

## MEMO

TO: District Commission  
FR: Director  
RE: Fox Energy Water Quality Trading  
DT: 12/2/2016

HOV staff met with representatives Mark Metcalf and Darren Lukas from Fox Energy / WE Energy on December 2<sup>nd</sup>. The discussion centered around the issuance of WDNR Permits for the two facilities and the new effluent quality limits which will be required under these permits. Both HOV staff and Fox Energy are eager to continue this discussion once the final versions of the Permits are received from WDNR.

Fox Energy and HOV may be able to develop a mutually beneficial agreement which can assist each entity in achieving compliance with the new permit limits.

Items discussed included the potential for each party to trade phosphorus and total suspended solids "credits" to the other party when they have excess available as determined from their effluent quality. This could occur when the flow, or concentrations are low at the District, such as when Fox Energy is taking a large portion of the Districts flow, or when Fox Energy is not operating due to low demand or during maintenance shutdowns.

We also discussed the possibility of Fox Energy agreeing to take water on a constant basis, such as during their shutdowns, and discharging it from their outfall. This is likely not much of a benefit as Fox Energy only has a 500 gpm capacity to pump to their discharge.

Fox Energy inquired if it would be possible for HOV to reduce the hardness of our effluent prior to their pumping from HOV. This could allow them to use the Districts effluent without pre-treating it, and only needing to treat the smaller amount they discharge. They discharge only about ¼ of the water they pump from HOV because the balance is evaporated in their power production process. This would save them on treatment costs. Fox Energy indicated they would be willing to pay additional fees to HOV for the water it purchases if the District could reduce the effluent hardness from the approximate 600 grains it is at now, to about 200 grains. This issue can be an item of research and consideration going forward.

Fox Energy and HOV representatives should meet again in early spring, after each party has received the final version of its new WPDES Permit from the WDNR to discuss this and other relevant issues. This also will allow the new Director time to become familiar with the District treatment plant performance and effluent quality, and the agreement between HOV and Fox Energy.