



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, Idaho 83706 • (208) 373-0550

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

October 2, 2007

Michael Sparks
MBR Product Manager
I. Kruger Inc.
401 Harrison Oaks Blvd. Suite 100
Cary, NC 27513

Re: Acceptance of Kruger NEOSEP Flat Sheet Submerged MBR System for Class A Effluent

Dear Mr. Sparks:

For the purposes of complying with the filtration technology acceptance requirements of Idaho Reuse rules, the Department of Environmental Quality (DEQ) is accepting of this particular membrane filtration technology under the following conditions for Class A wastewater projects in Idaho. This acceptance is based on DEQ receiving a copy of a letter from Jeff Stone of the California Department of Health Services dated October 12, 2006, stating the acceptance of this technology for water recycling in California. Idaho DEQ's acceptance is not an endorsement of this technology, nor is it an approval of any other portion of the equipment or of a project.

For Membrane Bioreactor (MBR) Vacuum Filtration using a Kruger NEOSEP Flat Sheet Submerged Membrane: PVDF ultrafiltration flat sheet membrane with a nominal pore size of 0.08 micron with a flux rate of 17 to 38 gallons per square foot per day (gfd); transmembrane pressure of -0.5 psi to -4.0 psi; required membrane integrity tests; turbidity performance limited to Section 601.06.b of IDAPA 58.01.17; and being complimented with a disinfection process that will achieve the limits stated in Section 600.07.a of IDAPA 58.01.17.

Be advised that Idaho has modified its rules regarding disinfection requirements for Class A effluent to require the entire treatment train to achieve 5-log removal of virus in addition to the reuse and wastewater rules. The effluent turbidity for membranes is 0.2 NTU.

Please forward a copy of the test report completed by MWH at your earliest convenience.

Very truly yours,

Mark Mason, P.E., Engineering Manager
Boise Regional Office, Idaho DEQ

c: Roger Tinkey, P.E., DEQ CDA Regional Office
Tom Moore, P.E., DEQ Lewiston Regional Office
Dave Anderson, DEQ Twin Falls Regional Office
Tom Hepworth, P.E., DEQ Pocatello Regional Office
Greg Eager, P.E., DEQ Idaho Falls Regional Office
Richard Huddleston, P.E., DEQ Wastewater Program Manager
Reading File, Engineering File