# SPILL RESPONSE TRANSPORT

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## Interested in one of our training courses?

## Training courses

Get in touch over the phone: + 33 2 98 33 10 10 or by email: formation@cedre.fr

## **E-learning courses**

Download the registration, Complete the form and email it to: formation@cedre.fr



Training centre n°: 53290244729

# Contents



# Cedre, an organisation dedicated to spill response

As an expert organisation in spill preparedness and response, Cedre has been working across France and worldwide for 45 years.

With a 50-strong team of technicians, engineers and scientists, its multidisciplinary team provides advice and knowledge to French and foreign authorities and private organisations in charge of pollution response.

Cedre was created on 25 January 1979, in the aftermath of the *Amoco Cadiz* oil spill, in a bid to be more fully prepared for accidental water pollution and to strengthen France's national response organisation. Itis responsible, on a national level, for research, experimentation and documentation on pollutants (oil, chemicals and aquatic litter), their effects as well as spill response methods and equipment. Its role as an advisory body and its expertise encompass both marine and inland waters.





## **Fields of expertise**



Seas and oceans





Inland waters



Water resources



Oil



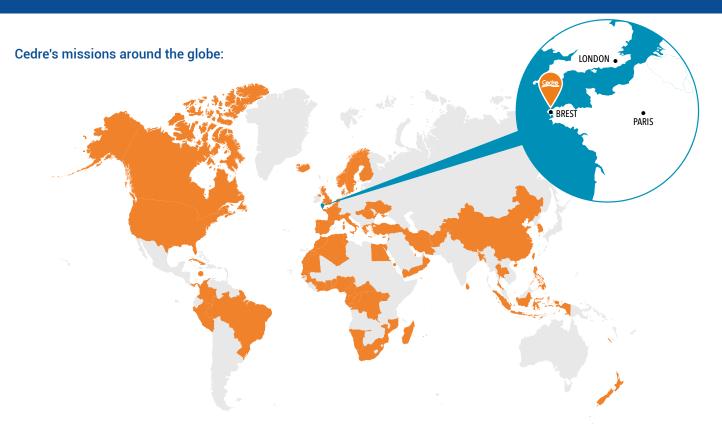
Chemicals



Litter Microplastics

# From the tip of Brittany to around the globe

Located in Brest, France, Cedre boasts one-of-a-kind facilities for experimentation, testing and training in environmentally safe conditions. Cedre's engineers also travel worldwide for missions relating to accidental water pollution (response operations, tests, studies, training, etc.).



## **Cedre's training commitment:** sharing our expertise through high-quality professional training!

Cedre is accredited by the French Ministry of the Environment to carry out missions of general interest, providing expertise and support to the authorities in their spill response missions.



Obtaining and maintaining certifications and accreditations remains a constant priority for Cedre's team, which is committed to training public and private sector stakeholders both in France and internationally.

# **Cedre's training tools**

#### **OUTDOOR TEST TANK**

For training with the release of real oil and equipment deployment: booms, skimmers, sorbents, etc.





#### ROAD SURFACE AREA

For training exercises in spill response techniques on the ground and in rainwater systems, on a section of tarmac road.

#### **ARTIFICIAL BEACH**

For implementing response techniques on various shoreline substrates: sandy foreshores, riprap, pebbles, quaysides, outfall pipes, etc.



#### CONTAINERS

For simulating the grounding of packages, drums and containers on the shoreline after falling overboard and recreating conditions for managing leaking or overheated containers.





Composed of a platform and a fuelling station, for applying different techniques to various leak and spill scenarios in a port environment.



#### ZONE DEDICATED TO PLASTIC PELLETS

Facilities (storage areas on the beach and in the deep-water test tank) for trainees to learn about the emerging challenges associated with releases of microplastics.

SHOWROOM

Presents the most commonly used spill response equipment: booms, skimmers, pumps, trawls, sorbents, storage tanks, personal protective equipment, etc.







#### ONLINE TRAINING PLATFORM

To export and internationalise our training offer: webinars, virtual classes, hybrid training and e-learning modules. Via this platform with secure personal access, learners can access training resources and expand their knowledge.

elearning.cedre.fr

#### TRAINING ROOM

Fully equipped 100 m<sup>2</sup> room (video projectors, interactive screen, control room, audio equipment with interpreting facilities). Our training room is suitable for disabled access. This room is used for theory lectures, tabletop exercises, serious games and role play exercises.

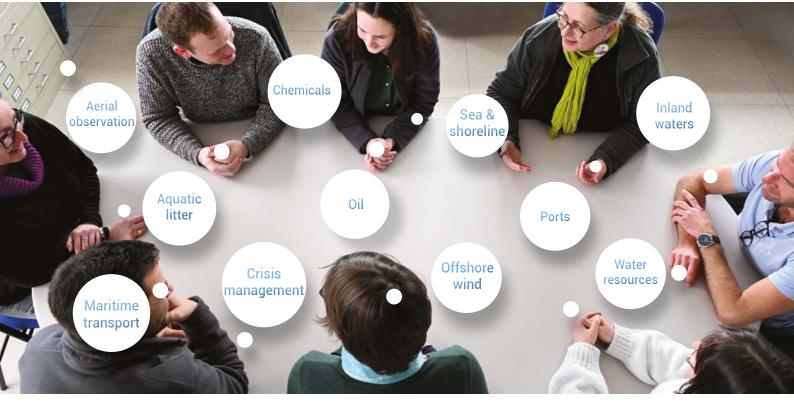


## Accessibility

The practical sessions proposed in some of our courses can involve intense physical activity. Please inform us upon registration, as well as your supervisor upon arrival, of any physical ailments or injuries which may require limited involvement in equipment deployment training and exercises. Pregnant women are strongly advised to avoid exposure to pollutants.

Our training courses are accessible to people with disabilities. In order to organise the course in the best possible conditions, please email us as: formation@cedre.fr or phone us on: +33 2 98 33 10 10.

# **Cedre training courses**



#### Bespoke courses

The content, duration and methods of our intra-company training courses are tailored to meet the client's needs.

At Cedre or at the site of your choice

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#### **Standard courses**

Our inter-company courses provide trainees with the chance to expand their professional network while benefiting from training that meets national and international standards.

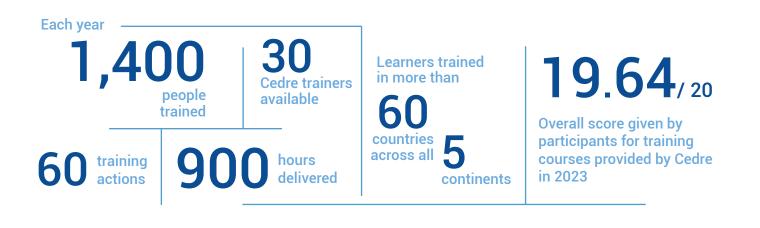
#### At Cedre or at our partner sites

#### E-learning courses

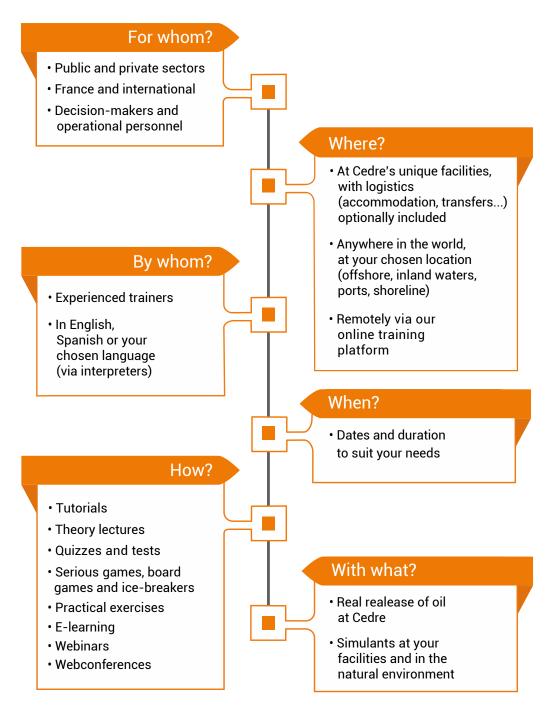
Complementary to our in-person training courses, our e-learning modules provide prior insights or expand on the concepts covered during a course.

On elearning.cedre.fr

Our trainers speak French, English and Spanish. Our courses can be delivered in any language in the world via simultaneous or consecutive translation!



# **Bespoke training courses**



#### Enhance your spill management with our bespoke training!

For over 45 years, we have been leading experts in accidental water pollution. We now offer the opportunity to benefit from fully customised training programmes, tailored to meet the specific needs of your organisation and environment.

Our courses seamlessly combine theory and hands-on practical experience, ensuring fast and effective skill development. Whether you represent a business, an authority, or a public sector organisation, our solutions are designed to help you master environmental challenges, strengthen your preventive actions, and ensure the safety of your teams.

Trust our expertise and equip your staff with the essential tools to respond swiftly and professionally to accidental water pollution!

Get a glimpse of some of our existing training courses on the following pages. Contact us directly to create a customised offer together!

## Oil spill response in inland waters



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At Cedre or at the site of your choice

Administrations and local authorities, emergency services, private response teams, water police, waterway services, river transport companies, port personnel, oil and chemical industries Interested in this course? Get in touch to request a quote for a bespoke training session tailored to your needs! Email us at formation@cedre.fr

#### Aims

- Anticipate the fate and behaviour of oil spills in the aquatic environment
- Gain concrete, practical knowledge of response strategies and techniques in inland waters
- Select appropriate equipment to respond to a spill
- Contribute to the development of a contingency plan

## Participant feedback

• 99.10% satisfaction in 2023

#### Content

- Spill issues and challenges
- Basic principles of response in inland waters
- Behaviour of oil spills in the environment
- Containment:
  - manufactured booms
  - custom-made barriers
- Recovery operations
- Spill response on land: in soil, gutters, channels and ditches
- Riverbank clean-up
- Waste management
- Principles of crisis management and contingency planning
- Feedback from past incidents

#### Format

- · Theory lectures in the classroom
- Tour of Cedre's facilities (if at Cedre)
- Practical exercises in the natural environment using simulants and at Cedre's technical facilities with release of real oil
- Resources available on Cedre's online training platform



🕥 Oral questions

Assessment during an autonomous exercise

Issue of a course completion certificate

► For courses held at our premises, you will use Cedre's facilities and equipment. If the course is delivered at your location, training will be conducted using your facilities and equipment.

## Marine pollution crisis management: spill response

## **IMO Level 3**



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At Cedre or at the site of your choice Navies (officers and supervisors), administrations involved in emergency crisis management both on and offshore, seaport personnel, shipping personnel Interested in this course? Get in touch to request a quote for a bespoke training session tailored to your needs! Email us at formation@cedre.fr

#### Aims

- Identify spill risks related to maritime transport
- Anticipate the fate and behaviour of oil and chemical spills in the aquatic environment as well as hazards for humans and the environment
- Seek out initial information and effectively manage the initial stages of the response in the event of a spill
- Gain concrete knowledge of the actions and strategies to be implemented
- Understand the organisation and the regulatory and legal framework for response at sea
- Be capable of joining an incident command centre
- Be involved in the development of contingency plans

#### Participant feedback

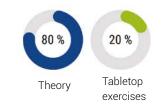
• 98.45% satisfaction in 2023

#### Content

- Legal foundations:
  - Context and challenges of spills at sea
- The right to intervene
- Liability and compensation issues
- Understanding spills at sea
  - Behaviour of oil in case of a spill at sea
  - Detection of slicks at sea
  - Decision support systems
- Response strategies and techniques: dispersion, containment and recovery
- Methodology and crisis management
- Feedback from past incidents

#### Format

- Theory lectures in the classroom
- Tour of Cedre's facilities
- Tabletop role play exercise
- Resources available on Cedre's online training platform







# Aerial observation of pollution at sea



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At Cedre or at the site of your choice



Air crews (navy, customs, police, coast guard, border guard, etc.), personnel from MRCCs and French and foreign administrations

Interested in this course? Get in touch to request a quote for a bespoke training session tailored to your needs! Email us at formation@cedre.fr

#### Aims

- Identify and gather information to characterise an oil spill
- Be familiar with national and international legislation on authorised and illegal discharges
- Be capable of drawing up a POLREP when pollution is detected
- Be capable of drafting an official report when pollution or illegal discharge is suspected
- Understand the conditions for giving evidence in court and the role of the witness
- Provide support for response operations at sea

#### Content

- Behaviour of oil and operational consequences
- Assessment and description of pollution:
- Bonn Agreement Oil Appearance Code - Quantifying and drafting a POLREP
- False positives
- Tools:
- MARPOL Convention
- Legal aspects and gathering evidence
- Criminal hearings
- Aircraft and sensors
- Investigations
- Official reports and POLREPs
- Detection and repression of oil pollution
- Feedback from past incidents

#### Format

- Theory lectures in the classroom
- Tabletop exercises

Assessment

Simulation

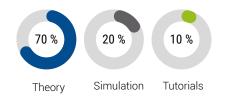
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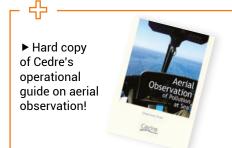
**Oral questions** 

Summary exercises

Start and end guiz

- Simulations
- Discussions between learners and trainers
- Resources available on Cedre's online training platform





#### Participant feedback

• 98.40% satisfaction in 2023

## Oil spill response in ports



# At Cedre or at the site of your choice

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Port personnel, emergency services (firefighters and naval firefighters), personnel from naval bases, local authorities, marine parks, oil terminal operators, crews of fishing, pleasure, commercial and military vessels Interested in this course? Get in touch to request a quote for a bespoke training session tailored to your needs! Email us at formation@cedre.fr

#### Aims

- Know how to react when faced with a spill in a port
- Anticipate the fate and understand the behaviour of oil spills
- Gain concrete, practical knowledge of response strategies and techniques in ports
- Select and deploy resources suited to spills in ports
- Understand the overall shoreline response organisation in your country or the response context
- Contribute to the development of first-line response plans

#### Participant feedback

• 99.25% satisfaction in 2023

#### ► For courses held at our premises, you will use Cedre's facilities and equipment. If the course is delivered at your location, training will be conducted using your facilities and equipment.

### Content

- Introduction and examples of spills in ports
- Key stakeholders
- Reminder of the overall shoreline response organisation
- Behaviour of oil spills and operational consequences
- General response strategies
- Containment and recovery on land and on the water
- Protection of outfalls
- Clean-up site organisation and waste management
- Clean-up of oiled surfaces
- Practical exercises

#### Format

- · Theory lectures in the classroom
- Feedback from past incidents
- Equipment demonstrations (with Cedre's or your site's equipment)
- Practical exercises with the release of real oil for courses at Cedre
- Debriefs
- Resources available on Cedre's online training platform



#### Assessment

🍌 Oral questions

Practical exercise and debrief Issue of a course completion certificate

## **Offshore wind farms:** pollution risks and spill response



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At Cedre or at the site of your choice

Stakeholders, operators or service providers involved in the installation and operational phases of offshore wind farms, operating and port surveillance personnel, personnel from administrations and local authorities Interested in this course? Get in touch to request a quote for a bespoke training session tailored to your needs! Email us at formation@cedre.fr

#### Aims

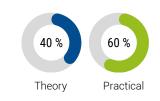
- Take into account pollution risks and mitigate spills
- Understand the regulatory framework for pollution preparedness and response
- Anticipate the fate and behaviour of spills of petroleum and mineral oils
- Gain concrete, practical knowledge of response strategies and techniques
- Select and deploy appropriate equipment to respond to a spill
- Contribute to the development of first-line response plans

#### Content

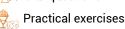
- Introduction to and examples of spills and incidents at offshore wind farms
- Regulatory framework and key stakeholders in your country or response context
- Spill preparedness: prevention of spills from facilities and equipment used in building and operating offshore wind farms
- Behaviour of spills of petroleum and mineral oils, impacts and operational consequences
- Appropriate general response strategies in wind farms: open spaces on land, port areas, offshore
- Response techniques: containment and recovery, clean-up of oiled surfaces and waste management
- Practical exercises

#### Format

- Theory lectures in the classroom
- Feedback from past incidents
- Equipment demonstrations (with Cedre's or your site's equipment)
- Practical exercises with the release of real oil for courses at Cedre
- Resources available on Cedre's online training platform







Issue of a course completion certificate

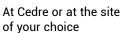
#### Participant feedback

99.8% satisfaction in 2024

## Principles of chemical spill response

## **IMO Manager Level**





Navies, administrations and local authorities, emergency services, private response teams, shipping companies, port personnel, oil and chemical industries Interested in this course? Get in touch to request a quote for a bespoke training session tailored to your needs! Email us at formation@cedre.fr

#### Aims

- Identify spill risks related to maritime transport
- Anticipate the fate and behaviour of oil and chemical spills in the aquatic environment as well as hazards for humans and the environment
- Seek out initial information and effectively manage the initial stages of the response
- Gain concrete knowledge of the actions and strategies to be implemented following a spill
- Be aware of the capabilities of responders, key stakeholders and technical support organisations/ experts who can be mobilised
- Contribute to the development of contingency plans covering chemical risks

Access to e-learning course on

chemical spills (see p.18)

### Participant feedback

99% satisfaction in 2023

### Content

- Maritime transport of chemicals
- Challenges of response at sea
- Data on maritime transport and past incidents
- Chemicals:
- Risks and behaviour
- Effects on humans, threshold values and protection measures
- Classifications
- Assessment and decision support tools: PPE, detection and sampling, drift and atmospheric modelling
- Response strategies for: containers and packages, bulk cargoes
- Issue of liquefied gases
- Monitoring environmental contamination
- Case studies

#### Format

- · Theory lectures in the classroom
- Demonstration of the equipment in a mobile chemical response unit (subject to location)
- Tour of Cedre's facilities for courses at Cedre
- Ice breaker: escape game
- Serious game
- Resources available on Cedre's online training platform



Oral questions

- Quiz
- Tabletop exercises, serious games

## Oil spill response at sea and on the shoreline

## IMO Level 2



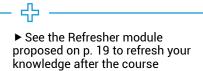


At Cedre or at the site of your choice

Administrations and local authorities, emergency services, private response teams, shipping companies, port personnel, oil industry, offshore wind sector To register for our intercompany session at Cedre, download the registration form using the QR code at the bottom of this page, complete it and email it to formation@cedre. fr or request a quote for a bespoke session tailored to your needs

#### Aims

- Anticipate the fate and behaviour of oil spills in the aquatic environment
- Gain concrete, practical knowledge of response strategies and techniques
- Select appropriate equipment to respond to a spill
- Contribute to the development of a contingency plan



### Participant feedback

98.16% satisfaction in 2023

Join our intercompany session in English! Dates: 31/03/2025 - 04/04/2025

Duration: 4 days

Location: Cedre, Brest

#### Content

- Spill issues and challenges
- Behaviour of oil spills in the marine environment and on the shoreline
- Response on the water surface
- Observation and detection
- Use of dispersants
- In situ burning
- Containment and recovery
- · Response on the shoreline
- Surveying
- Clean-up techniques
- Worksite organisation
- Waste management
- · Principles of crisis management
- Contingency planning
- Incident Management System (IMS)
- Crisis communication
- Compensation

#### Format

- Theory lectures in the classroom
- Tour of Cedre's facilities for courses at Cedre
- Tabletop exercises based on feedback from past incidents
- Practical exercises with the release of real oil for courses at Cedre
- Resources available on Cedre's online training platform



#### Assessment

- Oral questions
- 🛒 Case study
- Start and end quiz

# Surveying sites polluted by oil



Find out more at elearning.cedre.fr

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3 hrs The course can be paused and resumed at any time Asynchronous e-learning	Professionals liable to be involved in surveying oiled sites: administrations and local authorities, emergency services, private response teams, port personnel, oil industry personnel, offshore wind sector personnel	€150	To make the module acces- sible to people with disa- bilities, including visual and hearing impairments, a large number of aspects have been taken into account including audio-description, subtitling, module design, colour choices, naviga- tion and font choices

#### Aims

- Identify the key information to be passed on to the command centre for clean-up operations
- Conduct a field survey
- Segment a shoreline and describe the pollution
- · Fill in a standard survey form

#### Content

- Topics covered during the course:
- Preparing to conduct a survey
- Collecting and presenting information
- Optional unit: practical on-site survey exercise

#### Resources

- Equipment required: reliable internet access, Google Chrome browser, ideally headphones
- This module includes access to additional tools and resources (such as Cedre Operational Guides) as well as a help forum where trainees can interact with each other and with the trainers



Course to be fully completed within one year of registration

#### Assessment

Assessment and testing of knowledge acquired

A certificate of completion is issued once all the training modules have been completed (with the exception of the optional practical module). Registration: download the registration form using the QR code, complete it and email it to formation@cedre.fr



# Behaviour of chemicals



Find out more at elearning.cedre.fr

#### 0 € 2 hrs Navies, administrations €150 To make the module accessible to people with The course can be paused involved in emergency crisis and resumed at any time management both on and disabilities, including visual offshore, shipping sector and hearing impairments, Asynchronous e-learning personnel, seaport personnel, a large number of aspects have been taken into account oil industry personnel, offshore wind sector personnel including audio-description, subtitling, module design, colour choices, navigation

#### Aims

- Identify relevant key information affecting the behaviour of HNS
- Anticipate the areas liable to be affected: atmosphere, water surface, water column or seabed
- Understand the regulatory framework for transporting chemicals by sea and response measures in the event of a spill
- Mitigate the risks and anticipate the impacts on human health and the environment
- Minimise the consequences of spill

Course to be fully completed within one

### Content

- Topics covered during the course: - Introduction
- Transport of chemicals by water
- Chemical behaviour
- Risks for humans and the environment

#### Resources

and font choices

- Equipment required: reliable internet access, Google Chrome browser, ideally headphones
- This module includes access to additional tools and resources (such as Cedre Operational Guides) as well as a help forum where trainees can interact with each other and with the trainers

## Assessment

Knowledge test A certificate of completion is issued once all the training modules have been completed Registration: download the registration form using the QR code, complete it and email it to formation@cedre.fr



Deadline

year of registration

## Oil spill response at sea and on the shoreline

# IMO Level 2 refresher course



Find out more at elearning.cedre.fr

4 hrs

The course can be paused and resumed at any time

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Asynchronous e-learning except for the synchronous distance e-learning specialised module (scheduled date, prior registration required) Personnel who have previously attended an in-person IMO 2 Level course run by Cedre and are from administrations and local authorities, emergency services, private response teams, shipping companies, ports, oil industry, offshore wind sector



- Aims
- Refresh skills and knowledge in order and update theoretical and practical knowledge of response strategies and techniques in case of oil spills at sea and on the shoreline

### Deadline

Course to be fully completed within one year of registration

### Content

- Topics covered during the course:
- Initial measures
- Pollutant analysis and behaviour
- Aerial observation and slick drift
- Response at sea
- Response on the shoreline
- Waste management

The different topics are illustrated by a case study

This refresher course also includes a virtual classroom activity on a topic to be selected from several on offer, at a date scheduled by Cedre.

### Resources

• Equipment required: reliable internet access, Google Chrome browser, ideally headphones

To make the module

accessible to people with

and hearing impairments,

a large number of aspects

have been taken into account

including audio-description,

subtitling, module design, colour choices, navigation

and font choices.

disabilities, including visual

• This module includes access to a glossary, additional tools and resources (such as Cedre Operational Guides) as well as a help forum where trainees can interact with each other and with the trainers.

#### Assessment

A certificate of completion is issued once all the training modules have been completed

Registration: download the registration form using the QR code, complete it and email it to formation@cedre.fr







## www.cedre.fr contact@cedre.fr



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