Chile: Contamination from a pulp mill causes death in the wetlands

The Nature Sanctuary Carlos Anwandter at Rio Cruces is the Site that Chile incorporated as Wetland of International Importance when it adhered to the Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat, in 1981. It is home to a wide diversity of species of flora and fauna, particularly black-necked swans (Cygnus melancoryphus), an endangered migratory bird. The Sanctuary and its swans are part of the identity and image of the inhabitants of the nearby city of Valdivia, closely linked to the riparian landscape.

At the end of October, public alarm was alerted with the appearance of dozens of dead or undernourished and blind black-necked swans, with evident neurological alterations that made it impossible for them to fly. The reason for this was identified as being the fact that they feed on a type of algae (Egeria densa) which is apparently being affected by contaminants. This disaster is also affecting the taguas (a local bird), coypu (a vegetarian rodent), and various types of fish that have also been found dead.

Although there has not been a conclusive answer to the causes of this disaster, the sole relevant event that has taken place on the Cruces River over the past year and that could explain such a drastic change in the ecosystem is the entry into operation of the Valdivia Pulp Mill, belonging to the Celulosa Arauco Company (CELCO). This pulp mill started operating in February 2004, 15 km upriver from the protected wetland.

Located in the commune of San José de la Mariquina, Province of Valdivia, with an initial investment of one billion dollars, this mill has an annual production of 850,000 tons of Kraft pulp and was presented to the country as a model enterprise. It was the first one to be submitted to an Environmental Impact Assessment System (EIAS), set out in Law 19,300 on general environmental bases and, according to its executives, one of the few in the world to have a tertiary treatment system for the evacuation of effluents. The environmental resolution approving it assured that the emissions of total reduced sulphide (TRS) – the characteristic “rotten egg” smell of pulp mills – would not be detected by the human sense of smell. At the most it would be projected at a range of 500 metres.

However, since 1996, various ecological and citizen organizations had opposed the installation of CELCO. They warned about the project’s impacts and in particular the consequences of the evacuation of industrial effluents. The political authorities did not listen to them, seduced by the possibility of opening a great company.

Today, less than a year after it was launched, negative impacts on the environment have overshadowed any benefit that it might have given to regional economy. What started in the first months of the year with complaints and protests by the community of Valdivia, affected by the nauseous smell blown in by the wind (see WRM Bulletin 83), continued in August with an environmental emergency in the Eighth Region following the turpentine sulphate spill that affected, among others, the inhabitants of Lota, located at 30 km from the pulp mill, where schools had to close down because the pupils were nauseous with headaches and vomiting. . Following the launching of the pulp mill, in other nearby villages, such as Lanco, Mafil and San Jose de la

Mariquina, people started consulting the doctor because of headaches, nausea and irritated eyes.

The pervading emanating smell widely surpasses 50 kilometres, and even reaches as far as the city of Valdivia. CELCO has already been sanctioned by the Valdivia Health Service, by the Municipality of San Jose de la Mariquina and by CONAMA (the National Environmental Commission) of the Tenth Region.

The environmental authorities have detected serious irregularities in the construction and operation of the Mill and in the liquid and gaseous waste effluents and emissions showing that the volumes established by the Environmental Impact Assessment approved by the Chilean authorities, have not been respected. Among other things, a clandestine duct and direct discharge into the Cruces River of stagnant water from the ponds of untreated liquid industrial waste and of 50 litres per second of refrigeration waters at a high temperature through the rainwater collector, were identified..

To this now is added the death of the black-necked swans. Shocked by the ecological disaster that is affecting the wetlands of the Cruces River and disappointed by the slow reaction of the authorities to this event, on 14 November the inhabitants of the region organized a march and an original river caravan in which over 1,500 people took part and on 16 November they held a Citizen Assembly with the participation of 500 people. The demand was unanimous: to apply the preventive principle set out in environmental legislation and while their possible responsibility for the deaths in the Sanctuary is not discarded, to halt operations at the paper mill so as to eliminate contaminating effluents that are suspected of causing the loss of the ecological heritage of the Cruces River,.

The mass death of swans and the impacts on the ecosystem of the Nature Sanctuary were avoidable.

Article based on information from: “Desastre Ecológico en el Río Cruces: Crónica de una Muerte Anunciada”, distributed by RedManglar Internacional, e-mail: redmanglar@redmanglar.org , http://www.redmanglar.org/redmanglar.php?cat=GestionAmbiental13#cisnes ; “Celulosa Arauco no quiere someter ducto a evaluación de impacto ambiental”, Carlos González Isla; “¡Vida a los cisnes!”, Angara Kuns P., material sent by Lucio Cuenca, e-mail: l.cuenca@olca.cl , Observatorio Latinoamericano de Conflictos Ambientales, http://www.olca.cl