



ANDRES Z. SILVA, MAYOR

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August 22, 2011

Craig Roepke, Deputy Director
Interstate Stream Commission
407 Galisteo Street
Santa Fe, New Mexico 87504

Subject: Request for Reconsideration

RE: City of Deming's Tier-1 Application to Drill a Deep Well (Deep Well Application)

Dear Mr. Roepke,

The City of Deming received notice on August 16 that its Deep Well Application failed to meet the Tier 1 Criteria for meeting future water demand. Specifically the Tier-1 Evaluation Panel noted that the proposed project is "*More of an exploratory study, doesn't meet water supply demand and thus does not qualify under Tier-1 criteria but recommended for possible funding in future planning phases*".

The City of Deming requests that the Tier-1 Evaluation Panel reconsider the ranking of this project and would like to emphasize that the purpose of this project is to develop a deep production well to meet demand as soon as the well is completed and placed in production.

The Deming application is for a deep municipal supply well and is not exploratory in nature

Specific excerpts from the Tier-1 application state:

The deep groundwater development project would be a "water utilization alternative." "The Mimbres aquifer is the sole water source for the Deming municipal/industrial supply." (Deming App. Sec. B)
"The long-term goal of this project is to extend the viability of current groundwater supplies to meet future demands in the Deming area." (Deming App. Sec. D)

As with any engineering project, and likely with all the Tier-1 project proposals involving construction of a water supply project approved in the Tier-1 evaluation, the project will be developed in phases. As a phased approach is necessary to meet sound engineering practices and do not make this deep well an exploratory project. For example, the City of Deming proposed a diversion project that includes a pipeline. Engineering practices and NEPA requirements will require several alternate diversion points and pipeline routes which must be evaluated with studies and field investigations to determine the best and most feasible route for constructing the pipeline. Similarly, the Deming Deep Well will require aquifer characterization and water quality analyses in order to determine well screen completion locations, production capacity and treatment requirements. These initial project phases are not exploratory. They are necessary to meet good engineering practices and to design a production and treatment system that can produce water of sufficient quantity and quality. Additionally, NEPA

evaluations will likely require consideration of different alternatives to locate and complete the well production and treatment system.

A deep municipal supply well is critical for the City of Deming to meet future water demand due to declining water levels in the shallow aquifer where current municipal supply is pumped.

"The U.S. Geological Survey (USGS) has eight monitor wells within 4 miles of Deming, with water level measurements recorded as early as 1940. Water levels in these USGS-monitored wells have decreased at an average rate of 0.74 foot per year (ft/yr). In the recent 40-year water plan (DBS&A, 2009), historical water level trends in one of the monitor wells located within the City limits were projected to 2050, showing that about 100 feet of water column would remain in 2050 if current trends continue. Water levels in the vicinity of Deming are also impacted by irrigation wells." (Deming App. Sec. B)

"Most of the wells in the vicinity of Deming are less than 500 feet deep. Deepening of existing supply wells and/or drilling of new, deeper supply wells will be required in the future at the Deming well field. From 2004 to 2008, total production by the City ranged from approximately 4,000 to 4,550 acre-feet per year (ac-ft/yr) (DBS&A, 2009). By 2050, City water demand is projected to increase by 1,387 ac-ft/yr (low projection) to 5,017 ac-ft/yr (high projection), for a total demand of 5,489 to 9,119 ac-ft/yr, respectively (DBS&A, 2009)." (Deming App. Sec. B)

"The Mimbres Basin has significant agricultural water rights, some of which involve irrigation from relatively shallow wells in the basin. Development of deep groundwater for future water supply could reduce the pressure on the shallower aquifer and potentially decrease water level declines, thereby protecting and preserving agricultural and other traditional uses of water resources in the Mimbres Basin near Deming." (Deming App. Sec. D)

As discussed in the Tier 1 application, the aquifer is dropping in the Deming area and economic growth is dependent on water. In addition, future water demands in the Deming area may be outside the present or planned domestic water expansion areas.

The deep municipal supply well is necessary to meet projected future demand including significant additional industrial demand linked to projected economic growth in the region.

"An additional unquantified demand for water supplied by the City could come from industrial development that exceeds the projected demands estimated in the City's 40-year plan. One factor that strengthens Deming's potential industrial growth is its location on a major energy transmission line of the national power transmission grid. Luna County and Deming are areas identified as having the greatest amount of sunlight in the U.S. and therefore are ideal locations for solar power development. A New Mexico study identified the area north of Deming as a potential site for a concentrating solar energy plant (Black & Veatch, 2005). A recent report to Congress indicates that consumptive water use by a concentrating solar energy plant can range from 20 to 1,000 gallons per megawatt-hour produced (U.S. DOE, 2009). Installation of solar power production facilities could potentially increase the need for water supplies by 3,000 ac-ft/yr, but actual water use would vary depending on the type and size of plant. The City of Deming routinely receives inquiries from potential industrial developers regarding the ability of the City to supply their water needs." (Deming App. Sec. B)

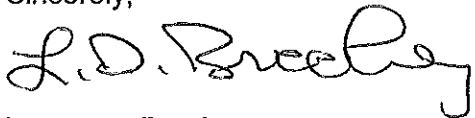
In addition, Not all industries need a potable water supply for their processes. An available alternate water supply for these water uses would take the place of fresh water and extend the current fresh supply for municipal purposes.

References:

City of Deming. 2011. *Tier-1 Application to Drill Deep Water Supply Well*. July 14, 2011.

Per this letter the City of Deming respectfully requests a passing evaluation score for the Tier-1 Application to Drill a Deep Well (Deep Well Application).

Sincerely,

A handwritten signature in black ink that reads "L.D. Brookey". The signature is written in a cursive style with a large, prominent initial "L".

Lawrence Brookey
Public Works Director