To:         Doug Szenher, ADEQ

From:       Robert Cross
            P.O. Box 145
            Fayetteville, AR 72702

Subject:    Comments on the Proposal by the Noland WWTP of the City of
            Fayetteville to Change the Regulation 2 Arkansas Water Quality
            Standards for Minerals for the White River from the Discharge of the
            Noland WWTP to Immediately Downstream of the Confluence with
            Richland Creek, Docket #13-010-R

Date:       February 27, 2014

I am making these comments as a resident of Fayetteville and as a Research
Professor Emeritus of the Ralph E. Martin Department of Chemical Engineering at
the University of Arkansas.  I have had experience in the design and operation of
water treatment and waste treatment plants.

I understand the challenges faced by the Noland WWTP in the treatment of the ever
changing wastes received as well as the difficulties faced by ADEQ in regulating
discharges in line with environmentally sound guidelines and practical limitations
of  treatment technology.  However, our rivers and streams are a precious resource
and once impaired are very difficult to restore to acceptable standards.

That said, while I can understand that Fayetteville needs relief from the current site
specific specifications, I also believe that new specifications should only be set as
high as necessary to accommodate the existing situation.  The mass balance model
used to calculate the proposed water quality criteria, however, utilizes a series of
inputs that are combined together in a way that will never occur and result in
considerably higher than necessary levels.  This is evident by a review of the actual
in-stream water quality monitoring data that shows minerals concentrations
generally well below the level of the proposed water quality criteria.  When these
higher than necessary concentrations are combined with the new assessment
methodology that allows the water quality criteria to be exceeded twenty-five
percent of the time, I believe that the proposed numbers are much higher than are
necessary and reasonable.

I trust you will consider these comments.