

STATE OF COLORADO

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Colorado Department
of Public Health
and Environment

RECEIVED

OCT 27 2010

WATER QUALITY CONTROL DIVISION

October 27, 2010

Garfield County Board of Commissioners
108 Eighth Street
Glenwood Springs, CO 81601

Re: **Final Agency Action:** Recommendation for Approval with Conditions
Certificate of Designation Application
Shaeffer Ranch / GreenBack Produced Water Recovery, LLC
Garfield County, Colorado

Dear Honorable Commissioners:

The Colorado Department of Public Health & Environment, Hazardous Materials and Waste Management Division (the "Division") received a referral correspondence from Garfield County on March 24, 2010. The correspondence included a letter from Garfield County Building and Planning Department requesting the Division's review of the subject Certificate of Designation (CD) application, and a document titled "Certificate of Designation, Engineering Design and Operation Plan, GreenBack Produced Water Recovery, LLC, Garfield County, Colorado" (Plan) prepared by CGRS, Inc. (CGRS) dated March 2010.

The Division conducted a Completeness Review of the Plan in accordance with procedures outlined in State statute, CRS 30-20-103 et seq., and corresponding Regulations Pertaining to Solid Waste Sites and Facilities, 6 CCR 1007-2, Part 1 (Solid Waste Regulations). In a letter dated April 26, 2010, the Division notified GreenBack Produced Water, LLC (GreenBack) that the Plan was complete.

The Division conducted a comprehensive technical review of the Plan pursuant to the procedures outlined in State statute and the Solid Waste Regulations. The Division's preliminary technical comments and requests for additional information were provided to GreenBack in a letter dated June 22, 2010. In response to the Division's June 22 letter, CGRS submitted a revised Plan dated August 2010, which was received by the Division on August 18, 2010. Since the revised Plan was received, the Division and CGRS have informally communicated numerous times, predominantly via telephone and email, concerning additional information or clarifications needed for the revised Plan. This information was transmitted electronically to the Division by

CGRS on August 26 and 30, September 8 and 14, and October 11, 12, 13, 14, 15, 19 and 21, 2010.

The Division initiated a 30-day written public comment period by publishing a public notice in the *Rifle Citizen Telegram* newspaper on August 19, 2010. The Division did not receive any comments during that period, which concluded on September 20, 2010.

On October 25, 2010 the Division received the final revision to the Plan, and has reviewed it for technical merit. It is the determination of the Division that the proposed facility can comply with technical, environmental, and public health standards of the Solid Waste Regulations if the facility is constructed, monitored and operated as detailed in the final Plan, and with the conditions as stated in this letter. Based on this assessment, the Division recommends, as final agency action, that this facility may be approved by Garfield County, with the conditions set forth herein and with any additional local restrictions Garfield County may chose to impose. The Division's approval of the Plan has the following conditions that shall be incorporated into the CD when and if issued by Garfield County:

1. The Financial Assurance Plan, including independent third party or referenced cost estimate, shall be submitted to the Division for review and approval. In addition, the financial assurance mechanism must be in-place and approved by the Division prior to acceptance of material at the site. Please note that pursuant to the requirements of Section 1.8.3 of the Solid Waste Regulations, the post-closure cost estimate must be adjusted annually to account for inflation or deflation by using the implicit price deflator for the gross domestic product. Additionally, GreenBack must replace the original cost estimate every five (5) years unless otherwise required by the Division. Both the annual adjustment and the 5-year update cost estimates must be submitted to the Division for review and approval.
2. Consistent with Section 1.5 of the Solid Waste Regulations, the Division has granted GreenBack a waiver for groundwater monitoring requirements. Part of the technical justification for granting the waiver from groundwater monitoring included a site-specific investigation and analysis of the existing groundwater conditions at the site through the drilling and construction of three (3) wells within the proposed CD boundary. Although one well was installed, it was determined that the location of the other two wells would potentially interfere with the facility construction and possibly become damaged during construction. As committed to in an email to the Division dated August 26, 2010, these two wells shall be installed as soon as logistically possible after potential damage to the wells from other site activities is no longer a concern, at least prior to facility operation. If groundwater is found in either of the two wells that will be installed, the Division will evaluate the appropriateness of the groundwater monitoring waiver.
3. If liquid is found in the impoundment sumps, an analysis will be conducted to determine the liquid's origin (e.g., E&P waste or precipitation). This determination will be made by evaluating the liquid's total dissolved solids (TDS) or specific conductance (measured in micro Siemens per centimeter) and comparing that value to the properties of the waste material. The threshold values for determining whether the liquid in the sump is E&P

waste or precipitation shall be based on sampling and analysis of typical material accepted at the site. GreenBack shall provide this analysis to the Division after a suitable number of samples have been analyzed and propose a threshold value based on this analysis as to whether E&P waste or precipitation is found in the sump.

As required by 30-20-104(3)(a) and (3)(b), Garfield County is obligated to notify its citizens and conduct a public hearing regarding the proposed solid waste facility. Please forward a copy of the County's final resolution concerning the CD issuance or denial to the Division.

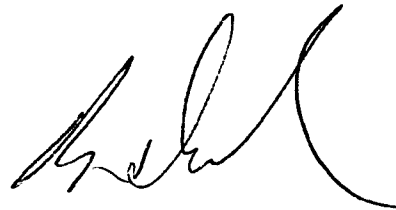
In closing, the Division is authorized to bill for its review of technical submittals at \$125 per hour, pursuant to Section 1.7 of the Solid Waste Regulations 6 CCR 1007-2. For review of the CD application including the completeness review, technical review, attending meetings, telephone conversations, and email correspondence; the fee ceiling is \$35,000. An invoice for the Division's technical review of the above referenced document will be sent to GreenBack under separate cover.

Should you have any questions, or if you would like to have a meeting to discuss this letter, please contact Larry Bruskin at 303-692-3384 (larry.bruskin@state.co.us) or Roger Doak at 303-692-3437 (roger.doak@state.co.us).

Sincerely,



Lawrence J. Bruskin, P.E.
Professional Engineer
Solid Waste and Material Management Unit
Hazardous Materials and Waste
Management Division



Roger Doak
Permitting Group Unit Leader
Solid Waste and Material Management Unit
Hazardous Materials and Waste
Management Division

cc: Dan Packard, GreenBack
Joby Adams, CGRS
Gale Carmoney, Garfield County Building and Planning Department
Gary Beers, CDPHE/WQCD
Dana Podell, CDPHE/APCD
Bob Peterson, CDPHE-GJ/HMWMD

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