Proinde

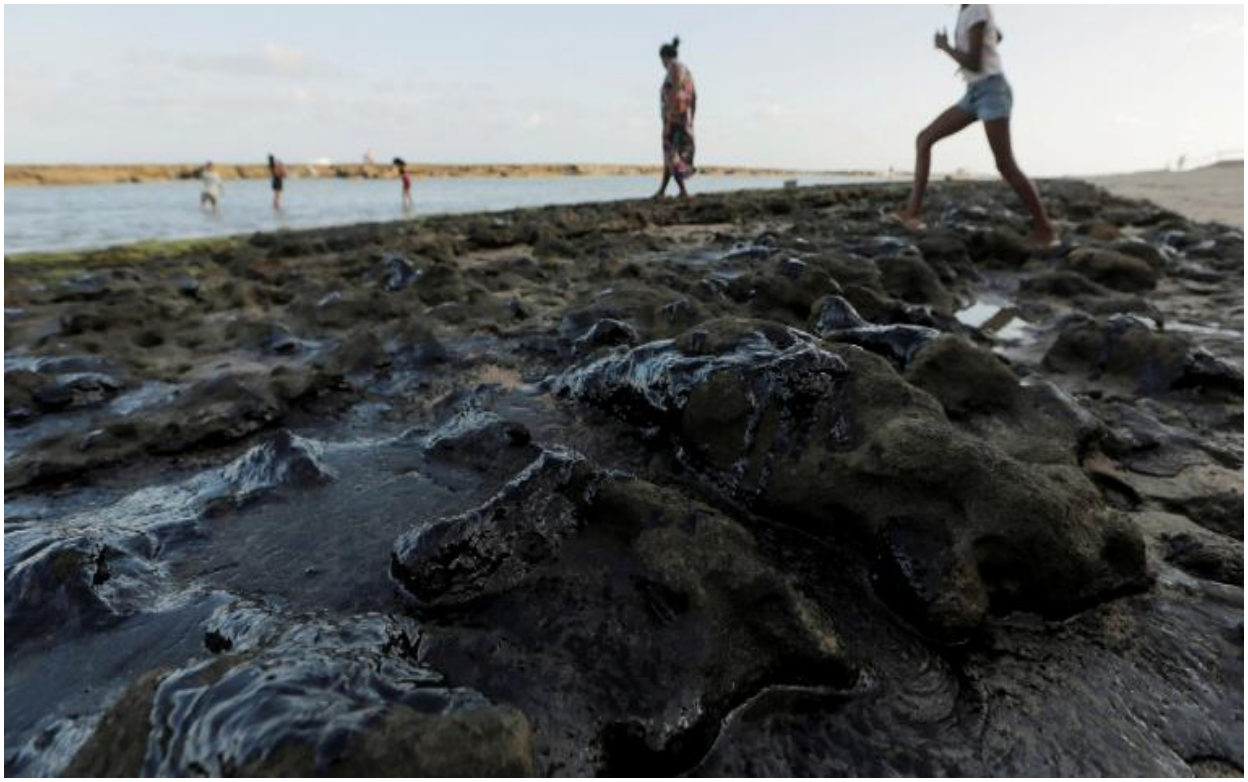
Proinde Circular 10-10-2019: extensive oil spill in Northeast Brazil and the impact on shipping

1. Background

For over one month now, an unprecedented extensive area along the shoreline of Brazil's Northeast Region has been hit by an oily substance in the form of lumps of black tar, whose origin and source remains unknown.

Substantial oil slicks were first spotted since at least 30 August 2019 and sightings were reported to federal authorities from 2 September 2019, but it was only weeks later they realised that the pollution was widespread and gradually reached the entire shoreline along the northeastern coast of the South Atlantic Ocean, heading south.

To date, more than 130 tonnes of oil waste has been collected on the many affected beaches, while oil-soaked sea turtles are being washed on the shores of the northeastern coast, many of them already dead. Fish contamination and mortality are also being reported.

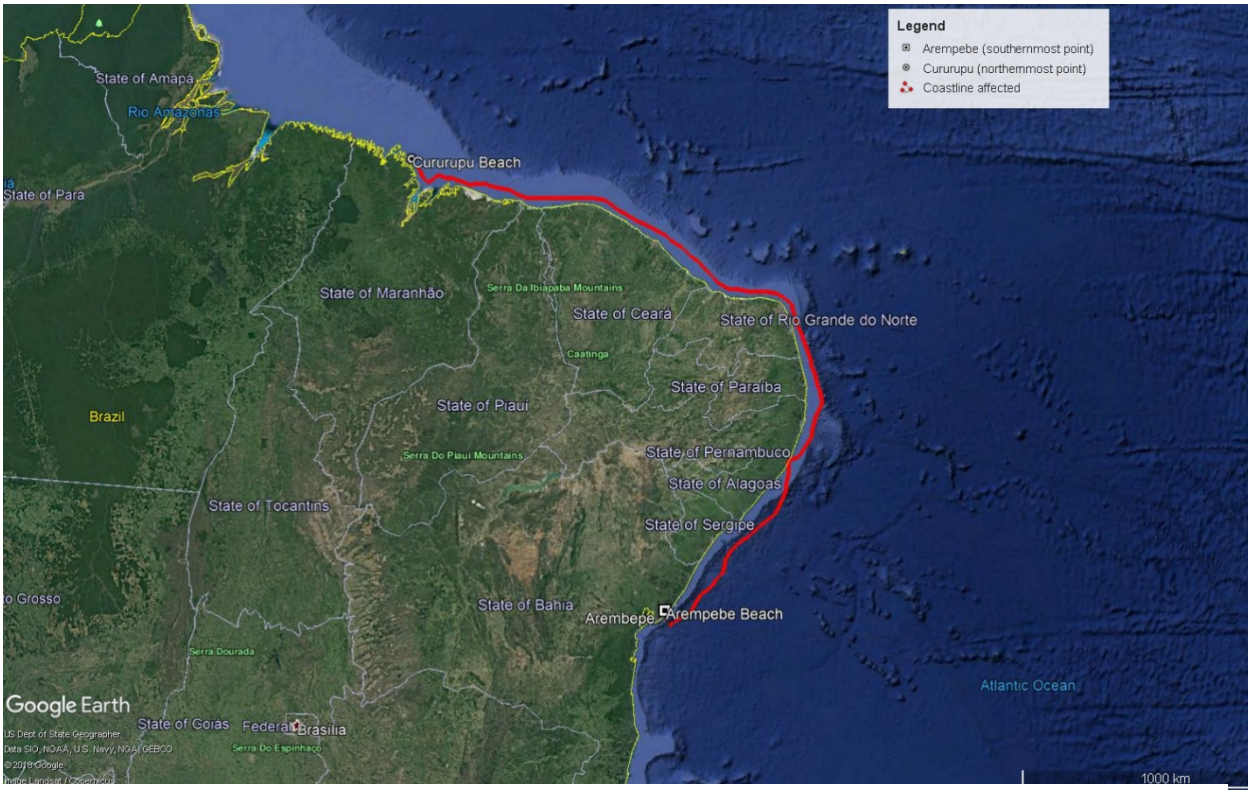


Lumps of crude oil washed on the shores of the State of Bahia

2. Area affected

All the nine states of Brazil's Northeast Region, namely (from north to south) Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe and Bahia, have been reached by the oil spill in the course of recent weeks.

The affected area spans over 1,370 nautical miles across sandy beaches, mangroves, reefs and rocky coasts and varied fauna and flora, extending from Cururupu in the state of Maranhão, to the northernmost point, to Arempebe in Bahia, the southernmost point so far **[see map below]**.



Brazil's Northeastern coast affected by the mysterious oil spill as at 10 October 2019

According to the latest report by federal environmental agency IBAMA, over 150 locations in 68 municipalities in the nine northeastern states were reached by the oil spill to varying degrees and at different times, and the area continues to expand as the oil flows south. Oil slicks are expected to hit the coast of Salvador, the largest city in Northeast Brazil, over the coming weekend. IBAMA regularly updates the maps of the beaches and fauna affected by the oil spill and these can be downloaded from: http://ibama.gov.br/notas/2047-manchas-de-oleo-no-litoral-do-nordeste.

Brazilian state oil company Petrobras is assisting IBAMA and state environmental agencies in the clean-up efforts and wildlife recovery. Some of the affected states have declared a state of emergency and tourists are being advised to avoid certain beaches.

Key northeastern ports clustered along the affected area include Itaqui (São Luis), Pecém (Fortaleza), Areia Branca, Natal, Cabedelo, Suape (Recife), Maceió, Aracaju, Aratu and Salvador; however, they are all operating normally, with no records of vessels contaminated.

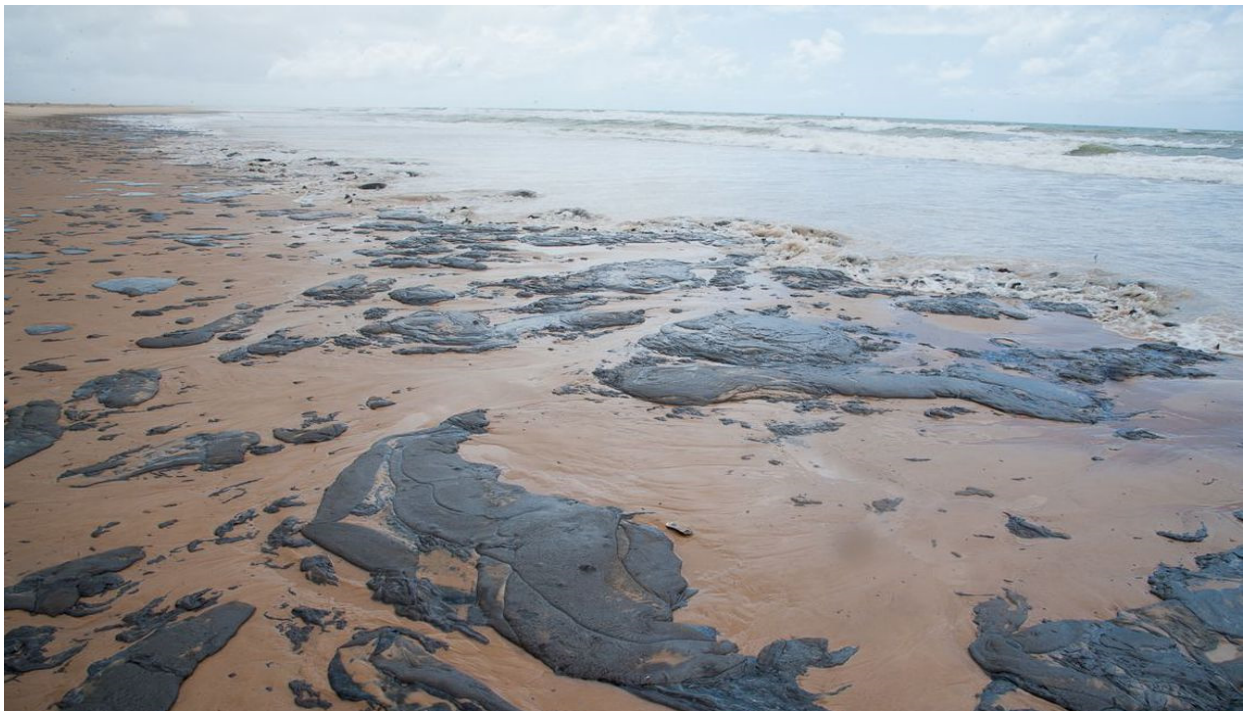
3. Origin and nature

Petrobras stated that representative samples of the substance were tested, and it was concluded that the product that currently pollutes the pristine northeastern beaches is crude oil, neither produced nor imported by Brazil.

Brazilian mainstream media informed that a confidential report from Petrobras to IBAMA indicates that the oil bears the same fingerprint as Venezuelan crude, information that was not corroborated by either party, though Brazilian environment minister Ricardo Salles was quoted as saying that, based on an alleged match between the samples tested and Venezuelan crude, it is likely that the product in question actually came from Venezuela, possibly carried on a vessel sailing near the Brazilian coast that accidentally or otherwise discharged it.

State-owned oil company Petroleos de Venezuela S.A. (PDVSA) has declared there is no evidence of spills on Venezuelan oil fields that could have caused damage to Brazil's marine ecosystem and that it has not received any reports from its customers or subsidiaries regarding a possible breakdown or spill near the Brazilian coast, whose nautical distance from its oil facilities is approximately 6,650 Km.

A study by the Institute of Geosciences of the Federal University of Bahia (UFBA), in partnership with the Federal University of Sergipe (UFS), points out that the oil is of Venezuelan origin. The information was released by the director of the entity who said that the analysis of samples collected off the coast of Bahia and Sergipe showed the presence of carbon and biomarkers similar to the crude produced in Venezuela.



Crude oil washed upon a beach in the state of Pernambuco

4. Official investigations

Brazilian Navy's Directorate of Ports and Coasts (DPC) has opened an administrative enquiry to determine the source of the oil spill. The procedure includes analysis of maritime traffic data, information collected by naval ships and aircrafts passing or patrolling the area, responses to

notices to mariners, simulation and modelling of sea currents and winds in the South Atlantic, and determination of the chemical profile of the product. The maritime authority is also assisting the environmental agencies in the pollution response and conducting sea and air patrols; however, so far, no trace of petroleum has been found in the open sea, only in the coastal area near the beaches, suggesting it is floating below the sea surface, making it difficult to determine its origin, range and moving pattern.

IBAMA leads the environmental monitoring and emergency management of the case in cooperation with the Navy, Petrobras and federal and state authorities. The agency is also directing the environmental impact assessment, wildlife rehabilitation, oil removal and waste disposal.

The Federal Police launched a criminal enquiry to investigate an eventual environmental crime.

4. Impact on shipping

Navy's Integrated Maritime Safety Centre (CISMAR) is investigating maritime traffic in the region, comprising an area of about 36,000 square nautical miles in Brazil's exclusive economic zone, with an emphasis on oil tankers.

From 1 August to 1 September 2019, CISMAR identified 140 tankers, some of which are being notified by the maritime authority to provide information. We understand that tankers that have sailed along the Brazilian coast in recent weeks are also under investigation.

5. Conclusion

Although merchant ships other than tankers carrying oil as cargo are not targeted by the various ongoing investigations, it is recommended that any sighting of oil slicks during navigation or while moored alongside or at anchor, or if vessels have their hulls oil-stained, the maritime authority should be promptly informed of the extent, location and likely path of the oil slick, with the finding carefully documented (logbook entry, position plotted on the nautical chart and photographs or video, if possible). Shipowners should inform their liability insurers and seek advice from agents about the need to perform hull cleaning prior to the vessel's arrival at the next port or anchorage area.

Brazil signed the CLC 1969 and the OPRC 1990 Conventions and, according to its domestic legislation, oil pollution fines can reach R$ 50 million, without prejudice to other administrative and criminal sanctions and the polluter's strict liability to fully redress environmental damages.

Editor: Ricardo Martins

www.proinde.com.br