Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods

Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)

Thirty-ninth session
Geneva, 24–28 January 2022
Item 4 (b) of the provisional agenda
Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN):
special authorizations, derogations and equivalents

Special authorization concerning UN 1288 SHALE OIL

Transmitted by the Government of the Netherlands*

Introduction

1. During the thirty-eight session of the ADN Safety Committee, the Special authorization concerning UN 1288 SHALE OIL was considered. However, no formal proposal for amendment of the ADN was proposed. The Dutch delegation kindly requests the ADN Safety Committee to consider the Special authorization and application, and to decide whether UN 1288 SHALE OIL could be included in the list of substances in the Regulation, authorized for carriage in tank vessels.

2. The Dutch government has received a request for a Special authorization concerning the transport of UN 1288 SHALE OIL in tank vessels. The request has been submitted, considered, and issued conform ADN 1.5.2.

3. The request for the Special authorization has been submitted by the VOMS (Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart) on behalf of a number of members of this organization. A translation of the original request, conform the model in ADN 3.2.4.1, is attached to this document in annex 1. The original request (Dutch only) can be found in annex 1 of informal document INF.2.

4. The competent authority has considered the application and has drawn up a Special authorization on the basis of the criteria contained in subsection 3.2.4.3. The Special authorizations were granted to the members of the VOMS on behalf of which the request was done. Translations of these special authorizations are attached to this document in annex 2.

* Annexes in this document are produced the way they are received from the Member State, without formatting and editing.
The original Special authorizations (Dutch only) can be found in annex 2 of informal document INF.2.

5. The request for the special authorization and the subsequently granted special authorizations have been communicated to the ADN Administrative Committee for consideration. However, the Dutch delegation would like to request the ADN Safety Committee to consider this Special authorization as well and to take action as it deems appropriate.

Proposal

6. The Dutch delegation proposes to amend the following entries of 3.2.1 Table A and to add the following entries to 3.2.3.2 Table C:
### 3.2.1 Table A, proposed amendments are bold and underlined:

<table>
<thead>
<tr>
<th>UN No. or ID No.</th>
<th>Name and description</th>
<th>Class</th>
<th>Classification Code</th>
<th>Packing group</th>
<th>Labels</th>
<th>Limited and aggregated quantities</th>
<th>Carriage permitted</th>
<th>Equipment required</th>
<th>Ventilation</th>
<th>Provisions of UN Recommendation</th>
<th>Number of blue cones/lights</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1288</td>
<td>SHALE OIL</td>
<td>3</td>
<td>F1</td>
<td>II</td>
<td>3</td>
<td>L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1288</td>
<td>SHALE OIL</td>
<td>3</td>
<td>F1</td>
<td>III</td>
<td>3</td>
<td>5 L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### 3.2.3.2 Table C:

<table>
<thead>
<tr>
<th>UN No. or substance identification No.</th>
<th>Name and description</th>
<th>Classification code</th>
<th>Packing group</th>
<th>Type of tank vessel</th>
<th>Cargo tank design</th>
<th>Cargo tank type</th>
<th>Cargo tank equipment</th>
<th>Opening pressure of the pressure relief valve/High velocity vent valve, in kPa</th>
<th>Maximum degree of filling in %</th>
<th>Relative density at 20 °C</th>
<th>Type of sampling device</th>
<th>Pump room below deck permitted</th>
<th>Explosion group</th>
<th>Anti explosion protection required</th>
<th>Equipment required</th>
<th>Number of cone/blue lights</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>3.1.2</td>
<td>2.2</td>
<td>2.1.1.3</td>
<td>5.2.2</td>
<td>3.4</td>
<td>3.5.1.2</td>
<td>3.2.1</td>
<td>8.1.5</td>
<td>7.1.6</td>
<td>7.1.6</td>
<td>PP, EX, A</td>
<td>VE01</td>
<td></td>
<td></td>
<td>1</td>
<td>14; 23</td>
<td></td>
</tr>
<tr>
<td>1288</td>
<td>SHALE OIL</td>
<td>F1</td>
<td>II</td>
<td>3+N3+C</td>
<td>MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>97</td>
<td>0,92</td>
<td>3</td>
<td>yes</td>
<td>II B</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>1</td>
<td>14; 23</td>
</tr>
<tr>
<td>1288</td>
<td>SHALE OIL</td>
<td>F1</td>
<td>III</td>
<td>3+N3+C</td>
<td>MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>97</td>
<td>0,92</td>
<td>3</td>
<td>yes</td>
<td>II B</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>0</td>
<td>14; 23</td>
</tr>
</tbody>
</table>
Annex I.

Request

Date: 8 December 2020
Reference: VOMS/2020/005/an

Via e-mail Ruud.wennekes@ilent.nl
Human Environment and Transport
Inspectorate
ILT/Safety and Institutions
Chain Dangerous Goods and Organisms
P.O. Box 16191
NL-2500 BD The Hague

Subject: special authorization transport of UN1288 in tank vessels

Dear Mr. Wennekes,

Enclosed you will find our application for a special authorization concerning the transport of UN1288 shale oil in tank vessels. The application is submitted for the vessels mentioned in the application form at the request of the members of our organization stated in the application form. Our members collect shale oil in accordance with the permit UN1288 shale oil granted to them and are thus transporter of UN1288 shale oil.

The application form has been completed for the various qualities and substance types which could be carried under UN1288. This concerns the various fractions of shale oil, ranging from the heavy fraction to the light (gasoline) fraction. Mixtures with water can be carried in addition to these products. This primarily concerns washwater originating from the cleaning of tanks in which shale oil was carried. These washwaters normally contain > 99 % and less than 1% shale oil. The application form was completed using the range of characteristics of the various fractions of shale oil known to us. Dilution with water was not taken into account.

We have consulted various MSDSs, including those of products which were presented to our members for collection, for the characteristics of various shale oil products. Additionally, data from the ECHA database was consulted. Information was not available for all data requested by the application form. Specifically for questions 3.3 and 3.4 we report that the consulted MSDSs and ECHA database consistently indicate that shale oil is non-explosive (100%).

In addition to the application form we state that the benzene content of shale oil is < 10%.
We hope this has answered your inquiry adequately.

Sincerely,

Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart

Drs. A.C.P. Nijdam

Attachment(s): application form for special authorizations
3.2.4.2 Application form for special authorizations under section 1.5.2

For applications for special authorizations, please answer the following questions and points.* Data are used for administrative purposes only and are treated confidentially.
* For questions not relevant to the subject of the application, write “not applicable”.

Applicant

A.C.P. Nijdam.........................................................................................................................
(Name)

VOMS..................................................................................................................................
(Company)

Kerkplein 3, NL-4209 AC Schelluinen, the Netherlands...................................................
(Address)

☒ It concerns several applicants. See Annex 1

Summary of the application
Authorization for transport in tank vessels of
Shale oil........................................................................................................................................
as a substance of Class
3..................................................................................................................................................

Annexes
(with brief description)

1. Applicants..........................................................................................................................
2. Authorizations.....................................................................................................................

This application concerns the following ships;

Name: See Annex I applicants...... o.s.n ..........................................
Name: ........................................................... o.s.n. ..........................................
Name: ........................................................... o.s.n. ..........................................
Name: ........................................................... o.s.n. ..........................................
Name: ........................................................... o.s.n. ..........................................
Name: ........................................................... o.s.n. ..........................................


Application made:

At: Schelluinen..................................................................................................................

Date: 8 December 2020..............................................................................................

Signature: .....................................................................................................................
(of the person responsible for the data)

1. General data on the dangerous substance

1.1 Is it a pure substance ☒, a mixture ☒, a solution ☐?

1.2 Technical name (if possible ADN nomenclature or possibly the IBC Code). (International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in Bulk)

Shale oil....................................................................................................................

1.3 Synonym. Shale oil..........................................................................................

1.4 Trade name. Shale oil..........................................................................................

1.5 Structure formula and, for mixtures, composition and/or concentration.

Shale oil 1-100%, water 0 - 99%..............................................................................

1.6 Hazard class and, where applicable, classification code, packing group.

Class 3, classification code F1, PG II and/or III..............................................

1.7 UN Number or substance identification number (if known).

1288............................................................................................................................

2. Physico-chemical properties

2.1 State during transport (e.g. gas, liquid, molten, ...).

Liquid..........................................................................................................................

2.2 Relative density of liquid at 20°C or at the transport temperature if the substance is to be heated or refrigerated during transport.

0,917 middle fraction..........................................................................................
2.3 Transport temperature (for substances heated or refrigerated during transport).
   Ambient temperature...........................................................................................................

2.4 Melting point or range < -9 °C.
2.5 Boiling point or range 40 - 645 °C.
2.5 Vapour pressure at:
   - 25°C 0.06 – 13.5 kPa..............
   - 20°C ........................................
   - 30°C ........................................
   - 37.8°C ........................................
   - 50°C 10.9- 26 kPa...............
   - for liquefied gases, vapour pressure at 70°C .........................),
   - for permanent gases, filling pressure at 15°C .........................).
2.7 Cubic expansion coefficient 0.000736 – 0.000888....... K⁻¹
2.8 Solubility in water at 20 °C: 0.1 - 5.74 g/l
   Saturation concentration  mg/l, or
   Miscibility with water at 15 °C
   □ Complete      □ partial      □ none
   (If possible, in the case of solutions and mixtures, indicate concentration)
2.9 Colour. Yellow to dark brown.................................
2.20 Odour. Bitter/irritating.................................
2.11 Viscosity 0.637 – 11.1........... mm²/s at 20 °C.
2.12 Flow time (ISO 2431-1996) ............... s.
2.13 Solvent separation test .....................
2.14 pH of the substance or aqueous solution (indicate concentration).

2.15 Other information.

3. **Technical safety properties**

3.1 Auto-ignition temperature in accordance with IEC 60079-20-1:2010, EN 14522:2005, DIN 51 794:2003 in °C; where applicable, indicate the temperature class in accordance with IEC 60079-20-1:2010.

238 – 395 °C bij 1013 hPa

3.2 **Flash-point**

For flash-points up to 175 °C

Closed-cup test methods - non-equilibrium procedure
- Abel-Pensky method: DIN 51755–1:1974 or NF M T60-103:1968
- Luchaire apparatus: French standard NF T60-103:1968

Closed-cup test methods – equilibrium procedure

For flash-points above 175 °C

In addition to the above-mentioned methods, the following open-cup test method may be applied:

Flash point: 10 - 30 °C, < 20 °C for the light (gasoline) fraction

3.3 **Explosion limits:**

Determination of upper and lower explosion limits in accordance with EN 1839:2012.
Non-explosive (100%) 

3.4 Maximum safe gap in accordance with IEC 60-20-1:2010 in mm.

.................mm.

3.5 Is the substance stabilized during transport? If so, provide data on the stabilizer:

No.................................................................................................................................

3.6 Decomposition products in the event of combustion on contact with air or under the influence of an external fire:

........................................................................................................................................

3.7 Is the substance fire intensifying?

Yes..............................................................

3.8 Abrasion (corrosion)

..................... mm/year.

3.9 Does the substance react with water or moist air by releasing flammable or toxic gases?

Yes/ no. Gases released: .................

3.10 Does the substance react dangerously in any other way?

No.................................................................................................................................

3.11 Does the substance react dangerously when reheated?

Yes/no

4. Physiological hazards

4.1 LD50 and/or LC50 value. Necrosis value (where applicable, other toxicity criteria in accordance with 2.2.61.1 of ADN).

LD50 > 2000 mg/kg

CMR properties according to Categories 1A and 1B of chapters 3.5, 3.6 and 3.7 of GHS.
Category 1B

4.2 Does decomposition or reaction produce substances posing physiological hazards? (Indicate which substances where known)

No

4.3 Environmental properties (see 2.4.2.1 of ADN)

*Acute toxicity:*
LC50 96 hr for fish 5,7......................... mg/l
EC50 48 hr for crustacea 9,7............... mg/l
ErC50 72 hr for algae ......................... mg/l

*Chronic toxicity:*
NOEC 47........ mg/l
BCF .................. mg/l or log Kow 2,84 at 23 °C ..........
Easily biodegradable .................. yes/no

5. Data on hazard potential

5.1 What specific damage is to be expected if the hazard characteristics produce their effect?

☐ Combustion
☐ Injury
☐ Corrosion
☐ Intoxication in the event of dermal absorption
☐ Intoxication in the event of absorption by inhalation
☐ Mechanical damage
☐ Destruction
☒ Fire
☐ Abrasion (corrosion to metals)
☐ Environmental pollution
6. **Data on the transport equipment**

6.1 Are particular loading requirements envisaged/necessary (what are they)?

7. **Transport of dangerous substances in tanks**

7.1 With which materials is the substance to be carried compatible?

   Metals

8. **Technical safety requirements**

8.1 Taking into account the current state of science and technology, what safety measures are necessary in the light of the hazards posed by the substance or liable to arise in the course of the transport process as a whole?

   Safety goggles, a pair of protective gloves, protective clothing and a pair of suitable protective shoes (protective boots if needed)

8.2 Additional safety measures

   - Use of stationary or mobile techniques to measure flammable gases and flammable liquid vapours.

   - Use of stationary or mobile techniques (toximeters) to measure concentrations of toxic substances.
Applicants

This application is made by the trade association of collectors of ships waste collectors on behalf of the members listed below for the vessels listed below. These companies transport (waste of) shale oil.

<table>
<thead>
<tr>
<th>Name company</th>
<th>Name ship</th>
<th>Vessel number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ships Waste Oil Collector B.V.</td>
<td>Aqua Albis</td>
<td>02333388</td>
</tr>
<tr>
<td></td>
<td>Aqua Ligera</td>
<td>06105175</td>
</tr>
<tr>
<td></td>
<td>Aqua Tiberis</td>
<td>02335731</td>
</tr>
<tr>
<td>CIMS Netherlands B.V.</td>
<td>Denver</td>
<td>02321340</td>
</tr>
<tr>
<td></td>
<td>Metis</td>
<td>02335431</td>
</tr>
<tr>
<td>Martens Havenontvangstinstallatie Vlissingen B.V.</td>
<td>Martens 4</td>
<td>02323039</td>
</tr>
<tr>
<td></td>
<td>Martens 5</td>
<td>02326607</td>
</tr>
<tr>
<td></td>
<td>Martens 11</td>
<td>02333031</td>
</tr>
<tr>
<td>International Slop Disposal B.V.</td>
<td>Hydrovac 12</td>
<td>2334947</td>
</tr>
<tr>
<td></td>
<td>Barbados</td>
<td>2321170</td>
</tr>
<tr>
<td></td>
<td>Hydrovac 11</td>
<td>2333112</td>
</tr>
<tr>
<td></td>
<td>Hydrovac 10</td>
<td>2331802</td>
</tr>
<tr>
<td></td>
<td>Main VIII</td>
<td>2332689</td>
</tr>
<tr>
<td></td>
<td>Main IX</td>
<td>2332478</td>
</tr>
<tr>
<td></td>
<td>Enserv 10</td>
<td>8023118</td>
</tr>
<tr>
<td></td>
<td>Leonore</td>
<td>02333003</td>
</tr>
</tbody>
</table>
Authorization for the application for a special authorization ADN 1.5.2.

Martens Havenontvangstinstallatie Vlissingen B.V.
S. Hendrickx
Spanjeweg 2
4455TW Nieuwdorp
Phone: +31 (0)113 – 672210
E-mail: serge@martenscleaning.nl

Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart
A.C.P. Nijdam
Kerkplein 3
4209 AC Schelluinen
Netherlands
Phone: +31 (0)183 – 626106
E-mail: info@scheepsafval.nl

Martens Havenontvangstinstallatie Vlissingen B.V. hereby authorizes the Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart to apply for a special authorization ADN 1.5.2 for transporting UN1288 Shale oil in tank vessels for the tank vessels listed below, reference VOMS/2020/005/an. on behalf of Martens Havenontvangstinstallatie Vlissingen B.V..

<table>
<thead>
<tr>
<th>Name vessel</th>
<th>ENI number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martens 4</td>
<td>02323039</td>
</tr>
<tr>
<td>Martens 5</td>
<td>02326607</td>
</tr>
<tr>
<td>Martens 11</td>
<td>02333031</td>
</tr>
</tbody>
</table>

Confirmed as such by,

Martens Havenontvangstinstallatie Vlissingen B.V.
S. Hendrickx
Signature
Handtekening

Datum: 30 November 2020
Date: 30 November 2020
Authorization for the application for a special authorization ADN 1.5.2.

International Slop Diposal B.V.
R. van der Wolf
Bunschotenweg 99
3089KB Rotterdam
Phone: +31 (0)85 – 4867222
E-mail Rene.Wolf@ngrp.com

Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart
A.C.P. Nijdam
Kerkplein 3
4209 AC Schelluinen
Netherlands
Phone: +31 (0)183 – 626106
E-mail: info@scheepsafval.nl

International Slop Diposal B.V. hereby authorizes the Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart to apply for a special authorization ADN 1.5.2 for transporting UN1288 Shale oil in tank vessels for the tank vessels listed below, reference VOMS/2020/005/an, on behalf of International Slop Diposal B.V..

<table>
<thead>
<tr>
<th>Name vessel</th>
<th>ENI number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrovac 12</td>
<td>2334947</td>
</tr>
<tr>
<td>Barbados</td>
<td>2321170</td>
</tr>
<tr>
<td>Hydrovac 11</td>
<td>2333112</td>
</tr>
<tr>
<td>Hydrovac 10</td>
<td>2331802</td>
</tr>
<tr>
<td>Main VIII</td>
<td>2332689</td>
</tr>
<tr>
<td>Main IX</td>
<td>2332478</td>
</tr>
<tr>
<td>Enserv 10</td>
<td>8023118</td>
</tr>
<tr>
<td>Leonore</td>
<td>2333003</td>
</tr>
</tbody>
</table>

Confirmed as such by,

International Slop Diposal B.V.
R. van der Wolf
Signature
Handtekening

Datum: 18 januari 2021
Date: 18 January 2021
Authorization for the application for a special authorization ADN 1.5.2.

Ships Waste Oil Collector B.V.
C.A. de Koning
Chemieweg 10
3197KC Botlek-Rotterdam
Phone: +31 (0)10-2957154
E-mail: info@shipswaste.nl

Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart
A.C.P. Nijdam
Kerkplein 3
4209 AC Schelluinen
Netherlands
Phone: +31 (0)183 – 626106
E-mail: info@scheepsafval.nl

Ships Waste Oil Collector B.V. hereby authorizes the Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart to apply for a special authorization ADN 1.5.2 for transporting UN1288 Shale oil in tank vessels for the tank vessels listed below, reference VOMS/2020/005/an, on behalf of Ships Waste Oil Collector B.V..

<table>
<thead>
<tr>
<th>Name vessel</th>
<th>ENI number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqua Albis</td>
<td>02333388</td>
</tr>
<tr>
<td>Aqua Ligera</td>
<td>06105175</td>
</tr>
<tr>
<td>Aqua Tiberis</td>
<td>02335731</td>
</tr>
</tbody>
</table>

Confirmed as such by,

Ships Waste Oil Collector B.V.
C.A. de Koning
Signature
Handtekening

Datum: 30 November 2020
Date: 30 November 2020
Authorization for the application for a special authorization ADN 1.5.2.

CIMS Ship Waste Collection B.V.
B.A. Sleeuwenhoek
Boompjes 254
3011 XX Rotterdam
Phone: +31 (0) 850 711 980
E-mail: barend@cimsnetherlands.com

Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart
A.C.P. Nijdam
Kerkplein 3
4209 AC Schelluinen
Netherlands
Phone: +31 (0)183 – 626106
E-mail: info@scheepsafval.nl

CIMS Ship Waste Collection B.V. hereby authorizes the Vereniging van Ondernemingen in de Milieudienstverlening ten behoeve van de Scheepvaart to apply for a special authorization ADN 1.5.2 for transporting UN1288 Shale oil in tank vessels for the tank vessels listed below, reference VOMS/2020/005/an, on behalf of CIMS Ship Waste Collection B.V..

<table>
<thead>
<tr>
<th>Name vessel</th>
<th>ENI number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver</td>
<td>02321340</td>
</tr>
<tr>
<td>Metis</td>
<td>02335431</td>
</tr>
</tbody>
</table>

Confirmed as such by,

CIMS Ship Waste Collection B.V.
B.A. Sleeuwenhoek
Signature

[Signature]

Datum: 27 November 2020

Date: 27 November 2020
Annex II.

**Special authorizations**

> Return address P.O. Box 20904 NL-2500 EX The Hague

CIMS Ship Waste Collection B.V.
Attn. B.A. Sleeuwenhoek Boompjes
254
3011 XZ Rotterdam

Reference   IenW/BSK-2021/100719
Date        8 April 2021
Subject     Special authorization

Dear Mr. Sleeuwenhoek,

You have authorized the *Vereniging van ondernemingen in de milieudienstverlening t.b.v. de Scheepvaart* (VOMS) to submit an application in the context of the transport of dangerous goods to obtain a special authorization conform 1.5.2 ADN. This application has been made by VOMS on 08-12-2020. I can inform you that the special authorization is hereby granted to you.

Sincerely,

The competent authority for ADN in the Netherlands.

The director Environmental Safety and Risks,

[Signature]

LL. M. Judith Elsinghorst

Governing body
Die Environmental Safety and Risks
Cluster B
The Hague
P.O.Box 20904
NL-2500 EX The Hague

Contact person
H.C. Langenberg
Task field Transport Dangerous Goods
T 070-4561566
M +31(0)6-46748893
Henk.LANGENBERG@minienw.nl

Our reference
IENW/BSK-2021/100719
Reference IenW/BSK-2021/100719

Special authorization by virtue of 1.5.2 of the ADN

By virtue of 1.5.2 of the ADN, the transport in tank vessels of the substance mentioned in the attachment to this special authorization is allowed, under the conditions stated there.

The carrier is required to have a recognized classification society add this substance to the list referred to in 1.16.1.2.5 in the ADN before transporting the substance.

This special authorization is valid for the following vessels:

Denver (Vessel number 02321340) and
Metis (Vessel number 02335431)

belonging to CIMS Ship Waste Collection B.V.

This special authorization is valid only on Dutch waters.

This special authorization is valid for a period of two years starting from the date of signature, unless revoked at an earlier date.

Issuing state:
THE NETHERLANDS

THE COMPETENT AUTHORITY FOR ADN IN THE NETHERLANDS

LL. M. Judith Elsinghorst
### Attachment belonging to IenW/BSK-2021/100719

<table>
<thead>
<tr>
<th>UN No. or substance identification No.</th>
<th>Name and description</th>
<th>Class</th>
<th>Classification code</th>
<th>Packing group</th>
<th>Type of tank vessel</th>
<th>Cargo tank design</th>
<th>Cargo tank type</th>
<th>Cargo tank equipment</th>
<th>Opening pressure of the pressure relief valve/maximum air release capacity, in kPa</th>
<th>Maximum degree of filling in %</th>
<th>Relative density at 20 °C</th>
<th>Type of sampling device</th>
<th>Pump room below deck permitted</th>
<th>Temperature class</th>
<th>Explosion group</th>
<th>Anti-explosion protection required</th>
<th>Equipment required</th>
<th>Additional requirements/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1288 SHALE OIL</td>
<td>3 F1 II 3+N3+C MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>45</td>
<td>97</td>
<td>0,92</td>
<td>yes</td>
<td>T3</td>
<td>yes</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>1</td>
<td>14; 23</td>
<td>1288 SHALE OIL</td>
<td>3 F1 III 3+N3+C MR</td>
<td>N</td>
<td>2</td>
</tr>
</tbody>
</table>
Dear Mr. van der Wolf,

You have authorized the Vereniging van ondernemingen in de milieudienstverlening t.b.v. de Scheepvaart (VOMS) to submit an application in the context of the transport of dangerous goods to obtain a special authorization conform 1.5.2 ADN. This application has been made by VOMS on 08-12-2020. I can inform you that the special authorization is hereby granted to you.

Sincerely,

The competent authority for ADN in the Netherlands.

The director Environmental Safety and Risks,

[Signature]

LL. M. Judith Elsinghorst
Special authorization by virtue of 1.5.2 of the ADN

By virtue of 1.5.2 of the ADN, the transport in tank vessels of the substance mentioned in the attachment to this special authorization is allowed, under the conditions stated there.

The carrier is required to have a recognized classification society add this substance to the list referred to in 1.16.1.2.5 in the ADN before transporting the substance.

This special authorization is valid for the following vessels:

- Hydrovac 12 (Vessel number 2334947),
- Barbados (Vessel number 2321170),
- Hydrovac 11 (Vessel number 2333112),
- Hydrovac 10 (Vessel number 2331802),
- Main VIII (Vessel number 2332689),
- Main IX (Vessel number 2332478),
- Enserv 10 (Vessel number 8023118) and
- Leonore (Vessel number 2333003)

belonging to International Slop Disposal B.V.

This special authorization is valid only on Dutch waters.

This special authorization is valid for a period of two years starting from the date of signature, unless revoked at an earlier date.

Issuing state:
THE NETHERLANDS

THE COMPETENT AUTHORITY FOR ADN IN THE NETHERLANDS

LL. M. Judith Elsinghorst
## Attachment belonging to IenW/BSK-2021/100720

<table>
<thead>
<tr>
<th>UN No. or substance identification No.</th>
<th>Name and description</th>
<th>Class</th>
<th>Classification code</th>
<th>Package group</th>
<th>Cargo tank design</th>
<th>Cargo tank type</th>
<th>Cargo tank equipment</th>
<th>Opening pressure of the pressure relief valve/maximum valve closing velocity, in kPa</th>
<th>Maximum degree of filling in %</th>
<th>Relative density at 20°C</th>
<th>Type of sampling device</th>
<th>Pump room below deck permitted</th>
<th>Temperature class</th>
<th>Explosion group</th>
<th>Anti-explosion protection required</th>
<th>Equipment required</th>
<th>Number of cone-shaped lights</th>
<th>Additional requirements/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1288 SHALE OIL</td>
<td></td>
<td>3</td>
<td>F1</td>
<td>II</td>
<td>3+N3+C MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>45</td>
<td>97</td>
<td>0.92</td>
<td>yes</td>
<td>T3</td>
<td>II B⁴)</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>1</td>
</tr>
<tr>
<td>1288 SHALE OIL</td>
<td></td>
<td>3</td>
<td>F1</td>
<td>III</td>
<td>3+N3+C MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>45</td>
<td>97</td>
<td>0.92</td>
<td>yes</td>
<td>T3</td>
<td>II B⁴)</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>0</td>
</tr>
</tbody>
</table>
Dear Mr. Hendrickx,

You have authorized the Vereniging van ondernemingen in de milieudienstverlening t.b.v. de Scheepvaart (VOMS) to submit an application in the context of the transport of dangerous goods to obtain a special authorization conform 1.5.2 ADN. This application has been made by VOMS on 08-12-2020. I can inform you that the special authorization is hereby granted to you.

Sincerely,

The competent authority for ADN in the Netherlands.

The director Environmental Safety and Risks,

LL. M. Judith Elsinghorst
Reference IenW/BSK-2021/100721

**Special authorization by virtue of 1.5.2 of the ADN**

By virtue of 1.5.2 of the ADN, the transport in tank vessels of the substance mentioned in the attachment to this special authorization is allowed, under the conditions stated there.

The carrier is required to have a recognized classification society add this substance to the list referred to in 1.16.1.2.5 in the ADN before transporting the substance.

This special authorization is valid for the following vessels:

- Martens 4 (Vessel number 02323039),
- Martens 5 (Vessel number 02326607) and
- Martens 11 (Vessel number 02333031)

belonging to Martens Havenontvangstinstallatie Vlissingen B.V.

This special authorization is valid for a period of two years starting from the date of signature, unless revoked at an earlier date.

**Issuing state:**
THE NETHERLANDS

**THE COMPETENT AUTHORITY FOR ADN IN THE NETHERLANDS**

LL. M. Judith Elsinghorst
<table>
<thead>
<tr>
<th>UN No. or substance identification No.</th>
<th>Name and description</th>
<th>Class</th>
<th>Classification code</th>
<th>Cargo tank design</th>
<th>Cargo tank equipment</th>
<th>Cargo tank type</th>
<th>Cargo tank equipment</th>
<th>Opening pressure of the pressure relief valve/high velocity vent valve, in kPa</th>
<th>Maximum degree of filling in %</th>
<th>Relative density at 20°C</th>
<th>Type of sampling device</th>
<th>Temperature class</th>
<th>Explosion group</th>
<th>Anti-explosion protection required</th>
<th>Equipment required</th>
<th>Pumps room below deck permitted</th>
<th>Additional requirements/Remarks</th>
<th>Number of cones/blue lights</th>
</tr>
</thead>
<tbody>
<tr>
<td>1288 SHALE OIL</td>
<td>3 F1 II 3+N3+C MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>45</td>
<td>97</td>
<td>0.92</td>
<td>3</td>
<td>0.92</td>
<td>yes</td>
<td>T3</td>
<td>II B⁴</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>14; 23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1288 SHALE OIL</td>
<td>3 F1 III 3+N3+C MR</td>
<td>N</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>45</td>
<td>97</td>
<td>0.92</td>
<td>3</td>
<td>0.92</td>
<td>yes</td>
<td>T3</td>
<td>II B⁴</td>
<td>yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>14; 23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ships Waste Oil Collector B.V.
Attn. C.A. de Koning Chemieweg 10
3197 KC Botlek-Rotterdam

Reference  IenW/BSK-2021/100722
Date  8 April 2021
Subject  Special authorization

Dear Mr. de Koning,

You have authorized the Vereniging van ondernemingen in de milieudienstverlening t.b.v. de Scheepvaart (VOMS) to submit an application in the context of the transport of dangerous goods to obtain a special authorization conform 1.5.2 ADN. This application has been made by VOMS on 08-12-2020. I can inform you that the special authorization is hereby granted to you.

Sincerely,

The competent authority for ADN in the Netherlands.

The director Environmental Safety and Risks

LL. M. Judith Elsinghorst
Reference IenW/BSK-2021/100722

Special authorization by virtue of 1.5.2 of the ADN
By virtue of 1.5.2 of the ADN, the transport in tank vessels of the substance mentioned in the attachment to this special authorization is allowed, under the conditions stated there.

The carrier is required to have a recognized classification society add this substance to the list referred to in 1.16.1.2.5 in the ADN before transporting the substance.

This special authorization is valid for the following vessels:

- Aqua Albis (Vessel number 02333388),
- Aqua Ligeria (Vessel number 06105175) and
- Aqua Tiberis (Vessel number 02335731)

belonging to Ships Waste Oil Collectors B.V.

This special authorization is valid only on Dutch waters.

This special authorization is valid for a period of two years starting from the date of signature, unless revoked at an earlier date.

Issuing state:
THE NETHERLANDS

THE COMPETENT AUTHORITY FOR ADN IN THE NETHERLANDS

LL. M. Judith Elsinghorst
<table>
<thead>
<tr>
<th>UN No. or substance identification No.</th>
<th>Name and description</th>
<th>Class</th>
<th>Classification code</th>
<th>Package Group</th>
<th>Packing Group</th>
<th>Dangers</th>
<th>Type of tank vessel</th>
<th>Cargo tank design</th>
<th>Cargo tank type</th>
<th>Cargo tank equipment</th>
<th>Opening pressure of the pressure relief valve/high velocity vent valve, in kPa</th>
<th>Maximum degree of filling in %</th>
<th>Relative density at 20 °C</th>
<th>Type of sampling device</th>
<th>Pump room below deck permitted</th>
<th>Temperature class</th>
<th>Explosion Group</th>
<th>Anti-explosion protection required</th>
<th>Equipment required</th>
<th>Number of cones/blue lights</th>
<th>Additional requirements/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1288</td>
<td>SHALE OIL</td>
<td>3</td>
<td>F1</td>
<td>3</td>
<td>F1</td>
<td>II</td>
<td>MR</td>
<td>N</td>
<td>45</td>
<td>97</td>
<td>0.92</td>
<td>Yes</td>
<td>T3</td>
<td>B+</td>
<td>Yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>14; 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1288</td>
<td>SHALE OIL</td>
<td>3</td>
<td>F1</td>
<td>3</td>
<td>F1</td>
<td>II</td>
<td>MR</td>
<td>N</td>
<td>45</td>
<td>97</td>
<td>0.92</td>
<td>Yes</td>
<td>T3</td>
<td>B+</td>
<td>Yes</td>
<td>PP, EP, EX, TOX, A</td>
<td>14; 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>