

The Development of Operational and Policy Guidance on the Use of Hydrogen Peroxide

Deoxygenation of waterways following natural or man-made events can have significant impact on water quality and aquatic organisms, the most visible being fish mortality. A number of remediation techniques are available to counteract such incidents principally involving reaeration. More recently, the addition of hydrogen peroxide has been identified as an effective means of combating the adverse effects of pollution.

The objective of this report was to assess the use and environmental impact of hydrogen peroxide, building on in-house experience to define best practice and produce safe operational procedures together with an application methodology.

The final report (R&D Technical Report P191) identifies the principle characteristics of hydrogen peroxide, details the toxicity levels in the aquatic environment, identifies methods of application and specifies Health and Safety issues and procedures.

The report concludes that further information is required to determine the efficiency of hydrogen peroxide addition and sets out protocol for capture of this data.

The information from this project will form part of the Environment Agency's Chemical Techniques manual, which reviews novel techniques to ameliorate the effects of polluting substances.

This R&D Technical Summary relates to information from Project P2-095 which has the following outputs:

R&D Technical Report P191: Development of Operational and Policy Guidance on the Use of Hydrogen Peroxide

Internal status: Release to Regions
External status: Released to public domain

R&D Project Record P2/095/1/M: Development of Operational and Policy Guidance on the Use of Hydrogen Peroxide (CD-ROM)

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Copies of the outputs are available, within the Agency, from Regional libraries and external to the Agency from WRc (telephone 01793 865138; fax 01793 514562)

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