



Department of Biological, Geological and Environmental Sciences

University of Bologna Alma Mater

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Bologna, Wednesday 2 October 2024

To whom it may concern

**Subject:** Environmental protection on the Harz anhydrite and gypsum karst areas

I am a Full Professor in Geomorphology and Speleology at the University of Bologna, in Italy. I have collaborated with the Emilia-Romagna Region in drafting the Dossier that led the Evaporite Karst and Caves of Northern Apennines (ECKNA) to be listed in the UNESCO World Heritage list of Natural sites to be protected for future generations. This is, so far, the ONLY gypsum karst area to be listed in the world. These areas are all protected by National and Regional laws, as UNESCO requires. This is so because of their exceptional scientific, social and economic value.

Also in our Region gypsum areas have been subdued to mining and exploitation, and many quarrying sites have been closed, only leaving one major extraction pole in the region. This quarry (Monte Tondo), mined by Saint Gobain, is due to close in the next few years, since protection, UNESCO and mining cannot co-exist.

In Germany, the unique and well-studied gypsum karst is still in pristine conditions ONLY in the Federal State of Saxony-Anhalt. This is also why this area in particular has been designated as the 'Südharz Karst Landscape Biosphere Reserve' by the regional authorities years ago. As far as I know, this is the only biosphere reserve in the world hosted in sulfate (gypsum) karst!

Given this fundamental information, the project of making a series of boreholes in these gypsum areas appears out of place, or even insane, since this is the beginning of an evaluation to start quarrying and mining gypsum in these areas. Even though gypsum is used as an "environmentally sustainable" material (in the building industry, for example), is it "environmentally friendly" to quarry protected areas? Can't we use more ecofriendly (recycled) materials? And can we allow us to loose this important geoheritage for future generation?

I thus fully understand and sustain the request of the German Speleological Federation (VdHK), to ask:

- The state of Saxony-Anhalt to recognize and accept its responsibility for the internationally significant gypsum karst landscape in the South Harz and protect it accordingly. Protected areas must be respected, whether under German legislation or the European Natura 2000 directive.
- The state of Saxony-Anhalt to prevent any further destruction of the gypsum karst, not only because of the adverse impacts on biotopes and geotopes but because it will impede future development of the region as a tourist destination.
- The state of Saxony-Anhalt to promote future- and climate-oriented plants and companies that produce alternatives to building plaster. Such building materials made from renewable materials such as plant fibers and recycled minerals have been on the market for a long time.

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