COLORADO GEOLOGICAL SURVEY

1801 Moly Road
Golden, Colorado 80401

Matthew L. Morgan
State Geologist and Director

November 12, 2026

Kari Parsons
El Paso County Planning
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Location:
SE¼ SW¼ Section 7
T14S, R62W of the 6th P.M.
38.8403, -104.3808

Subject: Cherokee MD PFAS Treatment Plant 1041
El Paso County, CO; CGS Unique No. EP-26-0102

Dear Kari:

As requested (email dated October 28, 2026), the Colorado Geological Survey (CGS) has reviewed the Cherokee Metropolitan District PFAS Water Treatment Facility (WTF) and Distribution Project 1041 referral. The project includes construction of a PFAS water treatment facility with an anticipated capacity of approximately 8.64 million gallons per day (MGD), raw and finished water storage and pumping facilities, transmission and distribution pipelines, and associated infrastructure. With this referral, CGS received the Letter of Intent (Cherokee Metropolitan District, October 13, 2026), Site Development Plan (Advanced Engineering and Environmental Services, LLC (AE2S), October 2026), Geotechnical Engineering Report (Kumar & Associates, Inc., June 3, 2026), Preliminary Drainage Report (AE2S, October 2026), and other documents. CGS's review is limited to the proposed WTF site, as the geotechnical investigation for the associated transmission and distribution pipeline alignments is currently being prepared and was not available for this review.

Geology and soil conditions: The proposed WTF site does not contain steep slopes, is not undermined, and does not contain or appear to be exposed to geologic hazards that would preclude the proposed development. The site is also located outside the FEMA-mapped floodplain (FEMA Map No. 08041C0809G, effective December 7, 2018). Available geologic mapping (Scott et al., 2008, *Geologic Map of the Pueblo 1° × 2° Quadrangle, South-Central Colorado*, USGS Map I-1022) identifies Louviers Alluvium (Ql) and the Dawson Formation (Tkd) in the project area.

According to Kumar's geotechnical engineering report (p. 5), loose granular soils were encountered within the upper approximately 5 feet in some borings. These soils may be susceptible to settlement under structural loads. Kumar recommends a minimum of 3 feet of overexcavation, moisture conditioning, and recompaction beneath foundation and floor slab bearing elevations, with replacement of any clay soils encountered with suitable structural fill. CGS recommends that applicable geologic hazards and constraints, including settlement-prone soils, be identified and addressed in accordance with Appendix C of the El Paso County Engineering Criteria Manual (ECM), and that the associated mitigation measures be incorporated into the final design and construction plans.

Transmission pipelines. Section 2.405(4) of the El Paso County 1041 review criteria addresses natural hazards, including unstable slopes, expansive soils, subsidence, and floodplains. On page 3 of Appendix V, the applicant indicates that a separate geotechnical investigation for the pipelines will be completed in

November 2026. CGS recommends that this investigation address applicable geologic hazards along the proposed alignments, consistent with the County's 1041 review criteria.

Provided Kumar's geotechnical recommendations are incorporated into the design and implemented during construction, CGS has no objection to approval of the proposed PFAS water treatment facility site.

Thank you for the opportunity to review and comment on this project. If you have questions or require further review, please call me at (303) 384-2632 or e-mail acrandall@mines.edu.

Sincerely,

Amy Crandall

Amy Crandall, P.E.
Engineering Geologist