



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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JAMES E. RISCH, GOVERNOR  
TONI HARDESTY, DIRECTOR

July 6, 2006

Aqua Aerobic Systems  
Hui Lin  
PO Box 2026  
Rockford, IL 61130

Re: Acceptance of Aqua Aerobic Systems 102 Needle Felt Fabric Media Disk Filter technology

To Whom It May Concern:

For the purposes of complying with the filtration technology approval requirements of our rules, I am hereby accepting this particular technology under the following conditions for this project and similar wastewater projects in Idaho. This is not an endorsement of this technology, nor is it an approval of any other portion of the equipment.

This acceptance is based on a report entitled "Evaluation of the Aqua-Aerobic Systems Cloth-Media Disk Filter (CMDF) for Wastewater Recycling Applications in California" prepared by UC Davis (March 2001). Idaho DEQ approval is based on utilization of the random woven NF 102 needle felt cloth media having openings ranging from 10 to 30 microns and thickness of 3.8 mm operating under a vacuum.

Further, acceptance of this technology is contingent on the influent to the filter being coagulated; having loading rates not to exceed 6 gal/sq ft<sup>2</sup>min; being complimented with a disinfection process that will achieve the limits stated in IDAPA 58.01.17 for Class A effluent; influent turbidity to filter not to exceed 10 NTU more than 5-percent of the time within a 24-hr. period and never exceed 15 NTU; scheduled inspections of cloth condition; ensure adequate sludge wasting; and turbidity performance limited to Section 601.06.b of IDAPA 58.01.17. Operations plan shall specify minimum filter to waste cycle following high pressure wash based on displacement of two filtrate volumes and effluent turbidity below 2 NTU.

Very truly yours,

K. Mark Mason, P.E.

DEQ Wastewater Program

- c: Roger Tinkey, P.E., DEQ Coeur D'Alene Regional Office  
Tom Moore, P.E., DEQ Lewiston Regional Office  
Chas Aris, P.E., DEQ Boise Regional Office  
Dave Anderson, DEQ Twin Fall Regional Office  
John Kirkpatrick, P.E., DEQ Pocatello Regional Office  
Greg Eager, P.E., DEQ Idaho Falls Regional Office  
Richard Huddleston, P.E., DEQ Wastewater Program Manager