

From: richard.w.goodwin
Sent: Friday, November 08, 2013 4:40 PM
To: Hanlon, Edward
Subject: Fw: U.S. EPA Office of Research and Development Daily Digest Bulletin

Mr. Hanlon I wish to join the following via teleconference The following reflects my informal comments that could be shared with SAB if appropriate - thank you Richard Goodwin

My particular interest lies in financial justification by operators to opt for reuse treatment of frac and product water. For instance, in drought prone areas raw water costs may justify additional expense of reuse treatment.

The private sector also offers commercially available reuse systems. GE Power and Water cleans the process water, eliminating trucking/on-site storage and deep well disposal – according to Bill Heins [GM – thermal products]. Heins has stated “since the cleaned water from the process can be reused it also will reduce the amount of fresh water needed per well, thereby further reducing costs and ecological impact.” Reducing the brine concentration reduces operating costs.

As the regulatory community establishes standards for frac water recycling and the private sector commercially offers cost-effective technology, the drillers will be able to implement reuse while expediting their projects and saving money.

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