

HSE HANDBOOK

OIL SPILL RESPONSE



NOFO



KYSTVERKET
NORWEGIAN COASTAL ADMINISTRATION

HSE HANDBOOK

Oil spill response



KYSTVERKET



NOFO

CONTENTS

1. Foreword	4
2. Hse work in cases of acute pollution	5
2.1 Current acts and regulations.....	6
2.2 HSE Training	6
3. Work in the operation area	7
3.1 Organisation.....	7
3.2 Preparation of advance depot and the operation area	7
3.3 Responsibility for following up HSE work in the operation area	10
3.4 Checklist prior to work in the operation area	12
4. Chemical health hazards	13
4.1 Properties of the oil/emulsion	13
4.2 Exposure to oil residues and oil vapour etc.....	14
4.3 Chemicals and safety data sheets	16
5. Risk assessment	17
5.1 Safe job analysis (SJA).....	18
5.2 Safety briefing	19
6. Precautionary measures	20
7. Work on vessels/small boats used in coastal preparedness	22
7.1 Vessels.....	22
7.2 Smaller boats (contract vessels)	24
8. Adverse event reporting	26
8.1 Reporting	27
9. Communication	29

10. Preparedness in the event of personal accident or injury	30
10.1 Notification.....	30
10.2 Psychological factors.....	30
10.3 Injuries/Exposure during oil spill response operations.....	31
10.4 First aidequipment.....	32
10.5 First aid	33
10.5.1 cardiopulmonary resuscitation (cpr)	33
10.5.2 what to do in the event of exposure	33
10.5.3 what to do in the event of bleeds.	33
10.5.4 what to do in the event of circulatory failure	34
10.5.5 what to do in the event of burns..	34
10.5.6 what to do in the event of hypothermia	35
11. Appendices	36

Emergency numbers

110 Fire

112 Police

113 Ambulance

1. FOREWORD

Our goal is to carry out our work in a safe and responsible manner that does not result in harm to staff, the environment or material assets.

The Norwegian Clean Seas Association for Operating Companies (NOFO) and the Norwegian Coastal Administration (NCA) have worked together to produce "HSE Handbook – Oil spill response". The aim is to provide all operational staff with information on HSE work in connection with oil spill response operations. The handbook is based on experience from several incidents involving acute oil pollution and from a large number of exercises, and forms part of "HSE Folder – Oil spill response".

Please study the handbook carefully and apply the contents actively during oil spill response operations and exercises.

HSE work is an ongoing process, and this handbook will be updated regularly.

With kind regards



Leif J. Kvamme
CEO
NOFO



Johan Marius Ly
Director of Emergency Preparedness
The Norwegian Coastal
Administration (NCA)

2. HSE WORK IN CASES OF ACUTE POLLUTION

Operation management with HSE responsibility is established in connection with an oil spill response operation. The main contractor, represented by operation management, must be known to all employees involved in the operation.

HSE shall be described in the operation order for the operation.

The safety representative scheme: Safety work and a safety representative are established locally, based on the scope size of the operation.

Important keywords for the HSE work:

- Training in fundamental principles of HSE
- Action in accordance with overall goals of the operation
- Compliance with statutory and regulatory requirements, as well as operation-specific instructions
- Risk mapping – assessment of risk – implementation of measures
- Reporting of injuries, near-misses, dangerous conditions and suggestions for improvements
- Monitoring of health and environmentally hazardous chemicals
- Access to relevant safety data sheets
- Using necessary and adequate personal protective equipment
- A good flow of information

2.1 Current laws and regulations

Current laws, regulations and operation-specific instructions must be available to everyone taking part in the operation.

These documents must be accessible at:

- Operation management (NCA, operating company, IUA)
- Forward located depots or gathering places where staff meet/eat etc.

The most important acts are the Working Environment Act, the Pollution Control Act and the Ship Labour Act, together with several related regulations.

The staff taking part in the operation must be familiar with where this information is available.

2.2 HSE training

Everyone who is to take taking part in an operation must have received training in fundamental principles of HSE. As a minimum, everyone must have completed an introduction to HSE in oil spill response operations, based on "HSE Folder – Oil spill response".

No one should be assigned to labour that they do not have the requisite qualifications, skills, personal protective equipment or adequate safe equipment to be able to work safely and responsibly.

3. WORK IN THE OPERATION AREA

3.1 Organisation

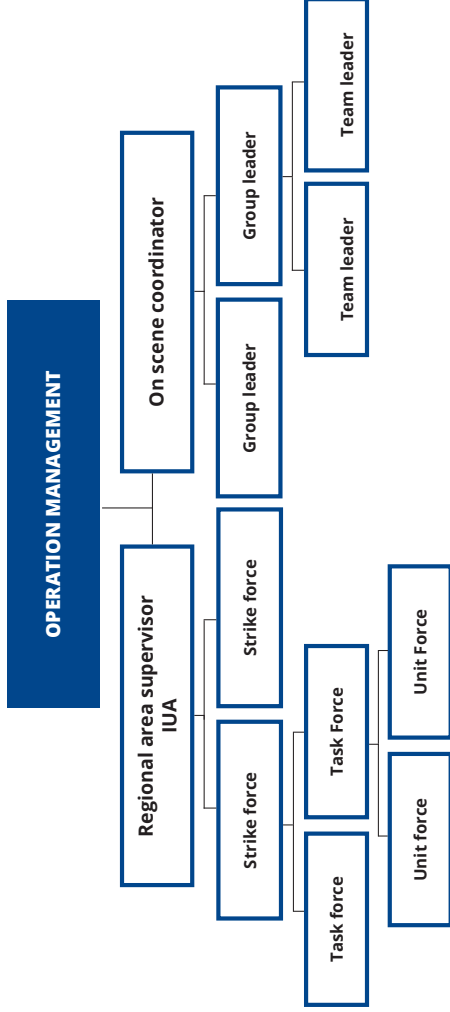
Oil spill response operations will normally be organised as shown in the diagram on the next page.

3.2 Preparation of forward located depot and the operation area

The forward located depot covers several functions in connection with operations in the coastal zone. Several HSE requirements will therefore need to be ensured.

- Preparation of premises and areas that will be used for mustering, provisioning and accommodation
- Establish cleaning station area
- A facility must be set up to receive and handle the collected contaminated mass
- Waste management plan
- To prevent secondary pollution, the operation area must be divided into and marked as clean and dirty zones
- Accessible and visible HSE information
- First aid equipment and fire-extinguishing apparatus.

ORGANISATION OF AN OIL SPILL RESPONSE OPERATION



Caution must be shown in the operation area:

- A risk assessment and safety briefing must be carried out and documented
- The operational staff must take part in the risk assessment and Safe Job Analysis (SJA)
- Forms must be available for reporting unwanted incidents/non-conformances
- The operation area must be divided into and marked as clean and dirty zones, and cordoned off if necessary
- The contaminated mass must be handled in accordance with the waste management plan.



Establishing clean and dirty zones. Ingøya 2016.

3.3 Responsibility for following up HSE work in the operation area

Within the operation area, responsibility for following up practical HSE work is assigned to:

- Operation leader
- Team leader
- The individual
- People with HR responsibility in connection with the operation must ensure that the following tasks are taken care of:

Management tasks:

- Ensure that all staff are given training in HSE
- Ensure access to HSE regulations, HSE Handbook and forms for reporting unwanted incidents and non-conformances
- Ensure that HSE work is documented
- Ensure that a safety representative has been designated
- Follow up the reporting systems for the operation
- Prepare and/or contribute to carrying out SJA
- Ensure that a safety briefing is carried out before/after the operation
- Ensure that required and approved personal protective equipment (PPE) is available and used
- Ensure that the conditions of employment for staff involved in the operation are in order, and that the individual has completed a declaration form.

The individual is responsible for:

- Complying with HSE requirements and workinstructions
- Contributing to risk assessments and SJA
- Taking care of his/her own safety
- Taking care of colleagues and notifying dangerous situations
- Using the prescribed personal protective equipment
- Receiving – and if necessary asking for – training in HSE and use of equipment
- Familiarising him-/herself with and using the HSE Handbook for oil spill response operations
- Reporting undesirable event such as injuries, near-misses and dangerous conditions, and submitting proposals for improvements, using the form for unwanted incidents reporting.

3.4 Checklist prior to work in the operation area

Key activities/equipment required to comply with HSE requirements will include:

- Risk assessments
- Safe Job Analysis (SJA)
- Unwanted incidents reporting
- Safety briefing
- Personal protective equipment
- Safety data sheets
- Communication
- First aid equipment
- Fire-extinguishing apparatus



Operating buster system in frozen waters. Porsanger 2016.

4. CHEMICAL HEALTH HAZARDS

4.1 Properties of the oil/emulsion

It is important that the oil from acute spills is analysed as quickly as possible. Until the results of the analysis are available, it must be assumed that the oil may have toxic properties.

It is important to get answers to questions such as:

- What harmful substances does the oil contain?
- Is the recommended personal protective equipment available?
- Is oil evaporating a problem?
- What happens if the oil is exposed to external effects, e.g. hot water?

There can be the risk of an explosion in the area surrounding the source of an oil spill. This is mainly true when there has been a spill of crude oil, gas or other easily volatile chemicals.

Personnel and vessels who have to remain in such an area shall have completed training in and be equipped for dealing with this type of operation.

Vessels shall have explosion protection. The areas shall be cleared before any efforts can be implemented by personnel/vessels not classified for explosion-proof zones.

Oil on water will vaporise and absorb water, so the risk of an explosion will gradually disappear.

4.2 Exposure to oil residues and oil vapour etc.

Any substance can be harmful to the body in a high enough concentration. Some substances are harmful even in small quantities; these are known as toxins. The risk of injury depends on the exposure route, dose and duration, as well as the properties of the oil.

Exposure to oil/chemicals may be through the skin, respiration or swallowing. Good hygiene is therefore particularly important to avoid injury or adverse health effects. During the operation, the recommended personal protective equipment must be used to protect the individual from injury or adverse health effects. Be aware that mist/vapour/aerosols can lead to increased skin contact and intake if appropriate personal protective equipment is not used.

Exposure measurements must be taken to assess the need for respiratory protective equipment. NCA and NOFO have equipment to measure oil evaporation.

Symptoms associated with skin contact

- Skin irritation
- Drying out of the skin
- Eczema
- Oil pimples

Symptoms associated with respiration, swallowing and contact with the eyes

Acute symptoms:

- Irritation in the eyes and respiratory tract, cough, dry and sore nose, loss of consciousness
- Headache
- Dizziness, drowsiness, exhaustion, nausea, numbness
- Symptoms associated with swallowing: Breathing problems and, in worst case, death. 100 ml petrol = fatal dose

Long-term effects

- May develop laboured breathing and further illnesses such as pulmonary fibrosis and lung cancer
- Chemical pneumonia, particularly in the case of swallowing or vomiting
- Depression
- Anaemia
- Weakening of the immune system
- May cause cancer, and is suspected to affect the ability to reproduce
- May cause genetic defects and organ damage in the case of long-term or repeated exposure.

If any of these symptoms should occur or persist, see a doctor, taking with you the safety data sheet.

Long-term harmful effects may in particular cases include cancer. The carcinogenic properties of the oil depend on the level of PAH, benzene and alkanes in gaseous form it contains. This is why it is extremely important that the oil is analysed as early as possible,

and that personal protective equipment is used and changed at regular intervals.

4.3 Chemicals and safety data sheets

Safety data sheets for all chemicals used in the operation must be available to everyone working with the chemicals.

Chemicals for use in oil spill response operations or exercises must be assessed and approved in line with regulatory requirements. Assessments of chemicals must include:

- grading the level of environmental risk
- assessing the working environment in connection with use and handling.



Personal protective equipment

Point 8 of the safety data sheet, “Exposure control and personal protective equipment”, recommends which type of personal protective equipment should be used in connection with different chemicals.

5. RISK ASSESSMENT

Risk assessment is a review of what may cause injury/mishap to people, the environment and equipment.

No one must be exposed to unnecessary risk.

Personal safety is the number one priority.

A risk assessment does not need to be complicated.

The scope of a survey will vary depending on the size of the operation area and the type of work being carried out.

Risk must always be mapped before starting the operation. The operational staff must be involved in the risk assessments. If necessary, implement risk-reducing measures.

The Working Environment Act and the Ship Safety and Security Act set out requirements for assessing risk factors in an operation area. Ensuring that the risk assessment is carried out is a management responsibility.

Three questions to ask in a simple risk analysis:

- What could go wrong?
- What can we do to prevent this?
- What can we do to reduce the consequences if it happens?

A risk assessment form will be found at the back of the handbook.

The form contains examples of elements of risk that may be subject to risk assessment. Use this as a starting point, but remember the list is not complementary. Consider whether there may be other elements of risk involved in the specific work operation that need to be assessed.



The Godafoss operation in winter 2011 presented cold and difficult conditions.

5.1 Safe Job Analysis (SJA)

SJA is a systematic and stepwise review of all risk factors prior to a given work activity or operation, so that steps can be taken to eliminate or control the identified risk factors during preparation and execution of the work activity or operation.

Typical factors to take into account when evaluating the need for SJA:

- Is the work described in procedures and routines or does it require exceptions from such procedures or routines?
- Has this type of work been prone to incidents/accidents?
- Is the work considered risky, complex or does it involve several disciplines or departments?
- Are new types of equipment or methods used that are not covered by procedures or routines?
- Have the personnel involved experience with the actual work or operation?

5.2 Safety briefing

A safety briefing must be held before the operation begins. This must be documented and followed up.

The following points should be included as a minimum:

- Elements of risk that are relevant to the area and the planned work tasks
- Risk-reducing measures: is/was it responsible to carry out the planned work?
- All participants must be informed of the required equipment and relevant procedures
- If necessary, carry out a Safe Job Analysis (SJA)
- Review any relevant unwanted incidents reports received.
- On completion of the operation, an evaluation/debrief including HSE must take place.

6. PRECAUTIONARY MEASURES

Exposure to oil/chemicals may be through the skin, respiration or swallowing. Good hygiene is particularly important to avoid damage to health.

Important things to bear in mind:

- avoid allowing oil and other chemicals to come into contact with skin
- in the event of splashing/soiling, use soap, water and a cream cleanser
- change clothing that has been soiled with oil
- wash hands before eating and drinking.



During the operation, all staff must use the prescribed and approved personal protective equipment, e.g.:

- Oil-resistant rainwear or disposable suit
- Oil-resistant gloves with long cuffs
- Helmet with chinstrap
- Oil-resistant protective boots
- Survival equipment comprising flotation suit or flotation vest with adequate buoyancy
- Safety goggles
- Dust mask/respiratory protective equipment if required

See safety data sheet or work specification for the relevant equipment/chemical to be used. Always check the expiry date on the protective equipment. Be aware that some protective equipment has a limited service life, and must therefore be replaced frequently. Gloves that are used in oil are particularly vulnerable and must be checked especially carefully.

During the operation, provision must be made for good personal hygiene:

- Washing station or wet wipes
- Clean water and soap
- Cream to protect skin from oil/chemicals
- Mirror
- WC



7. WORK ON VESSELS/SMALLER BOATS USED IN COASTAL PREPAREDNESS

7.1 Vessels

Separate instructions apply to work carried out on board vessels. Operational staff at sea must follow the safety instructions for the vessel on which they are working.

The shipmaster is responsible for ensuring compliance with safety measures on board by organising the work in a proper way.

- The following rules apply when working aboard a vessel
Prior to entering an oil spill area, the vessel must be ascertained that there is no explosion risk.
- In the case of work on deck or in an MOB boat (man overboard boat), a survival suit/work suit with a light or a work jacket/lifejacket with a light must be worn in addition to other required protective equipment; see point 6
- Special care must be taken when working in an MOB boat in the dark or with poor visibility
- Use of pilot ladders must be kept to a minimum when transferring staff between larger vessels. MOB boats should be able to be raised to the side of the craft and secured before boarding. When using loose ladders, the vessel from which people are transferring must carry out boarding routines, including signalling



Ensure that the required safety equipment is used during operations

- There must be good lighting for work on deck
- Equipment that is stored on deck for use during the operation must be secured
- When deploying, and bringing in booms, special attention must be paid to ropes, hawsers, wires etc. that pass across the deck. The minimum possible number of staff should be on deck during such operations
- Cleaning stations and clean protective equipment must be available
- Establish clean and dirty areas
- If there is a risk of icing, use spikes on footwear
- Ensure that gas meter is aboard and know how to use it

- Ensure that equipment taken on board is approved for use in explosive areas if it is to be used on deck
- Pay attention to oil spills, hydraulic oil, snow/ice, etc. in terms of the risk of falls
- Wear suitable footwear
- Keep cleanliness in mind, and use bark and oil-absorbent mats where necessary.

7.2 Smaller boats (contract vessels)

Before work begins, reporting lines must be clarified and a risk assessment carried out. The risk assessment must be documented and reported.

- Have map plotters, oars, and a boathook, grapnel, rope, knife and light on board
- Always wear an approved flotation vest with a light and minimum buoyancy of 150 N or a survival suit if deemed necessary
- Dress according to weather conditions
- Gloves and helmet with strap
- VHF/UHF/mobile phone – check communications equipment with line manager
- There must always be at least 2 people in each boat
- Do not overload the boat
- Take current, waves and wave height into consideration
- Check weather forecast



Personnel protective equipment

- Be aware of other vessels' manoeuvring and movements
- Check fuel
- Take your time
- Be aware of risk of icing
- Ensure that gas meter is aboard and know how to use it
- Ensure that equipment taken on board is approved for use in explosive areas if it is to be used on deck

8. UNDESIRABLE EVENTS

Establish a system for recording undesirable event in order to monitor safety and identify dangerous conditions and actions. This will improve safety and working conditions, and facilitate transfer of experience in connection with oil spill response exercises and operations. Take the necessary measures, and assess the effect of the measures taken.

The following events must be reported:

- Personal injury/death
- Near-miss
- Fire
- A new oil/gas leakage
- Chemical spills
- Damage to property
- Dangerous conditions
- General suggestions for improvements

The report must contain the following information as a minimum:

- The situation at the spill site when the event took place
- Description of the course of events
- Description of any personal injury or damage to property
- Description of the direct cause of the event
- Action taken
- Persons/bodies notified (police, the Norwegian Labour Inspection Authority, next of kin, etc.)

All participating units must report HSE status in their routine reports.

8.1 Reporting

Everyone is responsible for reporting to their line manager if they have witnessed or been involved in an undesirable event, or if they see a need for improvements at the workplace.

- The manager shall ensure that the event is investigated and reported using the appended report, form for undesirable events. The responsible organisation may use its own form.
- If personal injury, medical staff must be contacted and first aid performed. In the case of serious personal injury, the relevant forms must be submitted to the Labour Inspection Authority and the Norwegian Labour and Welfare Administration (NAV)
- Preparedness measures in the event of accidents
- If practicable, reports should be completed and dealt with immediately, and no later than the end of the working day
- The main contractor shall ensure that the reports are registered in a non-conformance/quality assurance system
- All events and suggestions for improvements must be investigated/analysed/assessed by the safety officer in the inter-municipal committee for acute pollution (IUA), IUA management, the governmental operation management, and possibly by NOFO/the operating company. In the case of events where separate measures are identified, it must be clear who is responsible for taking further measures and the deadline for doing so
- Current adverse event reports must be presented at the daily safety briefings.



9. COMMUNICATION

The responsible party (IUA/operating company/NCA) must have a communication plan in place. The communications equipment must be tested prior to use in the respective area (coverage, transmitter power, etc.).

The line manager must be able to be reached by this means at all times and from all places.

The necessary training in use of communications equipment and procedures must be provided. Remember to carry out a radio check/communications check before the work begins.

10. PREPAREDNESS IN THE EVENT OF PERSONAL ACCIDENT OR INJURY

10.1 Notification

There must be a plan in place for preparedness measures in the event of an accident. Personal injuries requiring medical treatment must be notified as follows:

On land/in the coastal zone:

- directly to 113 and then the operation leader
- the operation leader notifies operation management and verifies that the report has been received by 113

On vessels:

- in accordance with the vessel's preparedness plan (large vessels)
- the captain contacts the joint rescue coordination centre directly, and operation leader at sea (OLS)
- OLS notifies operation management and verifies that the joint rescue coordination centre has received the report

The main contractor is responsible for reporting serious injuries to staff taking part in oil spill response activities to the relevant authority.

10.2 Psychological factors

Oil spill response operations after shipping accidents may involve situations where missing person searches are

being carried out at the same time. It is important that the operational staff are informed of what they may encounter and that they are prepared for this. If staff are exposed to such situations, professional support measures should be initiated.

Oil spill response operations can be physically demanding but also psychologically stressful. There should therefore be provision for psychological support if required, e.g. via the municipal crisis teams. These can offer support in acute events as well as providing ongoing follow-up.

10.3 Injuries/exposure during oil spill response operations

The following types of accidents may occur in connection with oil spill response work:

- Poisoning in connection with exposure to oil residues and oil vapour etc.
- Falling into the sea, resulting in drowning/near-drowning
- Falls leading to fractures or sprains
- Hypothermia/frostbite
- Burn injuries
- Crush injuries

Implement preventive measures to avoid such accidents. A preparedness plan must be drawn up for dealing with injured persons.

10.4 First aid equipment

Groups/teams must be equipped with a first aid kit that complies with the Labour Inspection Authority's guidelines and any risk assessment performed. There must be staff competent in using the equipment.

The first aid kit must include:

- Eyewash
- Sterile compresses
- Plasters
- Surgical tape
- Surgical gauze
- Burn bandages/burn gel
- Single first-aid kits/pressure bandage
- Disinfectant
- Mouth-to-mouth mask with one-way valve
- Scissors
- First aid folder etc.



10.5 First aid

The key principles of first aid

- Make the location safe
- Get an overview – prioritise
 - Ensure the airways are clear
 - Start CPR if necessary
 - Ring 113
 - Stop major external bleeds
 - Place unconscious persons in the recovery position
 - Take steps to prevent hypothermia
 - Provide psychological support

10.5.2 What to do in the event of exposure

- Do not provoke vomiting in the case of exposure to petroleum products because of the risk of transferring any toxic substances to the lungs. Drinking something with a high-fat content is recommended, e.g. whole milk
- If someone has been splashed/soiled with oil, use soap and perhaps a cream cleanser, but not white spirit etc.
- Ring 113 or contact a doctor immediately if someone is displaying severe symptoms.

10.5.3 What to do in the event of bleeds

Major and life-threatening bleeds can be brought under control by using a pressure bandage with manual compression against the site of the bleed.

To stop the bleeding as quickly as possible, use the fingers to provide manual compression of the bleeding vessel.

Arterial bleeding:

- Severe bleeding
- The blood comes in spurts

Visible signs of internal bleeding in the chest and stomach area:

The patient has difficulty breathing, and is pale, in great pain and in a cold sweat. Ring the medical emergency number 113. The patient must be taken to a doctor/hospital as quickly as possible, and be transported lying flat.

10.5.4 What to do in the event of circulatory failure

Circulatory failure occurs when the blood flow in the body is not sufficient to meet the body's oxygen requirements. At a certain point, circulatory failure may be life-threatening. Ring the medical emergency number 113.

- Stop any bleeding. Lie the patient flat
- In the case of allergic shock or similar, lie the patient down with the legs raised
- If the person is unconscious, place him or her in the recovery position
- Cover the patient to prevent heat loss/hypothermia
- Keep the patient calm
- Do not give anything to drink
- Monitor the patient
- Get to a doctor/hospital quickly.

10.5.5 What to do in the event of burns

- Quickly removed burnt clothing from the skin, as hot clothing will continue to damage the skin tissue. NB If the clothes are stuck to the skin, they should not be pulled off but cooled with water where they are
- Cool the burned area using cool running water (not too cold and not lukewarm, ideally 15-20oC)
- Ring the medical emergency number 113.
- Cover with sterile bandages
- Risk of circulatory failure. If the burns are extensive, you should lie the patient down with legs elevated.

10.5.6 What to do in the event of hypothermia

- Try to prevent further heat loss and start measures to raise the body temperature
- Remove wet clothing and cover the skin with dry clothes or blankets
- Shelter the patient from wind and precipitation, ideally indoors
- Place blankets or an insulating material both beneath and on top of the patient
- If the patient is awake, offer warm juice or another warm drink
- If there is no frost injury and the patient is able to do so, try raising the body temperature by means of gentle physical activity (muscular movements indoors). Try to prevent further heat loss but do not

start actively warming unconscious persons suffering from hypothermia; this needs to be done carefully at hospital

- Transport of unconscious persons with hypothermia must be as gentle as possible, with the patient in the recovery position throughout. Sudden movements may trigger cardiac arrhythmias
- If the patient is in a dangerous or life-threatening condition: Ring 113 and start measures to prevent further heat loss. Place in the recovery position.

11. APPENDICES

- Checklist – Risk assessment
- Form for reporting undesirables' events and/ or improvements

Kystverket
PO box 1502
6025 Ålesund
Norway
www.kystverket.no

NOFO
PO Box 8077
4068 Stavanger
Norway
www.nof.no



KYSTVERKET
NORWEGIAN COASTAL ADMINISTRATION

Hjerte-lungeredning til voksne

Se etter tegn til liv

Spøkk berussther:
Rist forsiktig i skuldrene
Roop høyt

Apne luttretlen
Se etter normal pust
Ring 1-1-3 straks hvis
du er i tvil



Berustos og puster ikke normalt

Sidetele:
Bare hvis normal pust
i et helt minutt

Få hjelp av andre
til å hente hjertestarter

Skaff hjelp - Ring 1-1-3

Slå på høyttalerfunksjonen
på mobiltelefonen
Følg rådene fra 1-1-3

Start HLR 30:2



Fortsett til noen andre kan overta

Trykk, daene
rødtenn
1-2-3-4-5

Trykk brystet ca 5 cm ned
i en takt på 100 per minutt

Blås bare til brystkassen
hever seg

Gi brystkompresjoner
uten opphold hvis du ikke
far til å kombinere med
innblåsninger

Slå på hjertestarteren og fest elektrodene Følg hjertestarterens råd

Stopp HLR bare når hjertestarteren
analyserer, leder og gir sjøkk



Bort fra
pasienten!

Analysere
... og sjøkk

Fortsett HLR mens
hjestarteren slås på
og elektrodene festes

En elektrode
nedenfor pasientens
høyre kragebein

En elektrode en
håndsbredde nedenfor
pasientens venstre
armhule

Fortsett til ambulansen kommer - eller til du ser sikre tegn til liv

Checklist – safety preparations (executed by task force leader, oil spill response leader, team leader)	Status	Comments
Procedures/checklists for the activity are known		Working procedures and checklists reviewed
Personnel completed training (HSE, working equipment)		Training in the use of equipment, protective equipment. HSE routines and instructions
Approved protective equipment available and ready for use		
Working method, special conditions for the use of additional protective equipment (e.g. bark blowing)		Bark – Use special protective equipment
Emergency action in the event of an accident/fire		Boat, local health service, first-aid equipment, fire safety equipment
Chemicals approved and labelled. HSE Datasheet read and available		
Control of lifting equipment completed?		Certified and approved
Communications plan and communication equipment on site?		VHF/UHF, mobile phone, satellite telephone
Has a risk assessment been carried out?		
Has a JSA been carried out?		
Have personnel completed a safety briefing?		
Is first-aid equipment available?		
Should area(s) be cordoned off?		



KYSTVERKET



NOFO

Risk assessment		No.:		Date:
Name:	Org:	Signature:		
Work team:	Vessel/work area:			
Work description:				
Equipment:				
Job Safety Analysis completed?	No	Yes	JSA NO.:	
Working situation / hazard	What can go wrong?		What can we do to prevent this?	What can be done to reduce the consequences if an incident should occur?
Weather and temperature				
Exposure to high waves/strong winds				
Steep ground				
Slippery surface, ice/snow/oil				
Unfamiliar ground				
Darkness/poor visibility				
Risk of explosion				
Emergency action in the event of an accident/fire				
Working with chemicals/properties of oil				
Manual work/heavy lifting				
Hazardous conditions relating to entry and use of boat				
Bark blowing				

REPORT – ADVERSE EVENT

Ref. chapter 8. ADVERSE EVENT REPORTING for information on how to fill in the form

Type of adverse event

Status Near-miss/
event Damage Suggested
improvement

Time and place

Vessel/area:

Date:

Time:

Description of the event

Cause of the event

Action

Supplementary information

Signature

Person reporting (voluntarily)

Supervisor