



Methodological proposal for the remediation of a site affected by phosphogypsum deposits

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The accumulation of phosphogypsum (PY) produces a well known environmental problems. The proposals for the remediation of these sites require multidisciplinary and very specific studies. Since they cover large areas a sampling design specifically outlined for each case is necessary in order the contaminants, transfer pathways and particular processes can be correctly identified. In addition to a suitable sampling of the soil, aquatic medium and biota, appropriate studies of the space-temporal variations by means of control samples are required.

Two different stages should be considered:

1.- Diagnostic stage

This stage includes preliminary studies, identification of possible sources of radiosotopes, design of the appropriate sampling plan, hydrogeological study, characterization and study of the space-temporal variability of radioisotopes and other contaminants, as well as the risk assesment for health and ecosystems, that depends on the future use of the site.

2.- Remediation proposal stage

It comprises the evaluation and comparison of the different procedures for the decontamination/remediation, including models experiments at the laboratory. To this respect, the preparation and detailed study of a small scale pilot project is a task of particular relevance. In this way the suitability of the remediating technology can be checked, and its performance optimized.

These two stages allow a technically well-founded proposal to be presented to the Organisms or Institutions in charge of the problem and facilitate decision-making. It both stages be included in a social communication campaign in order the final proposal be accepted by stakeholders.