

From: Gary Beers
To: Adams, Joby
Date: 5/14/2010 4:26 PM
Subject: GreenBack Schaeffer Ranch Produced Water Treatment Plant

Hi Jody,

We are progressing on this application and have a few more questions.

Data Sources (info sent with your April 30 email)

(1) What are the sources for the water samples identified as DLHC3FB, NOB4PRODW, NOB5AGPOLFD, and Composite ?

Note →

(2) Would you provide a short statement as to why you consider these wells (the first three samples) as representative of the raw produced water to be treated by the treatment plant ?

(3) One data sheet was identified as Analytical Results for Condensate. What does this sample represent ?

Discharge

(1) To what point (creek bed, pond, etc) will the discharge be directed ? Your application states it is a surface drainage on the ranch, is this still true ?

(2) Will the discharge be from the treatment facility or from a holding pond after the treatment process ?

(3) Did you consider using the discharge for irrigating ranch property or to an unlined pond on the ranch ?

(4) Is the discharge expected to be continuous or batch ?

(5) Will there be any data from pilot testing of treatment process using expected raw waters ? It would be important to run WET tests on this treated water sample to show no toxicity ?

Issues

(1) What is the timing of your expected first discharge ? Is it still October 2010.

(2) A key issue is toxicity (possible failure of the WET test) due to low ionic strength of the RO permeate and the ionic imbalance (ie. high SAR). Some salts or other clean water with salts will have to be added before the discharge can pass the WET testing. Are you aware of this issue ? Have you developed some options ?

(3) I suggest that we meet again, now that we have the application and some data to assess, to discuss some details to be sure all bases are covered as we move forward to develop the permit. One topic would be your answer to (3) under **Discharge** above, since the WET testing would not be necessary if the discharge never reached a tributary. Let me know when you plan next to be in the Denver area.

Thanks

Gary Beers

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