"Service, Quality, and Innovation"

1103 Oak Park Drive, Suite 110 Fort Collins, CO 80525 Phone (970) 377-1600 Fax (970) 377-1880 www.paragoncg.com

February 28, 2024

Sent Via Email (patrick.lennberg@state.co.us)

Mr. Patrick Lennberg, Environmental Protection Specialist Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

Re: Technical Revision McAtee Construction Company Timnath Pit Mine ID No. M1989-056 6550 South County Road 5 Timnath, Larimer County, Colorado 80528 Project Number 1023018.2

DAVID M. RAU, P.E., BCEE SCOTT A. RUTHERFORD, P.E. BRICK SMITH, P.E. Brad C. Wohler HEATHER S. ALDERMAN DAVID L. WALKER

Dear Mr. Lennberg:

The purpose of this letter is to provide a Technical Revision to the above-referenced mine permit. This Technical Revision was prepared in response to a problem identified in the inspection report associated with your August 24, 2023 inspection. I apologize for the delayed response to the inspection report that were due to our oversight, not McAtee Construction Company's (McAtee's) actions.

The inspection report stated the following.

PROBLEM: The current Groundwater Monitoring Plan needs to be updated and clarified pursuant to Rule 3.1.6. The operator must provide sufficient information to describe how disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quantity or quality of water in surface and groundwater systems both during and after the mining operation and during reclamation will be minimized.

CORRECTIVE ACTIONS: The operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved Groundwater Monitoring Plan to reflect existing and proposed activities by the corrective action date.

As you know, Simon purchased McAtee in late December 2022.

1. BACKGROUND

In way of background, attached as Exhibit A are a September 1, 1994 letter and figure from Tuttle Applegate, Inc. (Applegate) that were excerpted from information found in the Division of Reclamation, Mining and Safety (DRMS) files. This letter was submitted to the Division of Minerals and Geology in response to comments made by Mr. Del Brooks who owned the land located directly west of the mine across Larimer County Road 5 (LCR 5). During the permitting process, Mr. Brooks claimed that mining operations would adversely affect groundwater levels on his property. Based on significant experience specific to groundwater levels on that property, we believe that Mr. Brooks' claim was intended to prevent permitting of the mine rather than groundwater depletion concerns, since the groundwater issues related to that property were, and continue to be, associated with very high groundwater levels.

2. HISTORICAL GROUNDWATER MONITORING

As seen from Exhibit A, two (2) groundwater monitoring wells were installed in 1994 along the western boundary of mine near LCR 5. One (1) groundwater monitoring well was installed on Mr. Brook's property. The two (2) on-site monitoring wells appear to have been located approximately 90 feet from the centerline of LCR 5 in 1994. Based on a review of historical aerial images found on Google Earth, it appears the LCR 5 was significantly widened sometime after 1994 and before 2004. Then widened again sometime before 2012 and finally improved to its current configuration again between October 2020 and June 2021. LCR 5 has gone from a simple two-lane county road 1994 to a multilane arterial today such that it is approximately four (4) times as wide as it was in 1994. In addition, landscaping and berms were added along the west side of the mine adjacent to LCR 5. We also made a fairly detailed site reconnaissance of the area between LCR 5 and the mine fence. We did not observe recent soil disturbances or signs of monitoring wells. Therefore, we believe that the on-site monitoring wells were destroyed before McAtee took ownership of the mine.

A letter from Mr. Dallas Horton regarding the need for groundwater monitoring on the land formerly owned by Mr. Brooks is included in Exhibit A. As seen from this letter, the property owner did not believe that groundwater monitoring was needed on that property. In addition, that property has been developed into residential housing beginning sometime between October 2020 and June 2021. Therefore, in my opinion, the monitoring well located on that property has been destroyed as well and is no longer needed due to the change in land use and high groundwater conditions present on the property.

The Weiderspoon monitoring point is shown on figure included in Exhibit B, which is a letter from Earth Engineering Consultants, Inc. (EEC) documenting installation of the piezometer. This groundwater-level monitoring instrument was apparently added as a stipulation made by Larimer County prior to permit approval for the mine. As seen from the EEC letter included in Exhibit B, this piezometer was installed across the Cache la Poudre River from the mine so it is hydraulically isolated from the mine by the river so changes in groundwater hydrology in that area are not related to McAtee mining activities.

3. SUMMARY AND CONCLUSIONS

In summary my opinions are as follows.

- 1. The three (3) monitoring wells installed to monitor groundwater levels on site and on the property adjacent to the western edge of the mine are no longer available as groundwater monitoring points. In my opinion, these monitoring points were destroyed before McAtee took ownership of the mine.
- 2. These three (3) monitoring points had no significant value since high groundwater levels were and continue to be an issue in this area.
- 3. The Weiderspoon groundwater monitoring point is hydraulically isolated from the mine by the river and is of no value for monitoring impacts associated with mining activities as that mine.
- 4. The Fossil Creek Reservoir Outlet Ditch (FCROD) forms the northern boundary of the mine and the Cach la Poudre Rivere forms the eastern edge of the mine. Both create constant head boundaries, so the limited dewatering activities at the mine will have little or no impact on the local hydrologic balance of the affected land and of the surrounding area. In addition, McAtee uses changed Boxelder Ditch water rights to discharge water to the FCROD adjacent to the mine and to recharge groundwater at the mine to offset groundwater depletions at the mine and to prevent injury to senior water rights in the surrounding area.
- 5. In my professional opinion, the mine is operated in compliance with DRMS Rule 3.1.6 and additional groundwater monitoring is not required at and near the mine at this time.

4. **GENERAL COMMENTS**

This Technical Revision relied primarily upon readily available information and visual observations. We do not warrant the work of regulatory agencies or other third parties supplying information which may have been used during the assimilation of this Technical Revision. The analyses and opinions expressed in this Technical Revision are based on data obtained from the DMRS files and information from publicly available sources as described in this Technical Revision. This Technical Revision does not reflect any variations in subsurface geohydrology which may occur between wells and or across the site. Actual subsurface conditions may vary and may not become evident without further exploration. Due to the dynamic nature of groundwater flow subsurface conditions will vary with time. In the event that any changes in the nature groundwater conditions and around the mine as outlined in this Technical Revision are observed, the conclusions and recommendations contained in this report shall not be valid unless these changes are reviewed and the opinions of this Technical Revision are modified or verified in writing by us.

This Technical Revision was prepared for the exclusive use of Simon Contractors dba McAtee Construction Company consistent with the Terms and Conditions included in our original Mr. Patrick Lennberg/DRMS - Technical Revision Mine ID No. M1989-056 Project Number 1023018.2 February 28, 2024 Page 4

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engagement letter. The Technical Revision was prepared in accordance with generally accepted local assessment practices within the scope of the client's directives. No warranties, either express or implied, are intended or made. The limitations of this assessment should be recognized as Simon Contractors dba McAtee Construction Company formulates conclusions regarding groundwater conditions associated with the subject property.

We appreciate your cooperation in this matter. Please contact the McAtee team or me if you have questions or comments regarding this or any other matter.

Sincerely, PARAGON CONSULTING GROUP, INC.

Principal Engineer/Colorado Number 26138

- Att: Exhibit A Exhibit B
- cc: Mr. Rod Havens/Simon dba McAtee (<u>rhavens@simonteam.com</u>) Mr. Jaeden Mayzel/Simon dba McAtee (<u>jmayzel@simonteam.com</u>)

DMR/RH/JM:dmr3

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TuttleApplegate, Inc.

Consultants for Land, Mineral and Water Development

September 1, 1994

Mr. Allen Sorenson Reclamation Specialist Division of Minerals and Geology 1313 Sherman Street, Room 215 Denver, CO 80203

RE: Don Kehn Construction Co.; Timnath Pit Amendment; M-89-056

Dear Mr. Sorenson:

On behalf of our client, Don Kehn Construction Co., we would like to propose the following groundwater monitoring and mitigation plan for Mr. Del Brooks' property.

Kehn Construction will install three (3) groundwater monitoring wells; two (2) will be located at the Timnath Pit next to County Road 5 on the east side, one (1) will be located approximately 1100 feet to the west of the Timnath Pit permit boundary on Mr. Brooks' property (See enclosed map). These wells will be installed to bedrock. Water levels will be measured on a quarterly basis. The yearly water level information will be submitted with the required annual report for this site.

If the records show an adverse impact to the groundwater at Mr. Brooks' property that is directly caused by the mine dewatering, then Kehn Construction will have an obligation to offset the impacts caused by the drawdown of the water table. However, it must be shown conclusively that the dewatering of the mining operation is the cause for the lowering of the water table, and that other factors, such as lack of precipitation or extreme drought, are not the cause of a lower water table.

Mr. Brooks is responsible for keeping accurate records of the amounts of water diverted for use on his property, and also an accurate estimate of the amount of water, and dates, applied to the field that contains the monitoring well. We understand that this is the field he is most concerned with.

EXHIBIT A

Mr. Allen Sorenson Reclamation Specialist Division of Minerals & Geology September 1, 1994 Page 2

Mr. Kehn is not responsible for providing water for increased acreage under irrigation nor is he responsible to provide replacement water for crops that have not historically been grown on the property.

Forms of mitigation for drawdown impacts might include altering the timing of dewatering operations, the use of recharge ponds to stabilize groundwater levels, or providing replacement water of sufficient quantity to maintain the historic moisture levels in the soils, and no more.

Please review this information and give us a call with any questions or concerns.

Cordially,

TUTTLE APPLEGATE, INC.

Pamela E. Acre Landscape Architect PEA/sjr cc: File #93-130 Mr. Brooks, Fossil Creek 9 Don Kehn, Kehn Construction

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AERIAL PHOTO FROM: COLORADO AERIAL PHOTO DATE: 10/3/93



TuttleApplegate, Inc Consultants for Land. Mineral and Water Devel 11990 Grant Street. Suite 410 Denver, Colorado 80233 (303)452-6611 FAX(303)452-2759

FXHIBIT A

LEGEND

MONITORING WELL Ð

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EXHIBIT A

August 13, 2004

To Whom It May Concern:

I, Dallas Horton, purchased the property across from Kehn's property from Dell Brooks several years ago. I have no concerns about the ground water levels under the property.

fest + Sincerely,

Dallas Horton

October 10, 1996



Kehn Construction 6322 South College Avenue Fort Collins, Colorado 80525

Attn: Mr. Dan Kehn

Re: Piezometer Installation Timnath Pit Larimer, Colorado EEC Project No: 1962094

Mr. Kehn:

Earth Engineering Consultants, Inc. (EEC) personnel have completed the installation of the requested piezometer north of the Timnath Pit in Larimer County, Colorado. The purpose of this report is to provide details concerning that installation.

As requested, on October 2, 1996, one piezometer was installed at a location identified by Kehn Construction personnel. The field piezometer consisted of 2-inch nominal diameter PVC pipe and manufactured well screen. The piezometer was installed to allow for the evaluation of the hydrostatic head in the boring area.

The boring was performed using a truck-mounted CME-45 drill rig equipped with a hydraulic head employed in drilling and sampling operations. The borehole was advanced using 4-inch nominal diameter continuous flight augers. An EEC engineer was on-site during the drilling to evaluate the materials encountered and direct the drilling activities. A log of the materials encountered based on visual and tactual observation of the auger cuttings is included with this report.

The water level listed on the attached boring log is depth below existing ground surface. Fluctuations in water levels can occur over time depending on variations in hydrologic conditions and other conditions not apparent at the time of this report. In addition, zones of perched and/or trapped water may be encountered in more permeable zones at times throughout the year. Perched water is commonly encountered in the soils overlying less permeable weathered bedrock. Long-term monitoring of the piezometer would be required to more accurately evaluate ground water conditions.

Centre For Advanced Technology 2301 Research Boulevard, Suite 104 Fort Collins, CO 80526 (970) 224-1522 FAX 224-4564

Earth Engineering Consultants, Inc.

EEC Project No. 1962094 October 10, 1996 Page 2

We have not been asked to evaluate or interpret water level data and cannot be responsible for obtaining or interpretation of that data by others. It is our understanding that longer term water level measurements will be performed by others.

The monitoring well installed by EEC personnel has been registered with the State of Colorado, Division of Water Resources as required by current state regulations. Those regulations state "All monitoring and observation holes shall be plugged and abandoned within one (1) year after their construction unless a permit has been obtained from the State Engineer." A copy of the submitted registration is included with this report.

Current regulations also contain specific requirements for abandoning wells which are no longer in use. When this well is no longer used for monitoring groundwater levels, the state regulations in effect at that time should be consulted for appropriate abandonment requirements.

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding the above information or enclosed data, or if we can be of further service to you in any other way, please do not hesitate to contact us.

Very truly yours, Earth Engineering Consultants, Inc.

Britt N Balter (

Britt N. Babcock, E.I.T. Project Fremer



| | | KEHN MONITORIN | | | | |
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