

**COLORADO Division of Water Resources** Department of Natural Resources

January 4, 2019

Mr. Jared Dains, P.E. Applegate Group, Inc 1490 West 121<sup>st</sup> Avenue, Suite 100 Denver, CO 80234-2759

> Re: Schmidt Construction Fountain Pit, Substitute Water Supply Plan DRMS Permit No. M-1982-155 Section 13, T16S, R66W, 6th P.M. Water Division 2, Water District 10 SWSP ID 5242, WDID 1007807

Approval Period: December 1, 2018 through November 30, 2020 Contact Phone Number for Mr. Jared Dains: 303-452-6611

Dear Mr. Dains:

We have reviewed your October 16, 2018 letter requesting the renewal of the substitute water supply plan ("SWSP") in accordance with 37-90-137(11) C.R.S. for a sand and gravel pit operated by Schmidt Construction Company ("Schmidt" or "Applicant"). The most recent SWSP approval letter was dated February 9, 2017 and covered the period December 1, 2016 through November 30, 2018. The mine is permitted with the Division of Reclamation, Mining, and Safety under File No. M-82-155. The required renewal fee of \$257.00 has been paid under receipt number 3688961.

## PLAN OPERATION

The Fountain Pit site is located in Section 13, Township 16 South, Range 66 West in El Paso County. A small portion of the pit has been mined below the water table resulting in a ground water pond of approximately 0.2 acres in size. The remainder of the site will be mined above the water table, and the material will not be washed.

Water from an existing sump with well permit no. 59834-F (WDID 1005198) is pumped to the site and used for dust control purposes. Well permit no. 59834-F lies directly adjacent to Rock Creek approximately ¼ quarter of a mile upstream of the confluence of Rock Creek and Little Fountain Creek. A pipeline has been constructed to allow for water to be pumped from the existing sump to the mine site. Water is pumped to the large storage tank on site and this water is withdrawn from the tank throughout the year for dust control purposes. Additionally, you proposed to divert water from the pump to the 0.2 acre ground water pond as a temporary detention basin to increase the efficiency of the dust control operations. Depletions from pumping of water from the sump will accrue to Rock Creek. Consumptive use of ground water for the mining operation includes water used for dust control and evaporation from the ground water pond (permit no. 77721-F, WDID 1005850). Replacement water will be provided by Fountain Mutual Irrigation Company ("FMIC") shares owned by Schmidt.



In accordance with the letter dated April 30, 2010 (see attached) from the Colorado Division of Reclamation, Mining, and Safety ("DRMS"), all sand and gravel mining operators must comply with the requirements of the Colorado Reclamation Act and the Mineral Rules and Regulations for the protection of water resources. The April 30, 2010 letter from DRMS requires that you provide information to DRMS to demonstrate you can replace long term injurious stream depletions that result from mining related exposure of ground water.

In accordance with approach nos. 1 and 3, you have indicated that a bond has been obtained for \$457,188 through the Division of Reclamation, Mining, and Safety ("DRMS") to assure that depletions from ground water evaporation do not occur in the unforeseen event, or events, that would lead to the abandonment of the Pit.

## DEPLETIONS

According to the submittal, the only consumptive uses of water are from dust control, which have been estimated to be approximately 3.5 acre-feet per year, and evaporation from the ground water pond. Based on the NOAA Technical Report NWS-33, the gross annual evaporation rate in this area is approximately 46 inches (3.83 feet) per surface acre. The precipitation in the area was estimated to be 15.86 inches annually, using data from the Fountain Weather Station. The effective precipitation is estimated to be 70% of the actual precipitation, or 0.93 feet. With a gross evaporation of 3.83 feet, less 0.93 feet of evaporation credit, the net evaporation is estimated to be 2.91 feet per surface acre annually. Scaled for the 0.2-acre groundwater pond, the net evaporative depletion at the site is approximately 0.58 acre-feet per year.

The total of 3.5 acre-feet per year for dust control would be withdrawn from well permit no. 59834-F and piped approximately one mile to the storage tank and/or ground water pond. The water withdrawn from the ground water pond will be less than or equal to water delivery so Schmidt does not anticipate appropriating additional ground water within the pit itself other than water lost to evaporation.

The timing of depletions to Rock Creek attributable to pumping from the sump well no. 59834-F were calculated using the Integrated Decision Support System AWAS program utilizing the following lagging parameters: distance to stream = 390 feet, transmissivity = 30,000 gallons per foot per day, aquifer width = 3,500 feet and specific yield = 0.2. Due to the location of the sump and the lagging parameters used, the steady-state lagged stream depletions were determined to be 3.49 acre-feet/year as shown in Table No. 3. The ground water pond is not located within the defined alluvium aquifer; therefore, for the purpose of this SWSP, the Applicant assumed steady-state conditions where the depletions accrue to the stream uniformly through the year. The total steady-state depletions covered by this SWSP are 4.07 acre-feet/year as shown on the attached Table 3.

The SWSP does not allow for use of storm water that may collect in on-site pits. Storm water collected on site will be administered in accordance with this office's February 11, 2016 Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado.

## REPLACEMENTS

Replacement water will be supplied by historical consumptive use credits from Applicant's 20 shares of the Fountain Mutual Irrigation Company (FMIC) to Fountain Creek at FMIC's augmentation

station located on Spring Creek in Colorado Springs. Replacement credits for the Fountain Mutual shares have averaged 0.7 acre-feet per share per year, representing a portion of farm headgate delivery. These share percentages have been confirmed in previous court cases, most recently by the Division 2 Water Court in case no. 07CW51. You have estimated that the 20 shares would yield 14 acre-feet per year of replacement water, which is sufficient to cover the estimated depletions from the consumptive uses mentioned above. For purposes of this SWSP, historical consumptive use credit for the 20 shares of FMIC will be accepted in accordance with the terms described in case no. 07CW51.

The Applicant shall also be entitled to use its pro rata share of the water attributable to its FMIC shares that is placed into storage, when storage is available, in FMIC's 10,000 acre feet of decreed storage in Big Johnson Reservoir, with prior notification of the Water Commissioner. The water stored in Big Johnson Reservoir is to be used for augmentation and delivered to either augmentation station by means of an intraditch exchange during any month in which the Applicant's deliveries of water under its direct flow rights to either augmentation station may be inadequate. The intraditch exchange from Big Johnson Reservoir to the Spring Creek augmentation station will operate at any time FMIC is diverting water, except when both (a) Big Johnson Reservoir is full, and (b) the date is between November 15 and March 15.

Transit losses will occur down Fountain Creek to the delivery point distance an estimated distance of 18 miles. An average transit loss of 0.25% per mile (total transit loss of 4.5%) was estimated and assessed against the 20 shares of FMIC replacement credits, as shown in the attached Table 5. Please note that the 0.25% per mile transit loss is only an estimate and the actual transit loss shall be determined by the Fountain Creek Transit Loss Model, as outlined in conditions of approval no. 9 of this plan. In the event that accounting shows that the FMIC shares are not yielding adequate amounts for replacements, the applicant will seek supplemental augmentation water from the City of Fountain, the Security Water District, or the Widefield Water & Sanitation District.

Actual water use and depletions during the operation will be submitted to the Division Engineer and Water Commissioner on a monthly basis.

## CONDITIONS OF APPROVAL

This SWSP is hereby approved pursuant to Section 37-90-137(11), C.R.S., subject to the following conditions:

- 1. This SWSP shall be valid for the period of December 1, 2018 through November 30, 2020, unless otherwise revoked or superseded by decree. If this plan will not be made absolute by a water court action by the plan's expiration date, a renewal request must be submitted to this office with the statutory fee (currently \$257) by **October 1, 2020**.
- 2. The total surface area of the ground water exposed at the Fountain Pit site must not exceed 0.2 acre during the approval period of this SWSP resulting in a net annual evaporative loss of 0.58 acre-feet.
- 3. The annual amount of water used at the operation shall not exceed 3.5 acre-feet for dust control.
- 4. Total consumption at the Fountain Pit site must not exceed the aforementioned amounts

unless a new SWSP allowing such is approved by this office.

- 5. Water pumped from well permit nos. 59834-F and 77721-F must be measured in accordance with the "Amended Rules Governing the Measurement of Tributary Ground Water Diversions Located in the Arkansas River Basin".
- 6. Pumping from the storage tank or the ground water pond during this plan is limited to 3.5 acre-feet for dust suppression purposes. Pumping from well permit no. 59834-F must not exceed the amount of replacement water available minus transit losses unless a new plan application is submitted and approved, which provides additional replacement supplies.
- 7. Approval of this plan is for the purposes as stated herein. Any additional uses of this water must first be approved by this office in a new SWSP.
- 8. Releases of water by the Fountain Mutual Irrigation Company pursuant to this plan shall be coordinated with the Water Commissioner and the Augmentation Coordinator and shall equal or exceed the depletions to be replaced on a monthly basis. Applicant shall provide fully executed lease agreements for procured replacement sources prior to use in this plan.
- 9. Replacement water provided for this plan at the Spring Creek augmentation station must be entered into the Fountain Creek Transit Loss Model and shall be tracked from the point of entry into the model domain until the water is delivered near the confluence of Little Fountain Creek to USGS Gaging Station No. 07106000 at Node 25. Deliveries on Fountain Creek are subject to daily administration by the local Water Commissioner, and actual transit losses on Fountain Creek shall be determined by the Fountain Creek Transit Loss Model.
- 10. Accounting of water in this plan, including storage pond surface area, pumping for dust suppression, pump meter readings pursuant to Well Permit Nos. 59834-F and 77721-F, and replacement water deliveries must be provided to the Water Commissioner (Doug.Hollister@state.co.us) and Division Engineer (augmentation.coordinator@state.co.us) with the subject line "Schmidt-Fountain Pit SWSP" on forms and at times acceptable to them. Said accounting must be received by the 10<sup>th</sup> of the month following the month being reported. The existing accounting spreadsheet shall be updated to include each reporting element mentioned above. The name, mailing address, and phone number of the contact person who is responsible for operation and accounting of this plan must be provided on the accounting forms.
- 11. The State Engineer may revoke this SWSP or add additional restrictions to its operation if at any time the State Engineer determines that injury to other water rights has or will occur as a result of this plan. Should this SWSP expire without renewal or be revoked prior to adjudication of a permanent plan for augmentation, all use of water under this SWSP must cease immediately.
- 12. The replacement water that is the subject of this plan cannot be sold or leased to any other entity. As a condition of subsequent renewals of this SWSP, the replacement water must be appurtenant to this site until a plan for augmentation is obtained. All replacement water must be concurrent with depletions in quantity, timing and locations.
- 13. In accordance with amendments to §25-8-202(7), C.R.S., and "Senate Bill 89-181 Rules and

Regulations" adopted on February 4, 1992, the State Engineer shall determine if this substitute supply is of a quality to meet requirements of use to which the senior appropriation receiving the substitute supply has normally been put. As such, water quality data or analyses may be requested at any time to determine if the requirement of use of the senior appropriator is met.

14. The decision of the State Engineer shall have no precedential or evidentiary force, shall not create any presumptions, shift the burden of proof, or serve as defense in any water court case or any other legal action that may be initiated concerning the SWSP. This decision shall not bind the State Engineer to act in a similar manner in any other applications involving other plans or in any proposed renewal of this plan, and shall not imply concurrence with any findings of fact or conclusions of law contained herein, or with the engineering methodologies used by the Applicant.

Please contact Kate Fuller in Denver at (303) 866-3581, or Charlie DiDomenico in Pueblo at (719) 542-3368, if you have any questions concerning this approval.

Sincerely,

Jeff Deathy

Jeff Deatherage, P.E. Chief of Water Supply

Attachments: Tables 1-5 Water Accounting Forms

ec: Bill Tyner, Division 2 Engineer Rachel Zancanella, Assistant Division 2 Engineers Doug Hollister, District 10 Water Commissioner Charles DiDomenico, Augmentation Coordinator Water Information Team Members Division of Reclamation, Mining and Safety

JD/kff: Fountain Pit M-82-155 SWSP 18-20.docx