

Water Management in the Aggregates Industry

KEY MESSAGES

- ▶ UEPG, the European Aggregates Association, recognises the valuable resource that water represents and works actively at promoting responsible and sustainable water management across European extractive sites.
- ▶ UEPG fully endorses the five main objectives of the Directive 2000/60/EC ("Water Framework Directive") and the main objective of the Directive 2006/118/EC ("Groundwater Directive"). The aggregates industry can indeed be a strategic partner for the proper implementation of these water policies.
- ▶ The Aggregates Industry has a proven record of best practices in water management, with an increasing number of case studies published on its website. Water recycling and control of any discharge from site are now established as good practice imperatives, just as are energy efficiency and environmental management. Innovative techniques ensure the compatibility of quarrying activity with the general objectives of quality of the Water Framework Directive.
- ▶ There are mechanisms of water management and control at very early project stages. The consideration of measures to protect water and water management are included in the Impact assessment procedure of the site, and in all European countries a water management plan (covering both surface and groundwater) is included in the general planning, permitting and operation of the quarry location.
- ▶ The Aggregates Industry contributes especially to the targets of the Water Framework Directive in its rehabilitation process, by creating lakes and wetlands, which provide ecosystem services such as biodiversity havens, flood management and water purification.

BACKGROUND

Aggregates are crushed rock, sand and gravel, used to construct Europe's essential infrastructure including homes, roads, railways, schools and hospitals. Some 3 billion tonnes per year of aggregates are produced by 14,000 companies (the majority of which are SMEs) on 24,000 extraction sites (quarries and pits), providing jobs for more than 250,000 direct and indirect employees. UEPG now represents national aggregates associations and producers in 31 European countries.

There is actually no direct process use of water in the Aggregates Industry. Water is used only where washing out of incidental clay or other natural organic materials is necessary. This water is sourced from rainwater or adjacent surface or groundwater, and its use is minimised through sedimentation and recycling. Quarried materials extracted and processed are inert as defined in EU legislation (2006/21/CE). No chemicals are used in the extraction process (other than the possible incidental use of flocculants in water recycling treatment). Standard measurement of the quality of discharge water is generally based on the parameters: pH, TSS (Total Suspended Solids), BOD (Biological Oxygen Demand), temperature and colour, all of which impacts are very local and rapidly disappear in downstream dilution.