

# EX TROPICIS

ENVIRONMENTAL NEWS



*Spot News*

Week of January 03 to 10, 1992

## WATER POLLUTION

### Heavy metal contamination in Cubatão river

In Cubatão, a town on the southern coast of São Paulo state, a study commissioned by a group of Cubatão industrialists has concluded that petrochemical waste their plants release into the nearby river does not in any way threaten the sources that supply drinking water for the area. This water is consumed by 1.2 million permanent residents and between 1.4 to 2.8 million tourists who visit during summer holidays.

Daniel Gomes, a geologist who participated in the research, stated that there were 2,000 tons of heavy metals found in the residue analyzed. The report claims that this quantity, however, is negligible due to the river's capacity to dilute the effluent.

Such a conclusion contradicts the report - the levels of lead, arsenic and cadmium are unacceptably high. The amount of mercury alone in the water table is eight times higher than in water fit for human consumption. According to Gomes, the effluent could only harm the community if heavy rains were to wash the toxic waste straight into the river. Heavy metals are not eliminated from the human body; as they build up, they can cause serious chronic diseases, cancer and birth defects. Therefore, the local population not only faces the danger of contamination from heavy rains, but also from small yet steady ingested doses of the metals. The pollutants enter the food chain through fish and seafood eaten and sold by local inhabitants.

The mayor of Cubatão has admitted that the presence of toxic wastes has been proven and has promised to evacuate the 159 residents who live in the contaminated area.

## PUBLIC HEALTH

### Bacteria helps clean up city

A pilot project using bacteria to "digest" raw sewage is set to begin at the end of 1992 in the state of São Paulo. The city of Cosmópolis, 115 kilometers from greater São Paulo, has received the go ahead to proceed with a new system of sewage treatment under an agreement signed by the municipal government and other community associations in the region. This consortium has twenty members that are seeking to clean up two local rivers contaminated by industrial waste and untreated sewage. The Piracicaba and Capivari rivers supply water to over 4 million residents and provide water for irrigation systems and industry.



The main advantage of this anaerobic treatment is that the process takes up little space and is inexpensive. The raw sewage enters a chamber containing bacteria. There, the microorganisms digest the waste material in an oxygen-free environment. The first facility will cost approximately \$47,000 and will serve 15,000 residents in the region of the River Jaguari, a tributary of the Piracicaba. The pilot project's success will mean the green light for treatment stations in the other municipalities who are part of the association.

## TOXIC WASTE

### Tighter legislation to avoid accidents

Santos, São Paulo's port city, has passed new environment protection legislation as a result of the massive fire that started at Granel Química, a petrochemicals company last October. Lightning struck refinery-sized tanks containing vinyl acetate at a deposit that houses 136 such tanks. Other toxic and flammable substances such as styrene, ethyl alcohol, caustic soda, methanol, deisel oil, gasoline and ether are stored in these tanks as well. There was insufficient water pressure in onsite hydrants to fight the fire so water was borrowed from another firm nearby. The law, passed last week by mayor Telma de Souza, requires inspection of security schemes at chemicals deposits, environment impact studies for new facilities and for the enlargement of existing ones. All chemicals firms must submit updated security programs by January 21.

## ENDANGERED SPECIES

### Tortoises make a comeback

The Brazilian Institute of the Environment and Renewable Natural Resources (Ibama), has launched a new project in the state of Bahia to preserve tortoises or "jabuti" as they are known locally. This species of tortoise, which is exclusively terrestrial, faces the risk of extinction because of unrestricted hunting and the advance of farming and ranching. The animals are used as a food source in the country and sold as pets in the city.

These tortoises used to be found in almost all regions in Bahia and their habitats varied from dense, humid forests to semi-arid savanna-like grasslands.

Ibama will use tortoises they collect and ones people donate to repopulate two reserve areas in Northeastern Bahia, 300 kilometers from Salvador. The monitoring program involves counting, tagging and marking shells of the tortoises with oil paint. After a quarantine period during which the animals are given parasite medicine, they will be released in areas where there is thick vegetation. Besides restocking the species in the reserves, the institute is carrying out a community education project on the importance of preserving the tortoise.