

**R/V "SANNA" – OZEK**

**IMO 9606065**

**SOPEP**

**SHIPBOARD OIL POLLUTION EMERGENCY  
PLAN**


IN ACCORDANCE WITH  
REG. 26  
MARPOL 73/78 ANNEX I

OWNER:  
Pinngortitleriffik, Grønlands Naturinstitut  
Kivioq 2  
Nuuk  
GREENLAND

\* issued by: Karstensens Skibsværft  
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Approved:

06-03-2012

  
DANISH MARITIME AUTHORITY  
Flemming Thue Jensen  
Ship Surveyor



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## SECTION 1

### GENERAL INFORMATION

Vessel name	: R/V "SANNA"
Port of registry	: NUUK
IMO No.	: 9906065
Control No.	: D 1707
Call sign	: OZEK
MMSI No.	: 331 394 000
Ship Register	: Greenland
Class	: -
Class Id.	: -

### MAIN DIMENSIONS

Length over all	: 32,35 m
Length between p.p.	: 30,00 m
Breadth moulded	: 10,00 m
Depth to main deck	: 4,88 m
Depth to acc. deck	: 7,49 m
Draught max.	: 4,65 m

### TONNAGE (1969 CONVENTION)

Gross tonnage	: 458
Net tonnage	: 405

### CAPACITIES

Fuel Oil	:	97,8	m3
Fresh water	:	33,6	m3
Hydr. Oil (spare)	:	3,1	m3
Oily Bilge	:	4,3	m3
Waste Oil	:	1,5	m3
Sewage	:	4,3	m3

### OPERATION AREA

Greenlandic Waters (West Coast) - North Atlantic, North Sea (transit - to from Denmark).



**VESSEL BUILT BY:**

KARSTENSENS SKIBSVÆRFT A/S  
Vestre Strandvej  
9990 Skagen  
DANMARK  
Yard No. 416  
Delivered: 2012

**OWNER/OPERATION OFFICE ASHORE**

Owner/Operator:

Pinngortitleriffik - Grønlands Naturinstitut  
Kivioq 2  
Nuuk  
Att: Mr. Helle Siegstad

ph. +299 361200  
fax. +299 361212  
mail INFO@NATUR.GL

- after hours:

ph. +299 546498

**COMMUNICATION MEANS ONBOARD**

<b>MOB telephone</b>	<b>DK DID Linie 1</b>	<b>+4578791137</b>
<b>MOB telephone</b>	<b>DK DID Linie 2</b>	<b>+4578791138</b>

JRC MF/HF System - 150W System:

MF/HF Control Unit	JSS2150
Battery Charger	Victron CH4656

JRC VHF System:

2 VHF DSC	JHS 770S
3 Bærbar VHF	SP3520P

Sat-C:

1 Sat-C GMDSS	JUE85
---------------	-------

2 Sart II Radar Transponder

Pathfin-  
der

Epirb ACR  
Epirb ACR

2775NH  
2742



Navtex

NCR333

1 stk. V-Sat anlæg

**V- SAT**

**Inmarsat Mini C**

**Inmarsat Mini C SSAS**

**Mobile no +**

**OILY WATER SEPARATOR**

DVZ type

Serial no:

Date of manufacture: 2011

EC Type Examination Certificate: Notified body 0729



## **SECTION 2**

### **PREAMBLE**

1.

This plan is available to assist the vessels personnel in dealing with an unexpected discharge of oil. Its primary purpose is to set in motion to stop or to minimize the discharge of those substances and to mitigate its effects.

2.

Effective planning ensures that the necessary actions are taken in a structured, logical and timely manner.

3.

The primary objects of this Plan are to:

- prevent oil pollution
- stop or minimize oil outflow when a damage to the vessel or its equipment occurs.
- stop or minimize oil outflow when a operational spill occurs in excess of the quantity or instantaneous rate permitted under the present Convention.

4.

Further, the purpose of the Plan is to provide the Master, officers and certain crew members with a practical guide to the prevention of marine spills and in carrying out the responsibilities associated with regulation 26 of Annex I to MARPOL 73/78:

- procedures to report an oil pollution incident.
- Coastal State contacts (Local Points) and Port Contact Lists to be contacted in the event of an oil pollution incident.
- response actions to reduce or control the discharge of oil following an incident.
- co-ordination with national and local Authorities in combating oil pollution.

5.

In summary, the Plan will serve to promote a practised response when the vessels personnel are faced with an oil spill.

6.

Although the Plan is designed as a vessel-specific tool it must also be considered as an additional instrument and as a link to shore-based plans. With this the Plans allows an efficient co-ordination between the vessel and shore-based Authorities/Organizations in mitigating the effects of an oil pollution incident.

7.

The Plan includes a summary flowchart (page 33) to guide the Master through reporting and acting procedures required during an oil pollution incident response.

8.



The Plan is likely to be a document used onboard by the Master and officers of the vessel and must therefore be available in the working language used by them.

9.

For any Plan to be effective it has to be:

- Familiar to those with key functions onboard the vessel.
- Reviewed and updated regularly; and
- Tested for viability in regular practices.

The technical manager is responsible for a regular review and update of the SOPEP. Updating shall be done no later than February 1st each year. See also 6.1.2.

10.

Changes to section 6 and the appendices will not be required to be approved by the Administration. The appendixes should be maintained up to date by the owners.

11.

The Plan should clearly underline the following: Without interfering with shipowners' liability, some coastal States consider that it is their responsibility to define techniques and means to be taken against an oil pollution incident and approve such operations which might cause further pollution, i.e. lightening. States are in general entitled to do so under the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969 (Intervention Convention).



## **SECTION 3**

### **REPORTING REQUIREMENTS**

#### **The plan shall at least include:**

The procedure to be followed by the master or other persons in charge of the ship, to report any oil pollution incident, as required in article 8 and Protocol I of the present Convention, based on guidelines developed by the Organisation.

The list of authorities or persons to be contacted in the event of an oil pollution incident.

A detailed description of the action to be taken immediately by persons on board to reduce or control the discharge of oil caused by the incident.

The procedures and point of contact on the ship for co-ordinating shipboard activities with national and local authorities in combating the pollution.

#### **When to report**

A report is required whenever there is:

- a discharge of oil resulting from damage to the ship or its equipment; or
- an intentional discharge for the purpose of securing the safety of a ship or saving life at sea; or
- during the operation of the ship a discharge of oil in excess of the quantity or instantaneous rate permitted under applicable marine pollution regulations.

a) Examples of ACTUAL CAUSES:

- |                                     |  |
|-------------------------------------|--|
| * Leakage of FO piping/connections, | * Leakage of oil piping/connections                    |
| * Tank overflow                     | * Other obvious causes, leading to spill/contamination |

b) Examples of PROBABLE CAUSES:

\*Collision \*Grounding \*Fire \*Explosion \*Structural failure \*Cargo shifting and When failure or breakdown of machinery or equipment which results in impairment of the safety of navigation; examples of such incidents are failure or breakdown of steering gear, propulsion, electrical generating system, essential shipborne navigation aids; and whenever there is a discharge of oil.

#### **Information required**

Master and/or an appointed member of the crew have to report to the shipowner or the nearest coastal radio station.

The Organisation's guidelines in resolution A.648 (16) provide necessary details for the Plan editor.



5 copies of the format Table 1 to be used for reporting purposes shall be available as part of the SOPEP at any time. Supplementary or follow-up reports should as far as possible use the same format. A reporting flow-chart and a reporting sample is also included. The format is included in section 6.

#### Whom to contact

##### LIST OF PERSONS TO BE CONTACTED

The ship involved in a pollution incident will have to communicate with boat coastal State or port contacts and ship interest contacts.

- \* Coastal State contacts (Table 5)
- \* Port contacts (Phone numbers page 25)
- \* Ship interest contacts (Phone numbers page 4)

#### List of persons to be contacted is enclosed in section 6 (page 28, Table 2)

When compiling contact lists, due account must be taken of the need to provide 24-hour contact information and to provide alternates to the designed contact.

The list must be routinely updated.

Information on regularly visited ports to be included in the list.

If the ship visits other ports the plan should require the master to obtain details concerning local reporting procedures upon arriving the port in question.

If the master reports an pollution incident to the shipowner, the latter will be responsible for informing insurers and salvage interests.

#### Follow up reports

Once the vessel has transmitted an initial report, further reports should be sent at regular intervals to keep those concerned informed of developments.

Follow up reports to coastal states should always be in the style given in Section 2.2, and should include information about every significant change in the vessel's condition, the rate of the release and spread of oil, weather conditions, and details of agencies notified and clean-up activities.

During the operation of the ship a discharge of oil in excess of the quantity or instantaneous rate permitted under applicable marine pollution regulations.



## **SECTION 4**

### **STEPS TO CONTROL DISCHARGE**

Ship personnel will almost always be in the best position to take quick action to mitigate or control the discharge of oil from their ship.

The Plan should provide the master with clear guidance on how to accomplish this for a variety of situations.

The Plan should not only outline action to be taken, but it should also identify who on board is responsible so that confusion during the emergency can be avoided.

The master to be responsible for onboard reporting/information.

The chief engineer to responsible for attempts/actions to be executed onboard.

The following plan will provide the master with guidance to address the following:

### **OPERATIONAL SPILLS:**

#### **Pipe leakage**

All fuel oil-, lube oil- and hydraulic oil pipes to be mounted inside the ship hull, so that a pipe leakage easily can be detected and controlled.

The chief engineer is responsible for the following:

- Stop the process flow:
- Close valves or stop pumps.
- Repair the pipe:

If the necessary pipe fittings and tools are onboard a permanent repair is to be made. Alternatively a temporary repair to be made.

- Oil spill from the pipe leakage to be removed by bilging to the drain/waste oil tank.
- Clean by use of water and environmental friendly chemicals. The latter only prior to agreement with coastal state authorities.
- Water containing oil which is stored in drain/waste oil tank to be separated through the bilge water separator. Clean water to be discharged overboard, and regained oil to be delivered to the waste oil tank.

#### **Pipeline leakage during discharging or loading oil cargoes, or bunkering.**

Measures to be implemented immediately:

- Stop all cargo and bunkering operations, and close manifold valves.
- Sound the emergency alarm, and initiate emergency response procedures.
- Inform terminal/loading master/bunkering personnel about the incident.



Further measures:

- Consider whether to stop air intake into accommodation and non-essential air intake to engine-room.
- Locate source of leakage, and begin clean-up procedures.
- Drain affected section of pipeline into an empty or slack tank (i.e the slop tank or another oil tank)
- Prepare portable pumps where it is possible to transfer spilled oil into a slack or empty tank.
- In the source of the leakage is located in the pump room at the seavalves the necessary measures must be taken to relieve the pressure from the relevant section of the pipeline.

If the spilled oil is contained on board and can be handled by the Oil Pollution Prevention Team then:

- Use sorbents and permissible solvents to clean up oil spills on board.
- Ensure that any residues collected in the clean up operation are stored carefully prior to disposal.

The use of a simple check list is recommended. Example check list is included in 6.6.

After dealing with the cause of the spill it may be necessary to obtain permission from local authorities or the terminal (or both) to continue normal operations.

#### Tank overflow

The vessel has 5 fuel oil tanks.

The officer in charge is responsible for bunkering fuel oil.

Measures to be implemented immediately:

- Stop all cargo and bunkering operations, and close manifold valves.
- Sound the emergency alarm, and initiate emergency response procedures.
- Inform terminal/loading master/bunkering personnel about the incident.

Further measures:

- Consider whether to stop air intake into accommodation and non-essential air intake to engine room.
- Reduce the tank level by dropping cargo/bunker into an empty or slack tank.
- Prepare pumps for transfer of cargo/bunkers to shore if necessary.
- Begin clean up procedures.
- Prepare portable pump if it is possible to transfer the overflowed oil into a slack or empty tank.

If the spilled oil is contained on board and can be handled by the Oil Pollution Prevention Team then:

- Use sorbents and permissible solvents to clean up oil spills on board.
- Ensure that any residues collected in the clean up operation are stored carefully prior to disposal.



The use of a simple check list is recommended. Example check list are included in 6.6.

After dealing with the cause of the spill, it may be necessary to obtain permission from local authorities or the terminal (or both) to continue normal operations.

#### Hull leakage

If oil is noticed on the water near the vessel during cargo or bunkering operations and cannot be accounted for, the possibility of hull leakage should be suspected.

Measures to be implemented immediately:

- Stop all cargo and bunkering operations, and close manifold valves.
- Sound the emergency alarm, and initiate emergency response procedures.
- Inform terminal/loading master/bunkering personnel about the incident.

Further measures:

- Use the Oil Pollution Prevention Team in an attempt to locate the source of leakage.
- Consider whether to stop air intake into accommodation and non-essential air intake to engine room.
- When appropriate, reduce the inert gas pressure to zero.

When the source of leakage is identified:

- Reduce the head of cargo or bunker oil by dropping or pumping oil into an empty or slack tank.
- Consider possibility of pumping water into the leaking tank to create a water cushion to prevent further oil loss.

If the leakage is located below the waterline, call in divers for further investigation.

If it is not possible specifically to identify the tank:

- The level of oil in the tanks in the vicinity of the suspected area should be reduced. Remember to consider the effect on hull stress and stability of the vessel.

The use of a simple check list is recommended. Example check lists are included in 6.6.

After dealing with the cause of the spill it may be necessary to obtain permission from local authorities or the terminal (or both) to continue normal operations.

#### Spills resulting from casualties

In responding to a casualty, master's priority will be to ensure the safety of personnel and the ship and to take action to prevent escalation of the incident.

In casualties involving spills, immediate consideration should be given to measures aimed at preventing fire and explosion, such as altering course so that the ship is upwind of the slick, shutting down non essential air intakes etc.



If the ship is aground, and thus cannot manoeuvre, all possible sources of ignition should be eliminated and action to prevent flammable vapours entering accommodation and engine room spaces.

When it is possible to manoeuvre, the master, in conjunction with the appropriate shore authorities, may consider moving the ship to a more suitable location in order, for example, to facilitate emergency repair work or emptying operations, or to reduce the threat posed to any particularly sensitive shoreline areas. Such manoeuvring may be subject to coastal state jurisdiction.

#### EXAMPLE ON CASUALTIES:

##### Grounding

If the ship runs aground:

- Sound the emergency alarm and initiate emergency response procedures.
- Eliminate all avoidable sources of ignition and ban all smoking on board.
- Consider whether to stop air intake to accommodation and non-essential air intake to the engine-room.
- Reduce the inert gas pressure to zero.
- Carry out a visual inspection of the vessel to determine the severity of the situation.
- Take soundings around the vessel to determine the nature and gradient of the seabed.
- Check difference in the tidal ranges at the grounding site.
- Evaluate tidal current in the grounding area.
- Take soundings of all cargo, ballast and bunker tanks and check all other compartments adjacent to the hull: Ullage plugs should not be opened indiscriminately as loss of buoyancy could result.
- Compare present soundings against departure soundings.
- Evaluate the probability of additional release of oil.

(Further information on the action to be taken when a ship is aground is contained in the ICS/OCIMF publication "Peril at Sea and Salvage – A Guide for Masters".)

Having assessed the damage that the vessel has sustained, and taking into account the effects of hull stress and stability, the master should decide whether or not any action can be taken to avoid further spillage, such as:

- Transfer of cargo and bunkers internally. If the damage is limited, for example to one or two tanks, consideration should be given to transfer of oil from damage to intact tanks.
- Isolate oil cargo and bunker tanks to reduce further loss due to hydrostatic pressure during tidal changes.
- Evaluate the possibility of transferring cargo to barges or other ships, and request such assistance accordingly.



- Trimming or lightening the vessel sufficiently to avoid damage to intact tanks, thereby avoiding additional pollution from oil spillage.

In the risk of additional damage to the vessel by attempting to refloat it by its own means is assessed to be greater than by remaining aground until assistance has been obtained, the master should try to prevent the vessel from moving from its present position by;

- Using anchors.
- Taking in ballast in empty tanks (if possible)
- Reducing longitudinal stress on the hull by transferring cargo internally. Attention should be given to hull stress and damage stability information, referring to the consultants if necessary.

The use of a simple check list is recommended. Example check lists are included 6.6.

#### Fire/Explosion

If an explosion or a fire occurs on board:

- Sound the emergency alarm, deploy the vessels fire emergency team and follow the emergency procedures.
- Determine the extent of the damage, and decide what damage control measures can be taken.
- Determine whether there are casualties.
- Request assistance as deemed necessary.
- Assess the possibility of pollution from oil leakage.
- If there is a spill of oil in connection with the fire or explosion, inform appropriate parties in accordance with Table 2 in this plan.

The use of a simple check list is recommended. Example check lists are included 6.6.

#### Collision

If a collision occurs:

- Sound the emergency alarm and initiate emergency procedures
- Determine whether there are casualties

The master should assess the situation for pollution purposes as follows, taking action where appropriate:

- Decide whether separation of the vessels may cause or increase the spillage of oil
- If any oil tanks are penetrated, reduce the risk of further spillage by isolating penetrated tanks or transferring oil to slack or empty tanks
- If there is a spill of oil in connection with the collision, inform the appropriate parties in accordance with Table 2 in this plan.

The use of a simple check list is recommended. Example check lists are included 6.6.

#### Hull failure

If the vessel suffers severe structural hull failure:



- Sound the emergency alarm and muster the crew.
- Reduce speed or stop to minimise stress on the hull.
- Assess the immediate danger of sinking or capsize.
- Initiate damage control muster.
- Reduce the inert gas pressure to zero.

The master should then assess the situation for pollution purposes as follows:

- If oil has spilled, or it is necessary to jettison oil in order to maintain stability, inform the appropriate parties in accordance with Table 2 of this plan.
- If the change in stability and stress cannot be calculated on board, contact relevant bodies mentioned on page 16, for necessary calculations to be carried out.
- Consider the forecast weather conditions and the effect they may have on the situation

The use of a simple check list is recommended. Example check lists are included 6.6.

#### Excessive List

If excessive list occurs rapidly and unexpectedly it may be due to:

- Failure of the hull plating.
- Failure of an internal bulkhead between compartments.
- Shift of cargo.
- Flooding of the engine room, where free surface can cause a list.
- Damage through grounding or collision.
- Incorrect operational procedures.

Steps to be taken immediately:

- Stop any cargo, bunkering or ballast operations in progress.
- Sound the emergency alarm and muster the crew.
- If under way, reduce speed or stop.
- Establish reason for list.

Further measures.

- Sound all tanks and compare soundings with departure soundings.
- If oil has spilled, or it is necessary to jettison oil in order to maintain stability, inform the appropriate parties in accordance with Section 2 of this Plan.
- If possible, take corrective action to rectify the situation.

The use of a simple check list is recommended. Example check lists are included in 6.6.

#### Containment System Failure

If there has been an internal failure of the bunker oil containment system, other than pipeline leakage, it is likely that it will be detected by another symptom such as an excessive list, a tank overflow or external hull leakage, often preceded or accompanied by a loud or unusual noise. Advice on initial reaction in each case will be described under other sections. However, once a failure of the internal containment system has been identified, there may be additional responses that can be taken to avoid or mitigate a spill of oil.

Steps to be taken immediately:



- Stop any bunkering or ballasting operations in progress, and close all tank valves and pipeline master valves.
- If under way, consider to reduce speed or stop.
- If in port consider evacuation of non-essential personnel.

Further measures.

- Determine the extent of the damage, and decide what damage control measures can be taken.
- Assess the possibility of pollution from leakage of oil.
- If oil has been spilled, inform the appropriate parties in accordance with Section 2 of this plan.
- Consider whether the level of liquid in tanks associated with the system failure should be reduced. Remember to consider the effect on hull stress and stability of the vessel.

If the spilled oil is contained onboard and can be handled by the Oil Pollution Prevention Team, then:

- Use sorbents and permissible solvents to clean up the liquid spilled onboard. Ensure that any residues collected, and any contaminated absorbent materials used in the clean up operation are stored carefully prior to disposal.

#### Ship Submerged / Foundered / Wrecked

If the vessel is wrecked to the extent that it or parts of it are submerged, take all measures to evacuate all persons onboard. Avoid contact with any spilled cargo or oil. Alert other vessels and/or nearest Coastal State for assistance in rescuing lives and the vessel as far as possible.

Prior to abandoning the vessel, if time allows, the following actions should be considered but not limited to:

- Stop the main- and auxiliary engines.
- Stop all pumps.
- Close all valves on all tanks containing oil.
- Close all ventilation valves.
- Close all ventilation flaps and all entrances.
- Close all weather- and watertight doors.

#### Hazardous Vapour release

For oil tankers and cargo vessels at sea, it is unlikely that a significant marine pollution hazard will be created, and in port the main problem with such an event is safety of the crew and nearby shore personnel in a flammable atmosphere.

Steps to be taken immediately:

- Stop any cargo, bunkering or ballasting operations in progress, and close all tank valves and pipeline master valves.
- Eliminate possible sources of ignition.
- If under way, consider altering course to create the best wind flow, or reducing speed or stopping.
- If in port, consider evacuation of non-essential personnel.
- If in port, alert shore personnel and the crew of craft alongside.

Further measures:

- Establish the reason for the hazardous vapour release.



- If possible, take corrective action to rectify the situation.

#### MITIGATING ACTIVITIES:

If both the vessel and the personnel have been addressed, the Master shall care for following issues:

- Assessment of the situation and monitoring of all activities as documented evidence.
- Care for further protection of the personnel, use of protection gear, assessment of further risk for health and safety.
- Containment of the spilled material by absorption and proper and safe disposal within leak proof containers of all material onboard until proper delivery ashore, with due consideration to possible fire risk.
- Decontamination of personnel after finishing the cleanup process.

#### Stability

In case the Master needs help in the assessment of stability and stress calculations, he is to initially contact the Owner phone +299 361200, INFO@Natur.gl or, secondly Karstensens Skibsværft A/S (consultants) (phone +45 98 44 13 11, fax +45 98 44 34 11, TR@kaship.dk) or, third Søfartsstyrelsen (phone +45 39 17 44 00, fax +45 39 17 44 10).

#### Insurance Company

x  
x  
x

#### P&I Club

x  
x  
x



## **SECTION 5**

### **NATIONAL AND LOCAL CO-ORDINATION**

Quick, efficient co-ordination between the ship coastal State or other involved parties becomes vital in mitigating the effects of a pollution incident.

The master must contact the coastal State for authorization prior to undertaking mitigating actions. Relevant phone numbers are listed in Table 5.

The identities and roles of various national and local authorities involved may vary widely from State to State, and even from port to port.

In the areas where the vessel is operation, Greenland - (transit to/from Denmark). Phone numbers to the Harbour Master in various Grenlandic harbours are listed on page 25.

Approaches to responsibility for discharge response may also vary.

Some coastal States have agencies that take charge of response immediately and subsequently bill the owner for the cost.

In other coastal States, responsibility for initiating response is placed on the shipowner.

The master must be given detailed instructions from the shipowner for the actual coastal area where the ship is operating.



## **SECTION 6**

- 6.1 Plan review procedure.
- 6.2 Response equipment.
- 6.3 Training procedures.
- 6.4 Record-keeping procedures.
- 6.5 Plans and diagrams.
- 6.6 Check list for emergency application.
- 6.7 Oil Spill Response Team:
- 6.8 List of Coast Radio Stations.
- 6.9 List of Port Authorities.



## ADDITIONAL INFORMATION

### 6.1

#### Plan review procedure:

Regular review of the plan by the master is strongly recommended, to ensure that it remains current.

1.

#### Periodical review:

The plan shall be reviewed by the company at regular intervals (see section 2, item 5), monitoring changes in local law or policy, contact names and numbers, ship characteristics, or company policy.

2.

#### Event review:

After any use of the plan in response to an incident, its effectiveness should be evaluated by the company, and modifications made accordingly.  
Changes shall be noted in table 3.

### 6.2

#### Response equipment:

#### Onboard spill equipment

(to be filled by Master)

Type	Quantity	Location
Oil absorbing equipment		
Buckets		
Foam		
Foam		

### 6.3

#### Training procedures:

Regular exercises should be performed, to confirm that the plan functions efficiently. Such exercises may be performed in conjunction with other shipboard exercises, and appropriately recorded (Table 4).

### 6.4

#### Record-keeping procedures:



The master is responsible for keeping records of events whenever there is a spill, or a substantial threat of spill. All relevant information shall be entered into the log book, including, but not limited to (as applicable):

- \* When and what happened, and where?
- \* Notification made, and to whom.
- \* Efforts made by crew.
- \* Assistance received, and by whom.
- \* Transfer of authority to shore based clean-up organisation.

Only facts shall be logged; Do not speculate as to what might have happened.  
If possible take photos and/or video recordings of important factors documenting events.

All spilt oil shall be sampled, safety permitted. Any oil observed on the water, while vessel is at anchor or berth shall be sampled, if possible.

Samples shall be properly marked, with date and location, and always be made in duplicate.

Samples will be most valuable if it is identified by someone not part of the crew, i.e., Harbour Master, terminal personnel or pilot.

One sample may be turned over to the appropriate coastal state authority, if requested, or to a duly authorised owner's representation.

## 6.5

### Plans and diagrams:

#### Drawings- 100720

01109.01	General Arrangement.	Enclosed
01105.01	Tank Plan with drain plugs.	Enclosed
0751.01	Fuel Oil System.	Enclosed
0534.01	Bilge System.	Enclosed
416-801-001	Ballast	Enclosed
0540.01	Air-, sounding and filling system	Enclosed

#### Tables

Table 1	SOPEP format for Initial Notification and report.
Table 2	Institutions/persons to be contacted.
Table 3	Record of changes.
Table 4	Record of oil pollution prevention drills (SOPEP).
Table 5	List of Coastal States.



## 6.6

### Check list for emergency application:

#### A. Operational oil spill response check list:

This check list is intended for response guidance when dealing with an oil spill during cargo or bunkering operations. Responsibility for action to deal with other emergencies which result from oil will be as laid down in existing plans.

ACTION TO BE CONSIDERED	ACTION TAKEN	PERSON RESPONSIBLE
<b>IMMEDIATE ACTION</b>		
Sound emergency alarm	Yes/No	Person discovering incident
Initiate vessel emergency response	Yes/No	Officer on duty
<b>INITIAL RESPONSE</b>		
Cease all cargo and/or bunkering operations	Yes/No	Officer on duty
Close manifold valves	Yes/No	Officer on duty
Stop air intake to accommodation	Yes/No	Officer on duty
Stop non-essential air intake to engine room	Yes/No	Engineer
Locate source of leakage	Yes/No	Officer on duty
Stop or reduce flow of oil	Yes/No	Officer on duty
Commence clean-up procedures using absorbents and permitted solvents	Yes/No	Mate
Comply with reporting procedures	Yes/No	Master
<b>SECONDARY RESPONSE</b>		
Access fire risk from release of flammable substances	Yes/No	Mate
Reduce oil level in relevant tank by oil transfer to an empty or slack tank	Yes/No	Mate
Reduce level of oil in tanks in suspect area	Yes/No	Mate
Drain affected line to empty or slack tank	Yes/No	Mate
Reduce fi-fi gas pressure to zero	Yes/No	Mate
If leakage is at pump room sea valve, relieve pressure on pipe lines	Yes/No	Mate
Prepare pumps for transfer of oil, to other tanks or to shore or lightening the vessel	Yes/No	Engineer
<b>FURTHER RESPONSE</b>		
Pump water into leaking tank to create water cushion and prevent further oil loss	Yes/No	Mate
If leakage is below waterline arrange divers for further investigation	Yes/No	Master
Calculate stresses/stability. If necessary request shore assistance for such calculations	Yes/No	Mate
Transfer cargo or bunkers to alleviate high stresses	Yes/No	Mate
Stow residues from clean-up carefully prior to disposal	Yes/No	Officer on duty



B. Casualty oil/spill response check list:

This check list is intended for response guidance when dealing with an oil spill following a casualty. Responsibility for action to deal with the casualty itself will be as laid down in existing plans. The term "Navigator" refers to the officer responsible for passage and planning and voyage analysis, normally the second officer (mate).

ACTION TO BE CONSIDERED	ACTION TAKEN	PERSON RESPONSIBLE
<b>IMMEDIATE ACTION</b>		
Sound emergency alarm	Yes/No	Officer on duty
Initiate vessel emergency response procedures	Yes/No	Officer on duty
<b>INITIAL RESPONSE</b>		
Stop air intake to accommodation	Yes/No	Officer on duty
Stop non-essential air intake to engine room	Yes/No	Engineer
Assess further danger to ship or personnel by such as capsizes or immediate risk of sinking	Yes/No	Master
Cease all cargo and other non-essential operations	Yes/No	Officer on duty
Assess whether oil has actually been spilt	Yes/No	Chief on duty
or if oil spill is likely to occur	Yes/No	Chief on duty
Comply with reporting procedures	Yes/No	Master
Sound all compartments	Yes/No	Mate
Sound around vessel if aground	Yes/No	Mate
Request external assistance	Yes/No	Master
Stop or reduce flow of oil	Yes/No	Mate
Counter excessive list	Yes/No	Mate
Contain spilt oil	Yes/No	Officer on duty
Commence clean-up procedures using absorbents and permitted solvents	Yes/No	Mate
<b>FURTHER RESPONSE</b>		
Reduce fi-fi gas pressure to zero	Yes/No	Engineer
Assess fire risk from release of flammable substances	Yes/No	Mate
Consider evacuation of non-essential crew	Yes/No	Master
Assess likelihood of further damage to vessel or cargo	Yes/No	Master
Calculate stresses/stability. If necessary request shore assistance for these calculations	Yes/No	Mate
Transfer cargo or bunkers to alleviate stresses	Yes/No	Mate
Request assistance or escort to port of refuge	Yes/No	Master
Manoeuvre upwind of spill/away from shore	Yes/No	Master
Assess whether tide will escalate the situation	Yes/No	Mate
Obtain weather forecast and assess effect	Yes/No	Master
Prepare pumps for transfer of oil, to other tanks or to shore or lightening the vessel	Yes/No	Engineer



Note: It is also important that the Owner and operator's representatives are familiar with the SOPEP.

## 6.7

### Oil Spill Response Team:

Master  
Navigating Officer (Mate)  
Crew as required

In the event of an oil spill, the team should be called out immediately

The team should be given the necessary training in the use of such equipment or oil absorbents as the vessel may carry. All members of the Oil Pollution Prevention Team should be aware of their duties, should an oil spill occur.

### **PROPOSED INSTRUCTIONS TO OIL POLLUTION PREVENTION TEAM**

- Master: In overall charge.  
Inform terminal authorities of incidents.  
Inform local agent and request agent to inform the local P&I Club rep.  
Advise the company's head office of the situation. Keep everyone updated at regular intervals and advise any changes in status of the emergency situation.  
Request assistance as deemed necessary.
- Mate: In charge of deck operation. Keep master informed and updated on the situation and of the results of steps taken to limit outflow.
- Engineer In charge of bunker operations.
- Organise distribution of oil spill detergent - after authorisation for use has been received



## 6.8

### List of Coast Radio Stations:

## COAST RADIO STATIONS

### NORTHERN REGION, UK:

Anglesey Radio	26, 28 & 61
Buchan Radio	25 & 87
Cardigan Bay	3
Clyde Radio	26
Collafirth Radio	24
Cromarty Radio	28 & 84
Cullecoasts Radio	26
Forth Radio	24 & 62
Hebrides Radio	26
Islay Radio	25 & 60
Lewis Radio	5
Morecambe Bay	4 & 82
Orkney Radio	26
Portpatrick	27
Shetland Radio	27
Skye Radio	24
Stonehaven Radio	26
Whitby Radio	25 & 28

### COASTGUARD:

	Telephone
Pentland	+44 1856 873 268
Shetland	+44 1595 692 976
Norway	+ 4775521267, fax 75524200
Faroe Islands	+298351300, +298351302, Fax +298351301
Island	+3545752000, +298351301,
Greenland	+299691911, Fax + 299681949

### KYSTSTATKONTAKTER

For at fremskynde svar og minimere skaden fra en forureningshændelse, er det af største vigtighed, at relevant Kyststat informeres straks.

Kyststaten skal informeres som beskrevet i kapitel 2 i denne manual.

Enopdateret liste over de agenter eller myndighedspersoner, som er ansvarlige for at modtage og behandle rapporter er vedlagt i dokument 05-01

Kontaktlisten benævnt MEPC./Circ.- (Annex 2 for SOPEP), er hentet på IMO's hjemmeside.

IMO contact points MEPC.

For skibe der rapporterer til Grønland, henvises desuden til gældende "bekendtgørelse om skibsrapporterings-systemer i farvande ved Grønland", danske søfartslove samt SMS dokument 07.04.03 GREENPOS/KTR



### List of Port Authorities:

## PORT AUTHORITIES

Organization	Contact	Telephone No.
Hirtshals Harbour	Harbour Master	+45 98 94 14 22
Hanstholm Harbour	Harbour Master	+45 96 55 07 10
Skagen Harbour	Harbour Master	+45 98 44 13 46
Qaqortoq	Harbour Master	+299494439/493335
Narsaq	Harbour Master	+299497732/497233/497234
Paamiut	Harbour Master	+299498639/498498
Nuuk	Harbour Master	+299557652
Maniitsoq	Harbour Master	+299520946/521245
Sisimiut	Harbour Master	+299527652/486733
Aasiaat	Harbour Master	+299536303/535453
Ilulissat	Harbour Master	+299544833/546533

**TABLE 1**

SHIPBOARD OIL POLLUTION EMERGENCY PLAN	
Sample format for initial notification report	
AA. Identification: Vessel name: <i>R/V "SANNA"</i> - Call sign: <i>OZEK</i> - MMSI-no: 331394000 - Flag: <i>Greenland</i> Vessel dimensions: LoA: <i>32,35 m</i> , Bmld: <i>10,00 m</i> , Dmld: <i>4,88 m</i> - Type: <i>Trawler</i>	
BB. Date/time of event:	<div> <div> <div></div><div></div><div></div><div></div><div></div><div></div> </div> <div> <div></div><div></div><div></div><div></div> </div> </div> <div> <div>D</div><div>D</div><div>M</div><div>M</div><div>Y</div><div>Y</div> </div> <div> <div>h</div><div>h</div><div>m</div><div>m</div> </div>
CC. Position:	<div> <div> <div></div><div></div><div></div><div></div> </div> <div> <div></div><div></div><div></div><div></div> </div> </div> <div> <div>d</div><div>d</div><div>m</div><div>m</div> </div> <div>* Longitude</div> <div> <div> <div></div><div></div><div></div><div></div> </div> <div> <div></div><div></div><div></div><div></div> </div> </div> <div> <div>d</div><div>d</div><div>m</div><div>m</div> </div>
DD. Alternative identification of position:	
Bearing and distance from landmark:	<div> <div></div><div></div><div></div> </div> <div> <div></div><div></div><div></div> </div>
Landmark description:	<div> <div>d</div><div>d</div><div>d</div> </div> <div>Naut. miles</div>
EE. Current vessel course:	<div> <div></div><div></div><div></div> </div> <div> <div>d</div><div>d</div><div>d</div> </div>
FF. Vessel speed:	<div> <div></div><div></div><div></div> </div> <div> <div>kn</div><div>kn</div> </div>
LL. Intended track:	



MM. Radio stations guarded: *Notified by*Inmarsat C, GMDSS MF/HF radio, GMDSS VHF DSC radio, VHF radio or GSM phone +4578791137/ +4578791138

NN. Date & time of next report, UTC: 

D	D	M	M	Y	Y

h	h	m	m

PP. Type & quantity of cargo/bunkers onboard:

QQ. Brief details of defects/deficiencies/damages:

RR. Brief details of pollution, including estimate of quantity lost:

SS. Brief details of weather and sea conditions:

Wind direction: 

d	d	d

Wind speed: 

--	--

  
(Beaufort)

Swell direction: 

d	d	d

Swell height: 

--	--

  
(meters)

TT. Contacts of ship's owners/operator/agent:

XX. Additional information:

\* Incident details

\* Need of external assistance:

\* Present actions being taken:

\* No. of crew and injury details:

\* Details of P&I Club and local correspondent:

\* Other relevant information (V sat no +):

Footnote: The ref. alphabetic letters applied in Table 1 above res referred to in "General principles for ship reporting syst. and ship reporting requirements, incl. guidelines for reporting incidents involving dangerous goods, harmful substances and/or marine pollutions", adopted by the IMO by resolution A.648(16). The letters do not completely follow an alphabetic sequence, as certain letters are used



to designate information required for other standard reporting formats, e.g. those used to transmit routing information.



**TABLE 2**

<b>Institution/person to be contacted</b>	<b>Address</b>	<b>Means of contact</b>	<b>Remarks</b>
<b>Owners office:</b> Grønlands Naturinstitut	Kivioq 2 Nuuk Greenlan	Telephone Fax Cell-phone	+299 361220 +299 +299
<b>Authorities:</b> SØFARTSSTYRELSEN	Vermundsgade 38C 2100 København Ø DENMARK	Telephone Fax	+45 39 17 44 00 +45 39 17 44 01
<b>Technical consultants/ Shipyard:</b>  Karstensens Skibsværft A/S	  Vestre Strandvej 19-21 9990 Skagen Denmark	  Telephone Fax	  +45 98 44 13 11 +45 98 44 34 11



**TABLE 3**

## RECORD OF CHANGES

[illegible]



**TABLE 4**

### RECORD OF OIL POLLUTION PREVENTION DRILLS (SOPEP)

[illegible]



## **TABLE 5**

### **LIST OF COASTAL STATES**



**EXAMPLE OF FILLED-IN REPORT (ref. Table Format, Table 1)**

The following is an example of an initial report, sent to the government of the coastal State, and to the Owner or Operator:

AA. *R/V Sanna*", Call sign *OZEK*, MMSI-no 331394000, *Grenlandic Flag*, Loa: 32,35 m, Bmld: 10,00m, Type: Fishery research vessel /trawler

BB. 280112 2030

CC. xxxN xxxE

DD. *Lighthouse Xxxxxx* 270 deg. 30Nm

EE. 007 FF. 10,5Kn

LL. *Bound for Nuuk from Sisimiut*

MM. *Aasiaat Radio notified by GMDSS MF/HF radio*

NN. *As required*

PP. *Marine Diesel Oil 50 tonne*

QQ. *Grounding. One bottom fuel tank leaking Preliminary efforts to reduce oil spill, and transfer in progress. Manoeuvrability intact.*

RR. *Estimated FO loss about 5 Tonnes*

SS. Wind xxx deg. Wind speed xx Beaufort. Sea/swell: calm, some fog

TT. Ship operators *Xxxxxxxx Ltd* is informed. Phone xx xx xxxxx Fax xx xx xxxx

XX. *No crew injuries, Oil skimmer required, Portable pumps are available onboard. Skippers mobile phone +299 546498*



**SOPEP  
REPORTING REQUIREMENTS**

