

Mumbai Oil Spill and its effect on Environment

Vikram Kumar

The 2010 Mumbai oil spill occurred after two Panamian-flagged ships, MSC Chitra and MV Khalijia-III collided off the coast of India near time. MSC Chitra, which was outborne Mumbai on 7.08.2010 at around 9:50 A.M local time from South Mumbai's Nava Sheva port collided with the inbound MV Khalijia-III which immediately threw out the oil containers from MSC Chitra into the Arabian Sea. Khalijia-III was apparently involved with another mishap on July 18, 2010.

MSC Chitra, registered in Panama, is owned by Mediterranean Shipping Company, a public limited company based in Geneva, Switzerland. Its management operations are conducted from Hong Kong, while its local agents in Mumbai look after the loading and unloading of its ships. "It's a big shipping company owing 140 ships," Mr. Khalid said.

Khalijia, on the other hand, is owned by Gulf Rock KSC, a Kuwait-based public limited company, with management operations in Navi Mumbai. The company is listed on the Kuwait Stock Exchange.

When the MSC Chitra collided with the Khalijia on 7.08.2010, it had a cargo of 1,219 containers holding 2662 tonnes of fuel, 283 tonnes of diesel and 88040 litres of lubricant oil. Thirty-one containers had pesticide in them. The Chitra tilted sharply under the impact of the collision, resulting in the oil spill and now, containers of pesticide bobbing off on the sea.

The foreign cargo ship, which collided with another vessel about 10 km off Mumbai harbour, tilted further spilling oil for the third day continuously as Navy and Coast Guard made hectic efforts to contain the leak. The Chief Minister of Maharashtra, Thiru Ashok Chavan claimed that they have already filed cases against the captains of the two ships which are from abroad. Thirty three crew members, including two Pakistanis, were rescued following the incident.

"The oil slick has been sighted on shore from Nariman Point to Cuffe Parade in Mumbai, Vashi and Airoli in Thane district, Uran, Mandovi and Elephanta in Raigad district. Elephanta and Navi Mumbai or BARC [Bhabha Atomic Research Centre] are reportedly the only sites where mangroves have been indicated to be affected. The Pollution Control Board has constituted four survey teams with assistance of the Coast Guard and the district or local administration, one each for Mumbai, Mumbai suburban, Thane and Raigad districts," a press note of the Directorate General (DG) of Shipping said.

The Navy and the Coast Guards have been carrying out anti-pollution operations every day to check and neutralise the oil spill. Six coastguard vessels and a helicopter with anti-pollution dispersal spray systems were pressed into service on 8th August 2010 to contain the oil spill.

A high-level meeting, attended by the officials of the Maharashtra Government Environment Department, National Disaster Response Force, Brihanmumbai Municipal Corporation, Shipping department, Mumbai Port Trust and other concerned agencies has been convened to assess the situation and steps to be taken to bring it under control, sources said.

Fishing associations have been also requested not to carry out any fishing activities till the oil spill is contained. Officials are yet to locate the leakage. The thick oil slick has been sighted two to three kms around the vessel Chitra. As on 10th Aug 2010, traffic had been suspended as the containers were still sighted floating into the channel thus making navigation hazardous.

The Directorate General of Shipping has initiated an investigation into the incident, Directorate General of Shipping's Chief Nautical Advisor M M Savvi said, adding that the Coast Guard and senior officials (Directorate General of Shipping) were at the site.

On 10th August the oil slick from MSC Chitra stopped. Officials claim that no oil was coming out. Operation is halted as the ship is steady. Evacuation of cargo was supposed to start from 11th August 2010.

But MSC Chitra is still tilted dangerously and there is no change in situation. The oil patches off middle ground and islands of Elephanta and butcher have been cleared off. The district collectors of Thane, Navi Mumbai and Raigarh have reported no sighting of oil on coast line. Pollution response capable vessels are spraying oil spill dispersants.

During aerial surveillance concentrated residual oil patches have been sighted adjoining areas of BARC and Sewri. Around 800 tonnes of oil is floating on the sea comes dangerously close to the coast line.

Prime Minister Manmohan Singh has intervened and asked for a report from the Union Shipping Ministry on the oil spill. Bhabha Atomic Research Centre (BARC) has also been alerted by the Coastguard to stop using sea water for cooling down purposes as the slick has reached Sewree area where BARC is located. Hectic efforts continued to combat the oil spill spanning around two miles in the Arabian Sea.

In the biggest such operation mounted so far in the Indian sea waters, authorities have deployed five Indian Coast Guard (ICG) ships, one helicopter and one small aircraft for controlling the massive oil spill. The ships ICG Sankalp, Amrit Kaur, Subhadra Kumari Chauhan, Kamla Devi and C-145 - have joined the ICG AOPV Sangram, which was deployed since 9th August 2010 to monitor the oil spill and guide relief efforts. A Chetak helicopter and a small Dornier aircraft were pressed into service for aerial spray of dispersants to tackle the thick oil slick.

August 11th 2010

The Singapore-based Smit Company will begin operations to salvage the MSC Chitra from August 11th 2010. But it may take nearly six to eight months before the ship can be removed from the spot. Mumbai Port Trust chairperson Rahul Asthana says that a team has come on 10th August 2010 and another is reaching on 11th August 2010 morning with pumps to remove the oil.

Jawaharlal Nehru Port Trust's acting chairperson N N Kumar said these pumps can suck out oil at the rate of 30 metric tonnes an hour. The ship Chitra was carrying 2662 metric tonnes of fuel when it started. Nearly 879 metric tonnes has flown out. Besides, there are 283.8 tonnes of diesel and 88,040 litres of lube oil on board. It is expected to take eight days to drain out the oil.

Coast Guard officials said a crane called Sea Patriot C4 mounted on a ship has been arranged and has been positioned close to Chitra to continuously pump out the oil.

The salvers have already placed tugs and put chains so that the falling containers do not drift far off. They are immediately picked up and kept on the tugs. Asthana said the equipment is being imported from Rotterdam and Singapore.

The submerged containers will be lifted using air bags and towed to a shallow corner. Simultaneously, the containers on the ship will be removed with a crane, placed on a barge and then taken to JNPT.

N. N Kumar also said around the same time, water will be filled in the ship's tanks so that she does not lose her balance. Water blasts will also be used to correct the balance. But Kumar says that the major fear will be over when the oil is removed completely. It will take six to eight months before the ship can be refloated and towed away. If the salvers cannot refloat her, then they will have to cut her and dismantle her.

Impact of the Mumbai Oil Spill

The situation is chilling. A snake which came in from the sea was covered in oil and chemicals and was struggling. Neither could it go back into the sea as it is filled with oil, nor could it remain in the open in the baking sun. The oil spill has turned deadly. And it's not just this one snake.

Fishermen claim that their fishing nets in the sea are all covered with oil. No one is willing to buy such fish. The marine life here is contaminated. This has been confirmed by initial reports carried out by the state government. The oil slick has even entered the sensitive mangrove belt. While the government is working towards a swift clean up, environmentalists fear it may be too late.

Environmentalists worry that the oil slick will enter the mangroves and mudflats and once that happens nothing can be done to clean it up. Moreover he believes that India has the technology or the intent.

The Environment Minister Thiru Jairam Ramesh claims that removing the entire oil from the sea will take 45 days. Comprehensive detailed investigation on damage on mangrove forest will be done by Maharashtra Pollution Board. And while the leak may have been plugged, going by the extent to which the slick has spread, it will be a while before the villagers can return to the seas for their livelihood.

As the crisis related to the oil spill off Mumbai coast becomes bigger, it's business as usual in the metropolis. Even as mangroves turn black due to the oil slick and toxic chemical bottles get washed ashore, at the Mumbai docks fish continues to be brought in and hundreds of fishermen continue to go out to sea.

Over 31 containers with hazardous chemicals are still missing and need to be found. Debris can still be seen floating in the waters. The water around the damaged MSC Chitra is clear but that is because the ship is in deep sea and the debris is getting washed ashore.

But the fishermen claim there is no need to panic. They are worried people will stop eating fish, affecting their business in turn.

12th August 2010

The crisis related to the oil spill off Mumbai coast becomes bigger.. Even as mangroves turn black due to the oil slick and toxic chemical bottles get washed ashore, at the Mumbai docks fish continues to be brought in and hundreds of fishermen continue to go out to sea.

Over 31 containers with hazardous chemicals are still missing and need to be found. Debris can still be seen floating in the waters. The water around the damaged MSC Chitra is clear but that is because the ship is in deep sea and the debris is getting washed ashore.

But the fishermen claim there is no need to panic. They are worried people will stop eating fish, affecting their business in turn. They claim that there is no connection between the oil spill and fish.

Despite the warnings of the state government and Environment Ministry for the fisherman of Mumbai it is business as usual. They insist there is nothing wrong. For them it is just another day.

Loss due to spill

Four billion dollar of trade will be lost if the oil spill off the Mumbai coast is not dealt with by the weekend. The situation has already prompted exporters and importers to ask the government for financial relief,.

The recent oil spill off the Mumbai coast has disrupted cargo traffic at JNPT and Mumbai port. And if the situation is not addressed by the end of the week (15th august 2010), the Federation of Indian Export Organizations (FIEO) estimates that USD 4 billion of trade cargo will be lost.

After all, these two ports handle 60% of India's container traffic. The FIEO says that losses are mounting with each day of delay. It pegs losses to Indian importers and exporters at USD 20 million by the end of the week. The Federation is now asking the government to help contain these financial losses by waiving demurrage, detention and other charges which arise from suspension of operations at the ports.

Oil companies, meanwhile, are putting on a brave face, for now. They say that fuel production at their Mumbai plants are normal, and add that the port disruption will not mean a shortage of supplies, for the time being. ONGC is also working to compensate for the blocked ports by diverting crude to its two facilities through pipeline.

This measure, it says, will ensure supplies are not impaired. Officials at oil marketing companies IOC, BPCL and HPCL agree, saying they have enough inventories to survive this crisis.

The Maharashtra government is going all out to assure the people that port activities will resume as soon as possible. But experts point out that if port operations remain suspended past the 15th of august, Mumbai could run out of fuel.

The Response System

The collision of two large ships off the Mumbai coast and the resulting oil spill has come as a test of India's preparedness to handle shipping disasters. A strong oil spill response system is of paramount importance. Yet capacity-building efforts in major ports have not kept pace with the need.

It is precisely to meet such challenges that a National Oil Spill Disaster Contingency Plan (NOS-DCP) was drawn up in 1996. Based on this, all ports should by now possess functional spill response systems but they clearly do not. The proceedings of the 14th NOS-DCP and Preparedness Meeting held in 2009 highlighted the slow progress in achieving full response capacity even at the basic level at Mumbai and JNPT ports.

India has ratified key environmental and shipping conventions, including the International Convention on Oil Pollution Preparedness, Response and Cooperation. The national coastline is about 7,500 km long and has, in the assessment of the Coast Guard (CG), 11 major and 20 minor ports that must be equipped to combat oil pollution. A few ships sink in Indian coastal waters every year; in 2007, as many as five vessels with a total of 658 tonnes of oil went down.

Captain Martin and Master Laxman Dubey of MV Kahljia III have been booked under IPC sections 280 [rash navigation] and 336 (act endangering life or personal safety of others) and

sections 7, 8, 9 pertaining to prevention, control and abatement of environmental pollution of the Environment Protection Act.

Dream Dare Win

www.jeywin.com
