

N° 299 E – News from March 2021

Emergency response

The MRCCs ([Mediterranean](#), [Corsen](#), [South Indian Ocean](#) and [Corsica](#)) interacted extensively with Cedre to interpret photos in order to determine the nature of substances spilled at sea and their natural dilution potential. An engineering firm questioned Cedre on the types of detectors that can be used in the event of a gas release potentially in the presence of oil, in pipes. Cedre was contacted by Cherbourg's AEM (State action at sea) division following a diesel leak from a trawler. The port of Sète requested information on the action to be taken in the event of small diesel spills. A fuel supplier requested information on Cedre's capabilities to identify oil leaking from its site during periods of rainfall. The [Yvelines fire brigade](#) informed us of a spill of a substance that appeared to be home heating oil in the river Seine. Finally, Cedre took part in a [MAR-ICE network](#) exercise organised by Finland. The exercise simulated a collision between a chemical tanker and an oil tanker involving the potential release of 5 chemicals: isopropanol (UN 1219), phenol (UN 2312), xylene (UN 1307), 1,2-dichloroethane (UN 1184) and butanol (UN 1120).

In short

Dates for the diary

► 14th April, [West MOPoCo](#) project wrap-up conference

Training

► 12th to 15th April, crisis management training course, at Cedre

► 13th to 15th April, [IMO 2 course](#) with practical sessions for 13 countries bordering the Gulf of Guinea, Abidjan-Côte d'Ivoire

► 20th and 21st April, spill response exercise for Saint Malo port staff

Cedre's virtual Information Day

On Tuesday 23rd March, as the *Ever Given* coincidentally became wedged across the Suez Canal, Cedre was running its annual Information Day on this year's chosen theme of containers. This virtual event, featuring a series of online conferences, involved a wide array of speakers from the shipping industry. Following an opening speech by France's Permanent Representative to [IMO](#), the main players in this field were given the floor. France's Secretariat General for the Sea ([SGMer](#)), Directorate for Maritime Affairs ([DAM](#)), marine casualties investigation board ([BEAmer](#)) and the [Maritime Prefect for the Atlantic](#) shared the viewpoint of the administrations in charge of maritime safety. [CMA CGM](#) presented the operating challenges involved in container shipping and the commanding officer of the [Port of Le Havre](#) addressed the specificities of container terminals. P&I Clubs were represented by the Director of [McLeans](#), who presented examples of past incidents and their consequences in terms of compensation. Finally, Cedre gave an overview of the risks related to containers carrying dangerous goods illustrated with examples of a few major incidents. This event met with much appreciation, both among the shipping industry and the media, and was a timely reminder of the importance of reinforcing the safety of this mode of transport upon which the majority of world trade depends.

E-learning module: surveying sites polluted by oil

In every major spill, the oiled site survey phase is of primary importance. It enables decision-makers to assess the scale of the pollution, estimate its impact on the shoreline, determine response priorities, select the most appropriate response techniques and allocate adequate personnel and equipment. During 2020, Cedre added a new two-hour module on this theme to its [online learning centre](#). The aim is to train any person liable to conduct a shoreline survey. This module aims more specifically to teach trainees the necessary skills to: conduct a field survey; segment a shoreline and describe the pollution; identify the relevant key information to be collected and passed on for clean-up operations and fill in a standard survey form. **The English language version of this module is now available on our e-learning platform.**

Port training in Saint-Quay Port d'Armor

At the request of the director of the port of Saint-Quay Port d'Armor, Cedre ran a theory and practical course on spill response techniques in port areas on 16th and 17th March. Several oil spill simulation exercises provided the opportunity for the port's dozen permanent staff to get to grips with the spill response equipment and techniques.

IMAROS project meeting and first Polludrome® trials

An online working meeting for the [European project IMAROS](#) (see [Newsletter n°297](#)) was held from 1st to 3rd March. The discussions were led by Cedre, in charge of Work Package 3 (physico-chemical characterisation, weathering and ecotoxicity) and mainly focused on the results of the physico-chemical characterisation conducted at laboratory scale on thirteen 2-litre samples of ULSFO, in case of a marine spill. Based on these results, which revealed a broad array of behaviours, the second phase of discussions aimed at selecting 3 or 4 products for the following pilot-scale weathering phase (in the [Polludrome®](#)) and ecotoxicity and efficiency tests for various response techniques (containment/recovery, dispersants, in situ burning) under Work Package 4. The products selected include the bunker fuel of the *MV Wakashio* for the [Polludrome®](#) trials, for which the trials at 5°C and 15°C were conducted in March.

Beach litter assessment results presented at EIHA OSPAR meeting

On 16th March, Cedre presented the preliminary results of the 2011-2020 North-East Atlantic beach litter assessment to the [OSPAR Environmental Impact of Human Activities \(EIHA\)](#) committee. This assessment was conducted by Cedre with support from the Beach Litter Expert Group (BLEG) led by Cedre. It provides a detailed account of the abundance, composition and evolution of beach litter, which continues to show a strong presence on the shores of the North-East Atlantic. This assessment will be integrated in the next OSPAR Quality Status Report (QSR) due to be released in 2023. It will also be available online on the [OSPAR Assessment Portal](#).

Biogenic, petrogenic and pyrogenic hydrocarbon differentiation project

At the beginning of this year, Cedre embarked on the second phase of a project centred on the definition of an analysis protocol to determine the sources of hydrocarbons liable to be found in the environment. Whether biogenic (natural source), petrogenic (derived from petroleum) or pyrogenic (combustion of petroleum hydrocarbon), these hydrocarbons are found in the environment in trace amounts. Their quantification and identification could become an essential element to support the decision to terminate or continue clean-up operations following a spill. The first project phase (carried out in 2020) consisted in a literature review focusing on sediment sample processing protocols (extraction, purification, analysis) as well as on the source indicators used for hydrocarbon differentiation. The protocol currently under development in our laboratory compares the different sample processing phases (extraction solvent, extraction type, purification method). Once the protocol has been validated on reference sediment samples with certified hydrocarbon contents, the source indicators inventoried in 2020 will be tested on sediment samples taken from environments exposed to variable anthropogenic pressures (port area, mudflat, beach, mangrove, etc.).

Cedre attends marine litter expert meetings

On 30th March, we attended the meeting of the [Barcelona Convention's Ecosystem Approach Correspondence Group on Marine Litter Monitoring](#), more commonly known as CORMON Marine Litter. This online meeting was organised by the Barcelona Convention Secretariat. Various topics were addressed, such as the assessment of litter-related pressure on the marine environment, monitoring protocols, and correspondences between the [MSFD](#) assessments and those conducted by the Convention. The meeting ended with a presentation of the projects currently in progress. We also took part in a presentation workshop on the beach litter database and visualisation tools developed through the [EMODnet Chemistry IV](#) project. Cedre was consulted, along with other European experts, on the data presentation formats and analysis methods used.

Plastics weathering on Cedre's beach

Several studies into the weathering of plastics in the marine environment have been launched at Cedre: one set to last several months on the man-made beach and a second over several weeks in a weathering chamber (under controlled conditions). These studies, conducted as part of the European project [OceanWise](#), will provide the opportunity to study expanded and extruded polystyrene (EPS/XPS) as well as alternative foamed, biodegradable and/or biosourced materials (PLA, PLA+PBAT and PHBH). The aim is to observe how these plastics evolve over time under the effect of sun, rain and wind. Some of the materials will also be used for ecotoxicological testing to compare the potential toxicity of "new" and "weathered" plastics.

Contribution to marine environment instructor training for Nautisme en Bretagne

On 5th March, Cedre was involved, alongside [UBS](#) (University of Southern Brittany) and [Ifremer](#), in a training course entitled "Ocean, plastic and teaching" for marine environment school field trip instructors belonging to the marine environment network [Classe de Mer en Bretagne](#). This course, organised by [Nautisme en Bretagne](#) with support from the [Region of Brittany](#), was held on site at Larmor-Plage, and was attended by some twenty participants. During this training event, we addressed the distribution and impacts of plastic litter in the marine environment, then held discussions with the participants during a round-table debate on the use of citizen science in school coastal field trips.

Online training for ISMI

In late 2020, Cedre was commissioned by the [Interregional Maritime Security Institute \(ISMI\)](#) – a training centre of excellence which trains civilian and military managers from administrations and private entities with expertise or activities in the fields of maritime safety, security and protection of the marine environment – to organise a training course on oil spill response at sea and on the shoreline in line with IMO 2 standards. Given current restrictions related to the COVID-19 pandemic, it was decided that the theory sessions would be held online. 25 participants from 13 countries — Benin, Cameroon, Congo, Côte d'Ivoire, Gabon, Ghana, Guinea, Liberia, Mauritania, Nigeria, Senegal, Sierra Leone and Togo — and from the private sector ([CNR International](#), [Société Ivoirienne de Raffinerie - SIR](#)) attended one of the two sessions offered: 10th-11th March in French and 30th-31st March in English. Further to these theory sessions run via the platform [elearning.cedre.fr](#), a training session is scheduled from 13th to 15th April in Côte d'Ivoire at ISMI and will include a spill response equipment demonstration in the port of Abidjan.