



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002AK5B

Title: Investigation of Fouling in Membrane Bioreactors for Wastewater Treatment

Project Type: Research

Focus Categories: Waste Water

Keywords: fouling, membrane bioreactors, wastewater

Start Date: 03/01/2002

End Date: 02/28/2003

Federal Funds: \$20,097

Non-Federal Matching Funds: \$15,712

Congressional District: Alaska

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Abstract

The use of membrane bioreactors in wastewater treatment can reduce the amount of contaminants discharged into sensitive Alaskan ecosystems. The process of membrane bioreactors for wastewater treatment offers the advantage of a very high effluent quality. Membrane fouling, which can cause operational problems, is the major challenge that this innovative technology faces. Therefore, research is necessary to alleviate this problem. The proposed project will contribute to a better understanding under which conditions fouling is exacerbated. Such knowledge can help to design the process such that fouling is reduced. Improved membrane bioreactor operation is expected to lead to an increased use of this environmentally beneficial technique.