

Informe de la empresa Boliden sobre el vertido tóxico en el entorno de Doñana

Boliden report on toxic waste in the vicinity of the Doñana National Park

La multinacional Boliden –propietaria de las minas de Aznalcóllar a través de la española APIRSA– ha explicado en varias ocasiones su opinión sobre la rotura de la presa que provocó el vertido tóxico en el entorno de Doñana. Aparte de ruedas de prensa y comunicados públicos, existen informes técnicos encargados por la empresa sobre las condiciones técnicas del dique afectado, el impacto ecológico y las implicaciones económicas y administrativas del caso. Un resumen de todo ello puede consultarse en la página web de Boliden Limited (<http://www.boliden.se>), que se renueva periódicamente con nuevos datos. Esta es la última versión de la página, a fecha 9 de septiembre de 1998:

SUMMARY

Tailings Dam Failure at Boliden's Los Frailes Mine near Seville, Spain.

On April 24, 1998 a tailings dam at Boliden Limited's Los Frailes mine, 45 km west of Seville, Spain, was breached.

The dam was built in 1978 and, in 1987, Boliden acquired the company Apirsa, including the dam.

The dam failed an approximately 50-metre section. An estimated 4-5 million cubic metres of acidic water was discharged into the nearby Rio Agrio. Tailings materials containing sulphates, zinc, copper, iron and lead were also discharged. No personal injuries were reported.

Approximately 2.000 hectares of land were flooded. Limited property damage occurred along the Rio Agrio and the Rio Guadiamar into which it flows.

As a result of prompt action by Spanish environmental authorities, the discharge was diverted away from

Doñana National Park at the mouth of the Rio Guadiamar.

Initial inspections indicated that ground beneath the dyke slipped causing the instability.

The tailings dam was reviewed by independent consultants and governmental authorities in 1996 and has been regularly inspected since that time, most recently on April 14. No signs of instability were detected prior to the failure.

Two studies were conducted in 1996 by independent consultants. Golder Associates of Canada conducted a hydrogeological study of the water seepage from the tailings dam and surrounding areas. This study was directed towards recommending remediation methods to minimize the impact on the nearby Rio Agrio. GEOCISA of Spain conducted a study on the stability of the tailings dam. This study was directed towards analyzing the stability of the tailings dam in light of the high levels of precipitation that had occurred in the area.

Mining operations have been temporarily stopped at Los Frailes and the company declared force majeure with respect to its obligations to its customers and suppliers.

Boliden estimates that a large part of the solid materials discharged were deposited within about 10 kilometres of the mine.

Spanish authorities asked an independent consultant to prepare a report on the incident. Boliden also assembled its own team of independent consultants to investigate the cause of the failure.

Mr Anders B, low, President and CEO of Boliden said that Boliden would honour its responsibilities as the owner of the mine, but that the ultimate liability for the damage caused by the accident may be something for the courts to determine.

Mr B, low expressed his gratitude for the excellent cooperation the company has received from all government authorities from the time that the accident was first discovered.

The Spanish ministers of industry and labour and the Andalucian Minister of industry stated that they believed that it was important that the tailings dam be rebuilt or a new tailings dam be built and the mine reopened as soon as possible. Notwithstanding the accident, the mine is important to the economic well-being of the area and, in their opinion, compatible with the other activities in the area.

Boliden expects the process to reopen the mine to take up to six months.

On May 3 Boliden received approval from Spanish authorities for work to begin on cleaning up discharged material.

Cleanup work began along the banks of the Rio Agrio and Rio Guadiamar between the mine to the port at Huelva are being used to transport the material. Contractors have been retained for other aspects of the cleanup.

An action committee established by the Spanish national and Andalucian regional governments to oversee the cleanup has approved a plan to return the discharged material to the mine site for disposal.

Boliden also established working groups to study the effects of the accident on property and wildlife as well as on surface and underground water.

The pH in the river is back to the normal 7.5. The pH was about 5 the day after the dam failure.

On May 6 Boliden entered into an agreement with the Andalucian Federation of Farmers, The Andalucian Ministry of Farms and Fisheries and the mayors of the Towns of Sanlucar la Mayor and Huevar (sic) with respect to the advance of moneys to farmers whose 1998 harvest was directly affected by the discharge from the ruptured tailings dam.

Under the agreement, an independent consultant selected by Boliden will carry out a survey under the supervision of local governmental authorities to determine the net amount lost by the farmers as a result of their inability to plant or harvest and sell their crops. Boliden will advance moneys to those farmers who

accept the independent consultant's determination of loss.

Boliden estimates that the aggregate amount that it might be required to advance under the agreement is approximately US\$6.5 million. Boliden's estimate is based on its own assessment of the damage and recently obtained satellite images.

The agreement specifically provides that, by entering into the agreement and advancing moneys, Boliden does not accept any liability for the damage caused by the rupture of the tailings dam.

Boliden believed that the payments made by it to the farmers under the agreement would be covered by Boliden's third party liability insurance.

Boliden has comprehensive property damage, business interruption and third party liability insurance. The property and business interruption insurance is with Storebrand and has a limit of approximately US\$66 million. The third party liability insurance is with Trygg-Hansa and has a limit of approximately US\$13 million.

By May 9, the zinc grade in the river had decreased to about 2 ppm/l despite stirring in the river during the clean-up.

On May 25, Boliden opened an information office in San Lúcar to receive comments and provide quick information.

On June 8, test fishing in the affected river Guadiamar showed that, once again, there are fish and other aquatic animals in the river.

On June 11, Boliden Limited announced that, according to a report from an independent consulting firm, the probable cause of the April 25 tailings dam accident at its Los Frailes mine in Spain was slippage in a shear zone within a marl formation 15-20 metres below surface.

EPTISA Servicios de Ingeniería S.A., the company commissioned to investigate the accident, is a Spanish engineering and consulting services company specializing in dam design, mine engineering and environmental studies.

EPTISA's investigation and final report is expected to be completed by mid-September.

A distinguished international panel of independent engineering experts from Spain, Sweden and Canada is reviewing EPTISA's work and will review its final report.

By June 15, 1.1 Mtonnes material (tailings sand and soil) had been transported from the river valley to the closed open-pit mine.

On June 22, Boliden started disbursement to the farmers who had their harvest destroyed. Immediately after the accident Boliden reserved 50 MSEK for damages remuneration.

By June 30, Mtonnes material had been transported away from the river.