



COLORADO
Division of Water Resources
Department of Natural Resources

October 9, 2019

Mr. Paul Bruss, P.E.
BBA Water Consultants, Inc.
333 West Hampden Avenue, Suite 1050
Englewood, CO 80110

**RE: Deep Cut LLC Substitute Water Supply Plan
DRMS Permit No. M-17-032
Section 21, Township 23S, Range 56W, Sixth P.M.
Water Division 2, Water District 17
SWSP ID 5992, WDID 1707867**

Approval Period: August 1, 2019 through July 31, 2021
(Subject to condition of approval no. 3)
Contact Information: 303-866-8952; pbruss@bbwater.com

Dear Mr. Bruss:

We have received your June 10, 2019 letter requesting a substitute water supply plan ("SWSP") in accordance with Section 37-90-137(11), C.R.S., for a sand and gravel pit, the 22 West Pit, owned by Deep Cut, LLC ("Deep Cut" or "Applicant"). The mine is permitted with the Division of Reclamation, Mining, and Safety ("DRMS") under Permit No. M-2017-032. The required \$257 fee has been paid and given receipt no. 3692260.

SWSP OPERATION

The Rocky Ford East Pit was previously operated by Valco, Inc. ("Valco") under a combined SWSP plan, together with the Lamar East Pit and the Canon City East Pit. Valco previously conveyed the Lamar East Pit to the City of Lamar, and separated the Rocky Ford East Pit from the combined plan due to changes in the water supply.

Valco has sold the 22 West Parcel (the portion of the property west of County Road 22) to Deep Cut, LLC. Valco has also transferred two shares of the Rocky Ford Ditch to Deep Cut. Valco has retained a portion of the Rocky Ford East Pit (that portion of the property east of County Road 22) and will continue replacing evaporative depletions on that portion of the property under SWSP ID 0115.

Deep Cut has obtained a separate DRMS permit (M-2017-032) and plans to continue mining in the northern portion of the 22 West Parcel. The southern portion of the 22 West Parcel was released from the Rocky Ford East Pit DRMS permit no. M-1977-560 pursuant to a June 2, 2016 letter from DRMS, which included 17.4 acres of ground water that was exposed prior to 1981. The remaining pond area in the northern portion of the 22 West Parcel (aka the 22 West Pit) is



11.3 acres and this ground water was all exposed after 1980. Deep Cut is assuming responsibility for the remaining augmentation obligations associated with the 22 West Pit. These obligations include depletions resulting from water removed with the mined material, dust control, and evaporation from the post-1980 portion of Ponds 1 and 2 (see Figure 1). The obligations previously incurred by Valco are incorporated into this SWSP and are shown in Table 2 (attached).

In accordance with the letter dated April 30, 2010 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 the operator provide information to DRMS to demonstrate the replacement of long term injurious stream depletions that result from mining related exposure of groundwater. In accordance with said letter, the Applicant has dedicated the following water rights for long-term replacement of evaporative depletions resulting from exposure of 15 acres of ground water by letter dated August 30, 2018, attached.

Water Right	Share s	Estimated Yield (af/yr/share)	Total Yield (af/yr)
Rocky Ford Ditch Company	2	12.86	25.72
Catlin Canal Company	15	1.54	23.10
Twin Lakes Reservoir and Canal Company	17.45	0.70	12.22
Total	-	-	61.04

DEPLETIONS

Deep Cut commenced active mining at the 22 West Pit location in 2018; previously it was scheduled for remediation. The previously incurred lagged depletions were calculated by re-establishing the centroid for Ponds 1 and 2 and lagging the depletions using the same methodology from previous Rocky Ford Pit SWSPs. The depletions calculated in this manner total **13.39** acre-feet during this SWSP approval period (see attached Table 2).

Depletions as a result of evaporation and mining activities during this plan year are shown in Table 1 (attached). Dust control is fully consumptive and has been estimated to be **1.0** acre-foot per plan year. The maximum water removed with product, assuming 20,000 tons of product removed, total **0.59** acre-feet annually. The current surface area of ground water exposed after 1980 is identified as 11.3 acres. During the period of this SWSP, additional ground water may be exposed, so evaporative depletions were estimated using a maximum exposed surface area of 15 acres. Evaporative depletions were estimated using the same net evaporation rate as previous Rocky Ford East Pit SWSPs (3.85 feet/acre/year) and total **57.75** acre feet annually. These values were lagged using a Glover analysis with the parameters as given below:

Distance from river:	3,522 ft
Distance from alluvial boundary:	7,670 ft
Transmissivity:	71,000 gpd/ft
Specific yield:	0.2

For the 2019-2020 plan year, the total lagged depletion is **49.11 AF** and for the 2020-2021 plan year, the total lagged depletion **55.17 AF** (see attached Table 5a).

REPLACEMENTS

Deep Cut will utilize a combination of leased water and historical ditch credits to make replacements to the river. A lease dated February 26, 2018 from the City of Aurora was obtained to provide replacement supplies during this SWSP approval period for 35 acre-feet (lease attached). This lease is valid until December 31, 2023, unless terminated by either party. Chris Tomky of Deep Cut is the owner of 17.45 shares of Twin Lakes Reservoir and Canal Company, including Twin Lakes Reservoir storage associated with those shares, and approximately 19.25 acre-feet of associated storage. The water lease allows Chris Tomky to trade with the City of Aurora 35 acre-feet of Twin Lake shares for 35 acre-feet of Aurora's fully consumable water stored in the Colorado Canal System, released from Meredith Reservoir. Catlin Canal shares are dedicated for long-term replacement, but are not intended to be used for the period of this plan approval.

Valco owned 2 shares in the Rocky Ford Ditch, which have been transferred to Deep Cut. However, these shares may result in consumptive use credits in excess of what Deep Cut requires for this season. Valco may, with approval from Deep Cut and the Division Engineer, use a portion of those shares as part of its SWSP replacement requirement. The two shares together are expected to yield approximately 25.72 AF/year.

CONDITIONS OF APPROVAL

I hereby approve the proposed SWSP in accordance with Section 37-90-137(11), C.R.S., subject to the following conditions:

1. This SWSP shall be valid for the period of August 1, 2019 through July 31, 2021 (subject to condition of approval no. 3) unless otherwise revoked or superseded by decree. If this SWSP will not be made absolute by a water court action by the SWSP expiration date, a renewal request must be submitted to this office and the Division 2 office (please copy Kathy Trask at Kathy.Trask@state.co.us and Bethany.Arnold@state.co.us) with the statutory fee per gravel pit (currently \$257) by **June 1, 2021**.
2. No more than 15.0 acres of groundwater may be exposed at the 22 West Pit during this plan year without first obtaining a new SWSP. Documentation of pond sizes may be required by the Division Engineer in the form of an aerial photo evaluation or survey by a Professional Land Surveyor during the plan year.

3. A well permit must be obtained for the proposed uses and exposed surface area of the gravel pit in accordance with §37-90-137(2) and (11), C.R.S. in conjunction with this SWSP. A well permit application was submitted with the SWSP request (receipt no. 3686393). The provisions of Colorado Revised Statute 37-90-137(2) prohibits the issuance of a permit for a well to be located within 600 feet of any existing well, unless the State Engineer finds that circumstances so warrant after a hearing held in accordance with the procedural rules in 2CCR402-5. This hearing may be waived if you are able to obtain statements from the owners of all wells within 600 feet, verifying that they have no objection to your use of the proposed well. Should a new well permit be denied for reasons of 600 foot spacing, or any other legitimate reason, approval of this SWSP may be cancelled. **The well permit application was returned to you by letter dated November 21, 2018, to address the 600-foot spacing requirement. The requested information has not yet been returned to DWR. The requested 600-foot spacing determination documentation must be returned to this office by November 15, 2019. If the requested information is not returned and a well permit obtained by November 15, 2019, this SWSP may be cancelled.**
4. Subject to approval by the Division Engineer, the Applicant may lease or purchase additional replacement water from the sources approved in this plan. In addition, the Applicant must also provide a copy of a lease/purchase agreement to the State Engineer's Office and the Division Engineer for use of such additional replacement water.
5. Approval of this SWSP is for the purposes stated herein. Additional uses will be allowed only if a new SWSP is approved for those additional uses. The replacement water, which is the subject of this SWSP, cannot be sold or leased to any other entity during the term of this SWSP without prior approval of the Division Engineer.
6. Replacement water shall be made available to cover all out-of-priority depletions in time, place, and amount and shall be made available under the direction and/or approval of the Water Commissioner. The Applicant will deliver its Rocky Ford Ditch shares directly to the Arkansas River using the City of Aurora's augmentation station. The City of Aurora will include the delivery of the Applicant's Rocky Ford Ditch shares in its water accounting for this augmentation station.
7. Conveyance loss for delivery of augmentation water is subject to assessment and modification as determined by the Division Engineer.
8. The Applicant shall provide daily accounting (including, but not limited to diversions, depletions, replacement sources, and river calls) on a monthly basis. The accounting must be emailed to the Water Commissioner (Lonnie.Spady@state.co.us) and to the Division Engineer (Augmentation.Coordinator@state.co.us) on forms and at times acceptable to them. Said accounting must be received by the 10th of the month following the month being reported. 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. Accounting and reporting procedures are subject

to approval and modification by the Division Engineer. **NOTE:** Monthly accounting, even during the winter non-irrigation season, is required.

9. All parcels of dried up land are subject to administration pursuant to the Administration of Parcels Claimed for Augmentation Credit Agreement signed by the Colorado State Engineer and Kansas Chief Engineer in September of 2005. Final verification of dry up must be in the form of an affidavit signed by an individual having personal knowledge of the dry up for the entire 2020 and 2021 irrigation seasons for each parcel of historically irrigated land. All affidavits must be provided to the Division Engineer by December 15, 2020 for 2020 dry up and December 15, 2021 for 2021 dry up such that the final determination of augmentation credits for the irrigation season can be made along with mapping showing any revisions to the dry up acreage.
10. The approval of this SWSP does not relieve the applicant and/or landowner of the requirement to obtain a Water Court decree approving a permanent plan for augmentation or mitigation to ensure the permanent replacement of all depletions, including long-term evaporation losses and lagged depletions after the gravel mining operations have ceased. If reclamation of the mine site will produce a permanent water surface exposing ground water to evaporation, an application for plan for augmentation must be filed with the Division 2 Water Court at least three (3) years prior to the completion of mining to include, but not be limited to, long-term evaporation losses and lagged depletions. If the ponds will be backfilled, or a lined pond results after reclamation, replacement of lagged depletions shall continue until there is no longer an effect on stream flow. Granting of this SWSP does not imply approval by this office of any such court application(s).
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 vested water rights has occurred or will occur as a result of the operation of this SWSP. 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 and the Applicant may need to obtain and present to this office an alternate source of replacement water.
12. In accordance with amendments to Section 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 whether or not the substitute supply is of a quality to meet requirements of use to senior appropriators. As such, water quality data or analysis may be requested at any time to determine if the water quality is appropriate for downstream water users.
13. 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 a defense in any pending water court case or any other legal action that may be initiated concerning this SWSP. This decision shall not bind the State Engineer to act in a similar manner in any other applications involving other SWSPs, or in any proposed renewal of

this SWSP, 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.

Should you have any questions, please contact Kate Fuller of this office or Lonnie Spady in our Division 2 office in La Junta at (719) 384-1000.

Sincerely,



Jeff Deatherage, P.E.
Chief of Water Supply

Attachments: Figure 1
 Tables 1, 2, 4, 5a
 February 26, 2018 Water Lease Agreement
 August 30, 2018 Dedication Letter

cc: Division 2 SWSP Staff
 Lonnie Spady, District 17 Water Commissioner
 Division of Reclamation, Mining and Safety
 Marshall F. Brown, Utility Enterprise of the City of Aurora

JD/kff: Deep Cut 2019-2021



Legend

- Post-1980 Water Surface Area
- DRMS Permit Boundary

Aerial Photo Date: 3/19/2016 Google Earth
Data Source: WRC, CDSS, CDOT, USGS, BLM

Figure 1 Deep Cut, LLC 22 West Pit

Date: 5/29/2019 | Job No: 1707.00

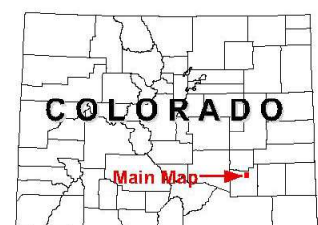


Table 1
Deep Cut, LLC
22 West Pit
SWSP Projected Annual Depletions and Replacements (August 2019 - July 2021)

Annual Replacement Credits Summary (acre-feet)

Fully Consumable Supply from Aurora	35.00
Rocky Ford Ditch Credits	25.72
Total Credits	60.72

Annual Depletions Summary

Site	Well Permit	Total Exposure (acres)	Pre-1981 Exposure (acres)	Post-1980 Exposure (acres)	Net Evaporation Loss Rate (ft/yr)	Evaporation Loss (af/yr)	Water Removed with Mined Material (af/yr)	Dust Control (af/yr)	Total Unlagged Depletions (af)
-	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
22 West Pit	Pending	15.00	0.00	15.00	3.85	57.75	0.59	1.00	59.34

Notes:

- [1] State gravel pit well permit number.
- [2] Total maximum exposed groundwater surface area for the SWSP period.
- [3] Pre-1981 exposed groundwater surface area.
- [4] Maximum post-1980 exposed groundwater surface area. [2] - [3].
- [5] Net evaporation rate equals gross evaporation from NOAA Technical Report NWS 33 less a 0.72 ft effective precipitation reduction.
- [6] Evaporation loss, [4] * [5].
- [7] Water removed with material mined below the ground water table assumed 20,000 tons per year and 4% water depletion by weight.
- [8] Dust control uses are assumed 100% consumptive.
- [9] Total Depletions equal to [6] + [7] + [8].

Table 2
Deep Cut, LLC
22 West Pit
Lagged Depletions from Operations Prior to August 2018
(all values in acre-feet)

Month	Lagged Depletions from Operations Prior to Aug. 2018		
	Total	22 West Pit	East Parcel
	[1]	[2]	[3]
Aug 2018	9.92	4.22	5.70
Sep 2018	8.46	3.60	4.86
Oct 2018	7.05	3.00	4.05
Nov 2018	6.09	2.59	3.50
Dec 2018	5.40	2.30	3.10
Jan 2019	4.88	2.08	2.80
Feb 2019	4.45	1.89	2.55
Mar 2019	4.07	1.74	2.34
Apr 2019	3.75	1.60	2.15
May 2019	3.46	1.47	1.99
Jun 2019	3.21	1.37	1.84
Jul 2019	2.99	1.27	1.72
Aug 2019	2.79	1.19	1.60
Sep 2019	2.62	1.11	1.50
Oct 2019	2.45	1.04	1.41
Nov 2019	2.30	0.98	1.32
Dec 2019	2.14	0.91	1.23
Jan 2020	1.99	0.84	1.14
Feb 2020	1.83	0.78	1.05
Mar 2020	1.67	0.71	0.96
Apr 2020	1.52	0.64	0.87
May 2020	1.39	0.59	0.80
Jun 2020	1.27	0.54	0.73
Jul 2020	1.17	0.50	0.68
Aug 2020	1.09	0.46	0.63
Sep 2020	1.02	0.43	0.59
Oct 2020	0.95	0.40	0.55
Nov 2020	0.89	0.38	0.51
Dec 2020	0.82	0.35	0.47
Jan 2021	0.74	0.32	0.43
Feb 2021	0.66	0.28	0.38
Mar 2021	0.58	0.24	0.33
Apr 2021	0.49	0.21	0.28
May 2021	0.42	0.18	0.24
Jun 2021	0.37	0.16	0.21
Jul 2021	0.32	0.14	0.19
Aug 2021	0.29	0.12	0.17
Sep 2021	0.27	0.11	0.15
Oct 2021	0.24	0.10	0.14
Nov 2021	0.22	0.09	0.12
Dec 2021	0.19	0.08	0.11
Jan 2022	0.15	0.06	0.09
Feb 2022	0.10	0.04	0.06
Mar 2022	0.05	0.02	0.03
Apr 2022	0.00	0.00	0.00
SWSP Year 1	23.13	9.84	13.29
SWSP Year 2	8.36	3.55	4.81
Total	96.71	41.16	55.55

Note:

- Lagged depletions in column [1] from monthly water accounting submitted to the Division of Water Resources. Includes operations through July 2018.
- Lagged depletions associated with 22 West Pit calculated as described in 2018-2019 SWSP renewal request submitted by Deep Cut.
- Lagged depletions after July 2021 associated with the 22 West Pit will be replaced pursuant to a subsequent SWSP or decree plan for augmentation.
- Lagged depletions associated with Valco's East Parcel will be replaced under a separate SWSP request.

Table 4
Deep Cut, LLC
22 West Pit
Lagged Depletions from SWSP Period Operations
(all values in acre-feet)

Month	22 West Pit		
	From Operations During SWSP Period	From Operations Prior to August 2018	Total
	[1]	[2]	[3]
Aug 2019	2.96	1.19	4.15
Sep 2019	3.38	1.11	4.49
Oct 2019	3.59	1.04	4.63
Nov 2019	3.56	0.98	4.53
Dec 2019	3.35	0.91	4.26
Jan 2020	3.10	0.84	3.94
Feb 2020	2.91	0.78	3.68
Mar 2020	2.81	0.71	3.52
Apr 2020	2.86	0.64	3.51
May 2020	3.13	0.59	3.72
Jun 2020	3.56	0.54	4.10
Jul 2020	4.08	0.50	4.58
Aug 2020	4.55	0.46	5.02
Sep 2020	4.86	0.43	5.29
Oct 2020	4.90	0.40	5.31
Nov 2020	4.73	0.38	5.11
Dec 2020	4.42	0.35	4.77
Jan 2021	4.09	0.32	4.40
Feb 2021	3.83	0.28	4.11
Mar 2021	3.67	0.24	3.91
Apr 2021	3.67	0.21	3.88
May 2021	3.88	0.18	4.06
Jun 2021	4.27	0.16	4.42
Jul 2021	4.74	0.14	4.88
SWSP Year 1	39.27	9.84	49.11
SWSP Year 2	51.62	3.55	55.17
Total	90.89	13.39	104.28

Note: [1] Projected lagged depletions resulting from operations during the SWSP period.
[2] Lagged depletions during the SWSP period resulting from operations prior to August 2018. See Table 2 column [2].
[3] Total lagged depletion equal to [1] + [2].
-Lagged depletions after July 2021 associated with the 22 West Pit will be replaced pursuant to a subsequent SWSP.

Table 5a
Deep Cut, LLC
22 West Pit

Projected Operations and Sample Monthly Accounting Summary
(all values in acre-feet unless otherwise indicated)

Month	22 West Pit Operations				Depletions			Replacement Requirement		Rocky Ford Ditch CU Credit	Excess Credit from Valco RPEP Operations	Release of Aurora Replacement Water					Net Impact to the River		
	Production (tons)	Dust Control Uses (gal.)	Exposed Water Surface (ac)	Water Removed in Mined Material	Dust Control	Net Evaporative Depletions	Total Unlagged Depletions	Total Lagged Depletions	% Call During Month			Replacement Requirement	Remaining Requirement	Transit Loss Requirement	Required Release	Leased Water		Transit Loss % Assessed on Release	Transit Loss Volume Assessed on Release
August 19	1,667	27,154	15.0	0.05	0.08	7.80	7.93	-4.15	181	100%	4.15	0.00	0.06	0.00	0.00	2.00%	0.00	191	4.02
September 19	1,667	27,154	15.0	0.05	0.08	5.78	5.91	-4.49	100%	4.49	0.00	0.00	0.02	1.05	-0.06	2.00%	0.02	0.01	0.01
October 19	1,667	27,154	15.0	0.05	0.08	4.04	4.17	-4.63	100%	4.63	0.00	5.33	0.11	5.44	5.45	2.00%	0.11	0.01	0.01
November 19	1,667	27,154	15.0	0.05	0.08	2.31	2.44	-4.53	100%	4.53	0.00	5.66	0.12	5.78	5.79	2.00%	0.12	0.01	0.01
December 19	1,667	27,154	15.0	0.05	0.08	1.73	1.86	-4.26	100%	4.26	0.00	5.34	0.11	5.45	5.46	2.00%	0.11	0.01	0.01
January 20	1,667	27,154	15.0	0.05	0.08	1.73	1.86	-3.94	100%	3.94	0.00	4.94	0.10	5.04	5.05	2.00%	0.10	0.01	0.01
February 20	1,667	27,154	15.0	0.05	0.08	2.02	2.15	-3.68	100%	3.68	0.00	4.61	0.09	4.71	4.72	2.00%	0.09	0.01	0.01
March 20	1,667	27,154	15.0	0.05	0.08	3.18	3.31	-3.52	100%	3.52	0.00	4.34	0.06	4.43	4.44	2.00%	0.06	0.01	0.01
April 20	1,667	27,154	15.0	0.05	0.08	5.20	5.33	-3.51	100%	3.51	0.64	2.97	0.06	3.03	3.03	2.00%	0.06	0.00	0.00
May 20	1,667	27,154	15.0	0.05	0.08	6.93	7.06	-3.72	100%	3.72	1.14	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	0.00
June 20	1,667	27,154	15.0	0.05	0.08	8.37	8.51	-4.10	100%	4.10	0.00	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	3.37
July 20	1,667	27,154	15.0	0.05	0.08	8.66	8.79	-4.58	100%	4.58	0.00	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	5.22
August 20	1,667	27,154	15.0	0.05	0.08	7.80	7.93	-5.02	100%	5.02	0.00	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	3.15
September 20	1,667	27,154	15.0	0.05	0.08	5.78	5.91	-5.29	100%	5.29	0.00	1.83	0.04	1.87	1.88	2.00%	0.04	0.01	0.01
October 20	1,667	27,154	15.0	0.05	0.08	4.04	4.17	-5.31	100%	5.31	0.00	6.01	0.12	6.13	6.14	2.00%	0.12	0.01	0.01
November 20	1,667	27,154	15.0	0.05	0.08	2.31	2.44	-5.11	100%	5.11	0.00	6.24	0.13	6.37	6.38	2.00%	0.13	0.01	0.01
December 20	1,667	27,154	15.0	0.05	0.08	1.73	1.86	-4.77	100%	4.77	0.00	5.85	0.12	5.97	5.98	2.00%	0.12	0.01	0.01
January 21	1,667	27,154	15.0	0.05	0.08	1.73	1.86	-4.40	100%	4.40	0.00	5.40	0.11	5.51	5.52	2.00%	0.11	0.01	0.01
February 21	1,667	27,154	15.0	0.05	0.08	2.02	2.15	-4.11	100%	4.11	0.00	5.04	0.10	5.14	5.15	2.00%	0.10	0.01	0.01
March 21	1,667	27,154	15.0	0.05	0.08	3.18	3.31	-3.91	100%	3.91	0.87	3.86	0.08	3.94	3.95	2.00%	0.08	0.01	0.01
April 21	1,667	27,154	15.0	0.05	0.08	5.20	5.33	-3.88	100%	3.88	3.98	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	0.00
May 21	1,667	27,154	15.0	0.05	0.08	6.93	7.06	-4.06	100%	4.06	1.45	0.00	0.06	0.00	0.00	2.00%	0.00	0.01	0.01
June 21	1,667	27,154	15.0	0.05	0.08	8.37	8.51	-4.42	100%	4.42	0.00	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	3.05
July 21	1,667	27,154	15.0	0.05	0.08	8.66	8.79	-4.88	100%	4.88	0.00	0.00	0.06	0.00	0.00	2.00%	0.00	0.00	4.92
19-20 Total	20,000	325,851	-	0.59	1.00	57.75	59.34	-49.11	-	49.11	1.78	34.23	0.70	34.92	35.00	-	0.70	12.65	11.19
20-21 Total	20,000	325,851	-	0.59	1.00	57.75	59.34	-55.17	-	55.17	6.34	34.24	0.70	34.94	35.00	-	0.70	11.19	11.19

Notes:

- [1] Total sand and gravel production in tons.
- [2] Total dust control water uses in gallons. Dust control water uses considered 100% consumptive.
- [3] Total maximum exposed groundwater surface area in the pit.
- [4] Water removed in mined material. Equal to 2% water by weight of material produced.
- [5] Total dust control water uses in acre-feet. Equal to [2] / 325,851. Dust control water uses considered 100% consumptive.
- [6] Required evaporative replacement based exposed water surface area. Equals exposed water surface area x 3.85 ft x monthly %.
- [7] Total unlagged depletions requiring replacement. Equals [4] + [5] + [6].
- [8] Total lagged depletion to the Arkansas River. Lagging method described in the SWSP renewal request.
- [9] Percent days of call during the month.
- [10] Replacement requirement equal to -[8] * [9].
- [11] Consumptive use credit from 2 Rocky Ford Ditch shares. Negative values indicate non-irrigation season net return flow obligations.
- [12] Excess credit from Valco Rocky Ford East Pit (East Parcel) SWSP operations. Excess credit is accounted for in Valco's monthly SWSP accounting.
- [13] Remaining replacement requirement after accounting for credit obligation from Rocky Ford Ditch shares and excess credit from Valco Rocky Ford East Pit (East Parcel) SWSP operations.
- [14] Transit loss requirement for reservoir release to meet the remaining replacement requirement.
- [15] Required release equals [12] + [13].
- [16] Scheduled release of leased water for Rocky Ford East Pit. Released water includes 35 acre-feet per year through agreement with Aurora and the remainder is through agreement with Valco.
- [17] Transit loss percent assessed on reservoir release during month.
- [18] Transit loss volume of water assessed on reservoir release during month.
- [19] Net impact to the river equals [5] + [11] + [15] - [16] - [18].

Water Trade Agreement

This Agreement ("Agreement") is made this 26th day of February, 2018, by and between the City of Aurora, Colorado, a Colorado municipal corporation of the counties of Adams, Arapahoe, and Douglas, acting by and through its Utility Enterprise ("Aurora") whose address is 15151 East Alameda Avenue, Suite 3600, Aurora, Colorado 80012, and Chris Tomky, whose address is 20330 County Rd CC, Rocky Ford, CO 81067. Aurora and Chris Tomky are each referred to herein as a "Party" and together as the "Parties".

Witnesseth

WHEREAS, Aurora has multiple sources of Arkansas River Basin fully consumable water stored in the Colorado Canal System, including in Meredith Reservoir; and,

WHEREAS, to make its water stored in the Colorado Canal System and Meredith Reservoir available to its residents and customers, Aurora must first exchange this water upstream on the Arkansas River to Twin Lakes Reservoir when said exchange is in priority and there is sufficient exchange potential, for subsequent transport through the Otero Pump Station to the South Platte River Basin; and,

WHEREAS, Chris Tomky is a private individual who has ownership of seventeen and forty-five hundredths (17.45) shares of Twin Lakes Reservoir and Canal Company, including Twin Lakes Reservoir storage associated with those shares (all seventeen and forty-five hundredths (17.45) shares and approximately nineteen and one-quarter acre-feet of associated storage hereinafter collectively referred to as the "Twin Lake Shares"); and,

WHEREAS, Chris Tomky has a need for a water supply in the lower Arkansas River Basin and desires use of Aurora's fully consumable water stored in the Colorado Canal System, released from Meredith Reservoir; and,

WHEREAS, the Parties wish to trade use of each other's water rights for a period of time, with Aurora having use of the Twin Lakes Shares and Chris Tomky having use of thirty-five (35) acre-feet of Aurora's fully consumable water available in Meredith Reservoir (all thirty-five (35) acre-feet is hereinafter referred to as the "Meredith Reservoir Water"); and,

WHEREAS, this Agreement will be of mutual benefit and convenience to each of the Parties, and,

NOW THEREFORE, for and in consideration of the mutual promises and covenants contained herein, and other good and valuable consideration, the adequacy and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

Agreement

1. **Term of Agreement.** This Agreement shall commence on the date it is signed by all the Parties ("Effective Date") and continue until December 31, 2023, automatically renewing for up to two (2) additional five (5) year periods ("Term"), unless terminated by either Party pursuant to Paragraph 13, below.
2. **Amount.** Each calendar year of the Term, Aurora will deliver to Chris Tomky, the Meredith Reservoir Water for his full use and control, to be traded for Aurora's full use and control of the Twin Lakes Shares for the duration of the Term, subject to the terms of this Agreement.
3. **Delivery Point and Transfer of Control.**
 - a. **Meredith Reservoir Water.** The Parties mutually agree that for each calendar year of the Term, Aurora will deliver the Meredith Reservoir Water to Chris Tomky for his full use and control at the Outlet of Meredith Reservoir ("Delivery Point"). Times and amounts of deliveries will be as directed by Chris Tomky or his agent, limited by the terms of this Agreement and the normal operational constraints of the Colorado Canal System. Meredith Reservoir Water agreed to be delivered pursuant to Paragraph 2, above, shall not be carried over to the next calendar year.
 - b. **Twin Lakes Shares.** The Parties mutually agree that Chris Tomky will transfer full use and control of the Twin Lakes Shares to Aurora, for the duration of the Term, pursuant to paragraph 2, above, and execute any required documents effecting said transfer. Said fully-executed transfer shall be considered the time and place of delivery for the Twin Lakes Shares ("Delivery Point").
4. **Use of the Subject Water.** Each Party shall have the right to fully use the water that is the subject of this Agreement, provided such use is consistent with the terms of this Agreement and all applicable laws, rules and regulations. Chris Tomky shall have the right to use and reuse to extinction the Meredith Reservoir Water delivered under this Agreement, including without limitation, replacement and exchange purposes, in connection with any substitute water supply plan approved by the Colorado State Engineer's Office, augmentation and exchange purposes in accordance with any augmentation plan or appropriative right of exchange decreed by the Colorado Water Court, and any other lawful exchanges. Each Party shall be solely responsible for any administrative or judicial approvals necessary for use of the water that is the subject of this Agreement.
5. **Consideration.** This Agreement is for a trade of use of water rights between the Parties that will provide a mutual and valuable benefit to each of the Parties.
6. **No Transfer of Water Rights or Facilities.** The Parties agree that no portion of this Agreement should be construed or interpreted as a transfer of title or a transfer of ownership of any water right or any facility for the supply, storage, treatment and distribution of water that is owned by either Party.

7. **Payment of Assessments.** Aurora will continue to timely pay all assessments and fees associated with the Meredith Reservoir Water during the Term. Chris Tomky will continue to pay all assessments and fees associated with the Twin Lake Shares during the Term.

8. **Transit Losses.** Each Party assumes all responsibility for transit losses associated with carriage of the water from the Delivery Point to the place of use.

9. **Water Use Accounting.** For each calendar year of the Term and for accounting purposes only, Aurora will add the Twin Lakes Shares to the shares it owns in the Twin Lakes Reservoir and Canal Company. For each calendar year of the Term, Aurora will provide reporting and accounting for the Meredith Reservoir Water delivered to the Delivery Point. All other accounting or reporting required by the Colorado State Engineer, the Division 2 Engineer, or any other lawful authority concerning the water that is the subject of this Agreement, including proof of the usability of the Meredith Reservoir Water and conveyance to the Delivery Point will be the responsibility of the Party owning the water right.

10. **Water Quality.** The Parties make no guaranty or warranty regarding the quality of the water that is the subject of this Agreement, including the presence or absence of any particular water quality constituent.

11. **Parties to Obtain Any Necessary Permission.** The Parties agree that it will be their sole obligation and risk to obtain any necessary permission for the withdrawal, diversion, carriage, exchange, storage or use of the water that is the subject of this Agreement after the water is delivered to the Delivery Point. Each Party agrees that it will cooperate with the other Party in its efforts to obtain any required quantification, permissions or approvals to the extent those efforts are consistent with this Agreement, and so long as those efforts do not result in any significant expense to the Party. However, the Parties may not change in any way, in any decree, permit, license, agreement or element of or related to the water rights and other rights that are part of and comprise the sources of the water that is the subject of this Agreement. Each Party specifically recognizes and agrees that it must follow all applicable statutes, rules, regulations, and lawful administrative orders regarding its transportation and use of the water after it is delivered to the Delivery Point.

12. **Right of First Refusal.** During the Term, Chris Tomky grants Aurora a right of first refusal for purchase of the Twin Lake Shares. Aurora's right of first refusal applies to any written agreement for purchase or purchase of associated storage right on any number or portion of the Twin Lakes Shares, but does not apply to transfers to or among persons or entities related to Chris Tomky. To exercise its right of first refusal, within forty-five days after receipt by Aurora of a bona fide fully-executed purchase contract, Aurora must provide written notice to Chris Tomky of its intent to purchase together with a non-refundable cash earnest money deposit equal to the cash earnest money specified in the purchase contract. Aurora's election to purchase shall be subject to no contingencies except title, which contingency shall be deemed waived unless Aurora provides Chris Tomky with a notice of termination of its rights pursuant to this paragraph within 10 days of receipt of Aurora's written notice of intent to purchase. Closing on the purchase shall occur on a mutually acceptable day following Aurora's notice of exercise. If closing occurs later than the day specified in the purchase contract, or more than 60 days following Aurora's notice of exercise of

right of first refusal, whichever is later, the purchase price shall be increased to include interest at a rate of 7% per annum calculated from the date closing would have occurred under the purchase contract.

13. Termination.

- a. Either Party may terminate this Agreement by written Notice to the other Party, pursuant to Paragraph 16, below, by December 31st of the last year of the current Term prior to automatic renewal.
- b. If for any reason the sources of water for the Twin Lakes Shares or Meredith Reservoir Water are unavailable for delivery to the Delivery Point by Chris Tomky or Aurora, respectively, or unavailable for use as contemplated under this Agreement, including but not limited to either Party's inability to obtain any necessary permission as provided for in Paragraph 4, above, this Agreement will terminate with no further duties owing from either Party to the other.

14. Governmental Immunity. Notwithstanding any provisions of this Agreement to the contrary, no term or condition of this Agreement shall be construed or interpreted as a waiver, either expressed or implied, of the monetary limitations on liability or any of the immunities, rights, benefits or protections provided to Aurora under the Colorado Governmental Immunity Act, § 24-10-101, et seq. C.R.S., as amended or as may be amended. The Parties hereto understand and agree that liability for claims for injuries to persons or property arising out of the alleged negligence of Aurora, its officials and employees is controlled or limited by said Act, as amended or as may be amended. Any provision of this Agreement, whether or not incorporated herein by reference, shall not be interpreted to control, limit or otherwise modify so as to limit any liability protection of Aurora pursuant to the above cited laws.

15. Sole Obligation of Utility Enterprise.

a. This Agreement shall never constitute a general obligation or other indebtedness of the City of Aurora ("City"), or a multiple fiscal year direct or indirect debt or other financial obligation whatsoever of the City within the meaning of the Constitution and laws of the State of Colorado or of the Charter and ordinances of the City.

b. In the event of a default by Aurora's Utility Enterprise of any of its obligations under this Agreement, Chris Tomky shall have no recourse for any amounts owed to him against any funds or revenues of the City except for those revenues derived from rates, fees or charges for the services furnished by, or the direct or indirect use of the Water System, and deposited in the Water Enterprise Fund as the terms "Water System" and "Water Enterprise Fund" are defined in City Ordinance No. 2003-18, and then only after the payment of all operation and maintenance expenses of the Water System, and all debt service and reserve requirements of any bonds, notes, or other financial obligations of the Utility Enterprise secured by a pledge of the net revenues of the Water Enterprise Fund. Notwithstanding any language herein to the contrary, nothing in this Agreement shall be construed as creating a lien upon any revenues of the Utility Enterprise or the City.

16. Notice. Any and all notices, demands or the communications desired or required hereunder ("Notice", collectively, "Notices") shall be given in writing and delivered personally or sent by registered or certified mail, return receipt requested, postage pre-paid or by fax addressed as follows:

To Aurora: City of Aurora
15151 East Alameda Avenue, Suite 3600
Aurora, CO 80012
Attn: Director

With copy to: City of Aurora
15151 East Alameda Parkway, Suite 5300
Aurora, CO 80012-1555
Attn: City Attorney

To Chris Tomky: Chris Tomky
20330 County Rd CC
Rocky Ford, CO 81067

or to such other address as either party may designate from time to time, by written notice, to the other Party. Notice shall be effective upon receipt.

17. Miscellaneous.

(a) **No Modification.** This Agreement may be modified, amended, or changed in whole or in part only by an agreement in writing duly authorized and executed by both Parties with the same formality as this Agreement.

(b) **Non-Waiver.** Waiver of any breach of the provisions of this Agreement by either Party shall not constitute a continuing waiver of any subsequent breach of said Party of either the same or any other provision of this Agreement.

(c) **Non-Assignability.** Neither Party may assign its rights or delegate its duties under this Agreement without the prior written consent of the other Party.

(d) **No Third Party Benefits Intended.** It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights and actions relating to such enforcement, shall be strictly reserved to Chris Tomky and Aurora, and nothing contained in this Agreement shall give or allow any claim or right of action by any other or third person to such agreement. It is the express intention of Chris Tomky and Aurora that any person other than Chris Tomky or Aurora receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

(e) **Applicable Law.** This Agreement and its applications shall be construed in accordance with the laws of the State of Colorado.

(f) No Recording. Both Parties expressly agree that neither Party will record this Agreement. Both Parties expressly agree that this Agreement may be referenced, included, or otherwise incorporated in any application for permission or approval or grant of permission or approval that is required by or appropriate pursuant to Paragraph 4 of this Agreement.

(g) Execution of Additional Documents. The Parties agree to execute any further documents reasonably necessary to complete the transactions provided for or contemplated by this Agreement.

(h) Remedies. If either Party is in default the non-defaulting Party may elect to treat this Agreement as terminated. Aurora may pursue any rights or remedies which Aurora may have reason of default or breach.

(i) No Costs and Fees. In the event of litigation or other dispute resolution process arising out of this Agreement between them the Parties agree that each shall pay their own costs and expenses including attorney's fees.

(j) Paragraph Headings. The paragraph headings inserted here are for convenience and not intended to govern, limit or in any way aid in interpretation of this Agreement.

(k) Integrated Agreement and Invalidity. This Agreement consists of the terms and conditions stated herein. No other documents related to this Agreement or generated as a result of this Agreement shall form a part of this Agreement unless it is expressly referenced and incorporated herein. This Agreement is intended as a complete integration of all understandings between the Parties, their successors and assigns concerning the substance hereof. No prior or contemporaneous addition, deletion or other amendment hereto shall have any force or affect whatsoever, unless embodied herein in writing. If any portion of this Agreement is held invalid or unenforceable for any reason by a court of competent jurisdiction as to either Party or as to both Parties, the entire Agreement will terminate.

(l) No Party Shall Not Depend on Continued Supply from the Other Party. Each Party acknowledges that it has the sole responsibility to supply water for its future needs. Each Party further acknowledges it has the sole responsibility to replace the water supplied by the other Party hereunder when this Agreement expires or when the other Party either curtails deliveries/transfer or declines to renew the provisions hereof. Each Party certifies that it will take all reasonable steps necessary to obtain water after the other Party ceases to supply water hereunder. Each Party further agrees and covenants that it will not claim in any way that the other Party has any duty or requirement to supply water to it after the other Party ceases to supply water hereunder. Each Party further acknowledges the statutory prohibition against vesting of a right for a continued lease expressed in CRS § 31-35-201 applies in these circumstances. The acknowledgments, certifications, agreements, and covenants by each Party set forth in this Agreement shall be binding and obligatory upon successors and assigns of that Party if any are allowed pursuant to this Paragraph 17.

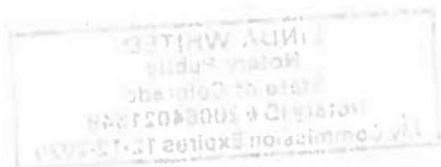
(m) Non-Business Days. If any date for any action under this Agreement falls on a Saturday, Sunday or a day that is a "holiday" as such term is defined in Rule 6 of the Colorado Rules of Civil Procedure, then the relevant date shall be extended automatically until the next business day.

(n) Commissions and Fees. Each Party shall be solely responsible for the payment of any and all real estate commissions or other commissions or fees that incurs with respect to this Agreement.

(o) No Construction against Drafter. This Agreement was drafted by Aurora with the opportunity for Chris Tomky to seek review, comment, advice, and the contribution of legal counsel. Accordingly, the Parties agree the legal doctrine of construction against the drafter will not be applied should any dispute arise concerning this Agreement.

IN WITNESS WHEREOF, the Parties hereto have duly executed this Agreement as of the date first written above, being the Effective Date.

(Signatures on the following pages)



CITY OF AURORA, COLORADO,
ACTING BY AND THROUGH ITS
UTILITY ENTERPRISE



Marshall P. Brown, Director

2/26/18

Date

APPROVED AS TO FORM FOR AURORA:



Stephanie Neitzel, Assistant City Attorney

2/26/18

Date

18005375

ACS #

STATE OF COLORADO)
) ss
COUNTY OF ARAPAHOE)

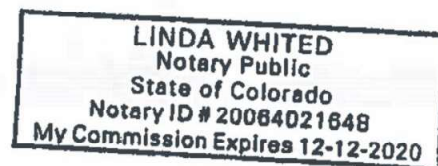
The foregoing instrument was acknowledged before me this 26 day of February 2018, by Marshall P. Brown, Director, acting on behalf of the Utility Enterprise of the City of Aurora, Colorado.

Witness my hand and official seal: 

Notary Public

My commission expires: 12-12-2020

(SEAL)



August 30, 2018

Caleb Foy, P.E.
Division of Water Resources
1313 Sherman St., Suite 821
Denver, CO 80203

RE: Dedication of Water Supplies to Satisfy Long-Term Augmentation Requirement
for Deep Cut, LLC's 22 West Pit (M-2017-032)

Dear Caleb:

This letter is to provide information intended to satisfy the requirements of the April 30, 2010 letter from the Division of Reclamation Mining and Safety (DRMS) and Section 16 of the General Guidelines for Substitute Water Supply Plans for Sand and Gravel Pits (Guidelines) pertaining to the long-term replacement of depletions at Deep Cut, LLC's (Deep Cut) 22 West Pit (M-2017-032). This letter supersedes the letter provided on August 23, 2018.

Section 16 of the Guidelines requires that *"If the proposed final reclamation of the mining operation, as approved in the DRMS permit, does not include backfilling or lining to eliminate all ground water exposed within the mining boundaries, sufficient replacement water must be dedicated to the plan, or financial assurance that would allow purchase of replacement water to cover the expected depletions that would occur at the site."*

Based on the net evaporation rate of 3.85 feet and the maximum exposed ground water surface area of 15 acres presented in the pending substitute water supply plan, approximately 57.75 acre-feet must be covered by the water right dedication.

For the purposes of satisfying the requirements of Section 16 of the Guidelines, Deep Cut will dedicate the following water rights for long-term replacement of evaporative depletions resulting from the exposure of ground water at the 22 West Pit:

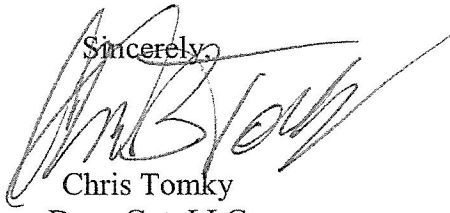
- 2 shares in the Rocky Ford Ditch Company
- 17.45 shares in the Twin Lakes Reservoir and Canal Company
- 15 shares in the Catlin Canal Company

Table 1
Deep Cut, LLC - 22 West Pit
Comparison of Long-term Evaporative Depletion and Dedicated Water Rights

Water Right	Shares	Est. Yield (af/sh)	Yield (af)
Rocky Ford Ditch Company	2	12.86	25.72
Catlin Canal Company	15	1.54	23.10
Twin Lakes Reservoir and Canal Company	17.45	0.70	12.22
Total	-	-	61.04

Evaporative Depletion	Acres	Net Evap. Rate (ft)	Total Evap. Depletion (af)
Projected Maximum from SWSP	15	3.85	57.75

As shown in Table 1 above, the dedicated water rights should be more than sufficient to cover the long-term evaporative depletions at the 22 West Pit.

Sincerely,

Chris Tomky
Deep Cut, LLC