

POSSIBILITY OF USING PERMEABLE REACTIVE BARRIER IN TWO SELECTED DUMPING SITES

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Abstract: In the first part of the paper the most often used processes in PRB technology are presented and described. These processes are: redox reactions, pH control, adsorption and biodegradation. They proceed in the reactive materials listed in the table. In the second part of the paper the procedure used in the assessment of possibilities of using PRB technology is presented. It was suggested to use preliminary assessment during the initial stage of the procedure, as it limits the range of the analysis to several most important factors. Moreover, the conditions of using PRB were described. They can help to decide whether this technology should be accepted or not in the initial stage of the procedure. Such preliminary assessment of possibilities of using PRB was performed for two selected areas of dumping sites located in Upper Silesia, Poland. After accepting the possibilities of using this technology in their area, the types of reactive materials for effective treatment of groundwater were proposed for both of them.