



The 2000/60/EC Water Framework Directive and the Flooding of the Brown Coal Meirama Open Pit (NW Spain)

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Coal mining in Galicia (NW Spain) has been an important activity which came to an end in December, 2007. Hence, for different reasons, the two large brown coal mines in Galicia (the As Pontes mine, run by ENDESA GENERACIÓN, and the Meirama mine, owned by Lignitos de Meirama, S.A., LIMEISA), have started closure procedures, both of which are considering the flooding of the mine pits to create two large lakes (8 km² in As Pontes and 2 km² in Meirama). They will be unique in Galicia, a nearly lake-free territory. An important point to consider as regards the flooding of the lignite mine pits in Galicia is how the process of the creation of a body of artificial water will adapt to the strict legal demands put forth in the Water Framework Directive. This problem has been carefully examined by different authors in other countries and it raises the question of the need to adapt sampling surveys to monitor a number of key parameters –priority substances, physical and chemical parameters, biological indicators, etc.– that cannot be overlooked. Flooding, in both cases consider the preferential entrance into the mine holes of river-diverted surface waters, in detriment of ground waters in order to minimize acidic inputs. Although both mines are located in the same hydraulic demarcation (i.e. administrative units that, in Spain, are in charge of the public administration and the enforcement of natural water-related laws) the problems facing the corresponding mine managers are different. In the case of Meirama, the mine hole covers the upper third part of the Barcés river catchment, which is a major source of water for the Cecebre reservoir. That reservoir constitutes the only supply of drinking water for the city of A Coruña (250.000 inhabitants) and its surrounding towns. In this contribution we will discuss how mine managers and the administration have addressed the uncertainties derived from the implementation of the Water Framework Directive in the particular case of Meirama.