

NEWS & REPORTS

Effluents from Oswal Fertilisers threatens olive ridley sea turtles on the Orissa coast

The Orissa sea coast is the largest breeding and nesting site for olive ridley sea turtles in the world. However, this unique natural heritage is under serious threat. Thousands of sea turtles are killed every year by illegal mechanised trawling. The latest threat to the long term survival of the turtle population is the continued discharge of effluents from the Oswal phosphate fertiliser factory located at Paradeep .

This industrial unit which commenced production in January, 2000 has caused environmental disasters right from its inception. More than half a dozen accidents have occurred so far which has injured thousands of people. The Paradeep Port Trust has also filed a police complaint against the unit. It is observed that the industrial unit has scant regard for the pollution control laws and the State Pollution Control Board has been unable to control the release of harmful effluents. It routinely discharges the following harmful effluents into the adjacent Mahanadi river system:

- a) Phosphogypsum which contains radium-226 which is a radioactive substance. This releases a harmful gas called radon.
- b) Fluorine which causes fluorosis and contaminates the ground water. Since the process produces fluorine as a by-product and the unit does not recover this, all such fluorine is released into the surrounding river and creek waters. To hoodwink the Pollution Control Board, the unit has a fluorine recovery unit which is actually not run since there is no production of hydrofluorosilic acid which is obtained when fluorine is recovered from the process.
- c) Free sulphuric acid which is extremely harmful for all live organisms.
- d) Sulphur dust which is also a poisonous chemical.

Phosphogypsum has been listed as a hazardous waste under category 16 of the Hazardous Waste (Management and Handling) Rules 1989 framed by the Government of India. Phosphogypsum contains radium-226, which decays to radon gas. The World Health Organization (WHO) as well as the US Environmental Protection Agency (EPA) have classified radon as a known human carcinogen.

A recent survey by Operation Kachhapa on 5th January has revealed the serious nature of the polluting activity of the fertiliser unit which has affected the local marine eco-system and can have a long term effect on the survival of olive ridley sea turtles on the Orissa coast. The waters of the Atharabanki creek were greyish white in colour due to the continued discharge of phosphogypsum. The mangrove forests on the banks of the Atharabanki creek carried a white deposit on the leaves which will ultimately lead to the death of the plants. Mangroves are the breeding areas for shrimps, crabs and fish which migrate inland.

Fishermen report the formation of a thick crust of gypsum at the Mahanadi river mouth. Trapped under this crust is radioactive radium- 226 which releases radon gas a known carcinogenic. The team could not find any evidence of living fish, shrimps or crabs on the Atharabanki creek downstream of the Oswal factory. Fish catch of nearly 10,000 country fishermen who depend upon the Mahanadi river system including has been badly affected due to this pollution. The state fisheries department has drawn the attention of the government to the falling fish catch near the Mahanadi mouth due to pollution by Oswal fertilisers.

It is feared that the food chain of the coastal marine ecosystem of the Orissa coast is being affected by this continued discharge of dangerous effluents into the Mahanadi river system. Strong ocean currents at the mouth of the river easily carry these pollutants both up and down the coast including the vital eco - sensitive areas and sea turtle mass nesting sites of Gahirmatha Marine Sanctuary and the Devi river mouth. There is a drastic reduction in the quantity of micro- organisms and juveniles of crabs, shrimps, jellyfish and other fish. Unless immediate steps are taken, Orissa's greatest natural heritage, the olive ridley sea turtles may fail to return in future years.

Source: Biswajit Mohanty, Operation Kachhapa Wildlife Society of Orissa, Cuttack 753001.