

**BEFORE THE DEPARTMENT OF  
NATURAL RESOURCES AND CONSERVATION  
OF THE STATE OF MONTANA**

\* \* \* \* \*

<b>APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 40S 30119937 BY TRANSCANADA KEYSTONE PIPELINE, LP</b>	) ) )	<b>PRELIMINARY DETERMINATION TO GRANT PERMIT</b>
--	-------------	--

\* \* \* \* \*

On October 9, 2018 TransCanada Keystone Pipeline, LP (Applicant) submitted Application for Beneficial Water Use Permit No. 40S 30119937 to the Glasgow Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for 6.68 CFS (3000 GPM) and 189.13 AF. The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated March 26, 2019. The Applicant responded with information dated April 9, 2019. The Application was determined to be correct and complete as of April 10, 2019. The Department met with the Applicant on October 1, 2018. An Environmental Assessment for this Application was completed on April 11, 2019.

**INFORMATION**

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments
- Maps: Aerial photos depicting the points of diversion and places of use.

Information Received after Application Filed

- Documentation for signing authority received by DNRC via email on October 23, 2018.
- Additional information received on December 17, 2018 regarding pump data and requested volume.

- Additional clarification received on January 25, 2019 regarding pump data and requested volume.
- Additional clarification received on March 21, 2019 regarding requested volume.
- Response to Letter Deficiency received on April 9, 2019.

#### Information within the Department's Possession/Knowledge

- USGS gaging station records (Station # 06132000, Missouri River below Fort Peck Dam MT) from October 1943-May 2017.
- Department water right records of existing rights

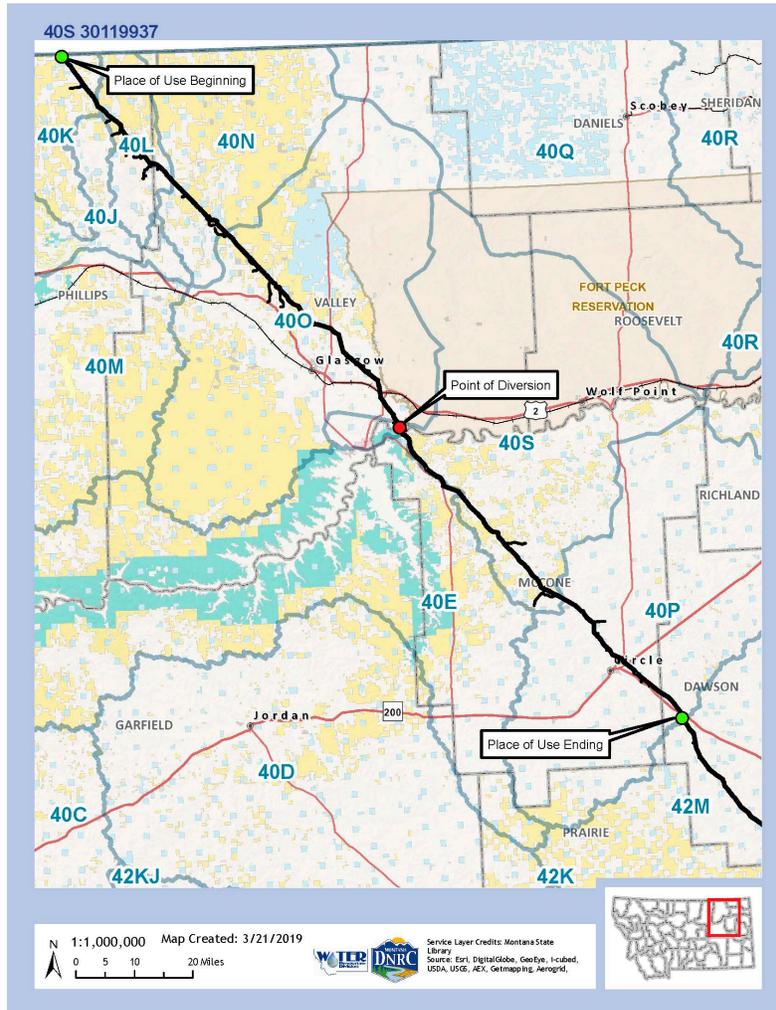
The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA).

### **PROPOSED APPROPRIATION**

#### FINDINGS OF FACT

1. The Applicant proposes to temporarily divert water from the Missouri River by means of a pump, from January 1-December 31. The requested surface water diversion is for 6.68 CFS up to 189.13 AF, from points on either side of the Missouri River in the NE Section 32, T27N, R42E, Valley and McCone Counties, for industrial use from January 1-December 31. The industrial use is comprised of horizontal directional drilling, hydrostatic testing, pump station construction and dust control. The horizontal directional drilling process will occur within the NE Section 32, T27N, R42E, Valley and McCone Counties. The hydrostatic testing water will enter the pipe at the proposed points of diversion to fill the pipe within Phillips, Valley, McCone and Dawson Counties. Water used in the hydrostatic testing process will be used to test portions of the pipeline, both north and south of the river, and ultimately be discharged into plastic lined filtering structures located within the NE corner of Section 32, T27N, R42E, in Valley County and the SW corner of Section 33, T27N, R42E, in McCone County. Water for pump station construction and dust control will be trucked to locations along the pipeline route.

2. The proposed place of use is the right-of-way and access roads along the pipeline route beginning in the NW of Section 5, T37N, R32E, Phillips County, passing through Valley and McCone Counties, and ending in the NW of Section 27, T18N, R50E, Dawson County (File). See Figure 1 below.



3. The water used for pump station construction, horizontal directional drilling and dust control is not expected to return to the source; therefore, these uses are assumed to be 100% consumptive. Water used for hydrostatic testing will return to the source near the two points of diversion.

4. To monitor the flow rates and volumes diverted, in-line flow meters will be installed on all pumps withdrawing water from the source for this temporary permit.

**§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA**

**GENERAL CONCLUSIONS OF LAW**

5. The Montana Constitution expressly recognizes in relevant part that:
- (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
  - (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
  - (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

- (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
- (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

6. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding

must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

... the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:

(a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, “the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” § 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is “more probably than not.” Hohenlohe v. DNRC, 2010 MT 203, ¶¶33, 35.

7. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

(1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, “uncontrolled development of a valuable natural resource” which “contradicts the spirit and purpose underlying the Water Use Act.”); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin. R. Mont. (ARM) 36.12.207.

8. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starnier (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court,

*Memorandum and Order* (2011). The Supreme Court likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

9. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.

10. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

## **Physical Availability**

### **FINDINGS OF FACT**

11. The Applicant is requesting a maximum flow rate of 6.68 CFS from the Missouri River. The proposed point of diversion is located approximately 1.8 miles downstream from the USGS gaging station below Fort Peck Dam (USGS Station # 06132000). The medians of mean monthly flow rates were obtained from the gaging station records as well as medians of mean monthly volumes, which were calculated by converting CFS to AF (CFS x 1.98 x days per month = AF).

12. Table 1 shows median of the mean monthly flows at the gaging station during the requested period of diversion:

**Table 1**

<b>Median of the mean monthly flows at USGS Station # 06132000 (CFS)</b>											
<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
9840	9316	6901	6644	7684	8334	8576	9094	8045	7748	7830	9365

13. Table 2 below is a list of existing water rights between the USGS gaging station (USGS Station # 06132000) and the proposed point of diversion.

**Table 2**

<b>Water Rights between the Gage and POD</b>			
<b>Water Right #</b>	<b>Flow (CFS)</b>	<b>Volume (AF)</b>	<b>Period of Diversion</b>
40S 168953 00	0.04	15.7	04/01 to 11/30
40S 46364 00	5.34	960.0	04/01 to 11/19
40S 28935 00	6.68	532.5	04/01 to 11/04
40S 33997 00	10.02	597.9	04/01 to 10/31

14. This list was used to evaluate the flow rate physically available at the point of diversion by determining the sum of the monthly diversions for existing water rights and subtracting these values from the median of mean values for the gaging station. The result is the monthly median of mean flow rate for the Missouri River physically available at the proposed point of diversion, which is show in Table 3 below.

**Table 3**

<b>Physical Availability-Flow Rate (CFS)</b>			
<b>Month</b>	<b>Median Monthly Flows</b>	<b>Water Rights Between the Gage and POD</b>	<b>Flow Rate Physically Available</b>
Jan	9840	0	9840
Feb	9316	0	9316
Mar	6901	0	6901
Apr	6644	22	6622
May	7684	22	7662
Jun	8334	22	8312
Jul	8576	22	8554
Aug	9094	22	9072
Sep	8045	22	8023
Oct	7748	22	7726
Nov	7830	12	7818
Dec	9365	0	9365

15. The list of existing water rights between the USGS gaging station (USGS Station # 06132000) and the point of diversion was also used to evaluate the volume physically available each month by determining the monthly volume being diverted. This was done by dividing the total volume for each water right by the number of months each diversion takes place. The sum of these values was then subtracted from the median of mean monthly volumes measured at the USGS gaging station for each month the use occurs to determine volume physically available at the point of diversion specified by the Applicant.

**Table 4**

<b>Physical Availability-Volume (AF)</b>			
<b>Month</b>	<b>Median Monthly Volumes</b>	<b>Water Rights Between the Gage and POD</b>	<b>Volume Physically Available</b>
Jan	603979	0	603979
Feb	516479	0	516479
Mar	423583	0	423583

Apr	394654	274	394380
May	471644	274	471370
Jun	495040	274	494766
Jul	521078	274	520804
Aug	558190	274	557916
Sep	477873	274	477599
Oct	475572	274	475298
Nov	465102	189	464913
Dec	574824	0	574824

16. The Department finds water is physically available at the proposed point of diversion in the amount the Applicant seeks to appropriate.

#### CONCLUSIONS OF LAW

17. Pursuant to § 85-2-311(1)(a)(i), MCA, an applicant must prove by a preponderance of the evidence that “there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate.”

18. It is the applicant’s burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-41I by Anson* (DNRC Final Order 1987)(applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

19. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

20. Use of published upstream gauge data minus rights of record between gauge and point of diversion adjusted to remove possible duplicated rights shows water physically available. *In the Matter of Application for Beneficial Water Use Permit No. 41P-105759 by Sunny Brook Colony* (DNRC Final Order 2001).

21. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF 11-16)

**Legal Availability:**

**FINDINGS OF FACT**

22. The Department determined the area of potential impact on the Missouri River as approximately five miles downstream of the proposed point of diversion. A list of existing legal demands within the area of impact, including the Montana Department of Fish, Wildlife, & Parks instream flow reservation, was generated and used to compare the physical availability (median of mean monthly flow rates and volumes) of water to the amount of water already appropriated under the existing water rights, water reservations and the Fort Peck Tribal right. The Department finds calculated flows and volumes in the tables below show legal availability of water for appropriation during the proposed period of diversion. The volume of downstream water rights was calculated by dividing the claimed volumes of the downstream water rights by the number of months of the claimed period of use (Table 5). The Applicant is requesting a flow rate of 6.68 CFS up to 189.13 AF per year.

**Table 5**

<b>Water Rights Downstream of the Gage</b>			
<b>Water Right #</b>	<b>Flow (CFS)</b>	<b>Volume (AF)</b>	<b>Period of Diversion</b>
40S 184730 00	0.04	42	01/01 to 12/31
40S 31904 00	14.82	89	04/01 to 11/30
40S 10030 00	14.92	575	04/01 to 11/30
40S 182895 00	15.37	675	04/01 to 11/30
40S 168938 00	15.37	498	04/01 to 11/30
40S 178473 00	0.04	15.68	04/01 to 11/30
40S 168953 00	0.04	15.68	04/01 to 11/30
40S 4929 00	16	840	04/15 to 10/15
40S 11184 00	8.01	270	04/15 to 11/15

23. The legal availability is summarized in the Tables 6 and 7 below.

**Table 6**

<b>Legal Availability-Flow Rate (CFS)</b>					
<b>Month</b>	<b>Flow Rate Physically Available at POD</b>	<b>FWP Instream Flow Right</b>	<b>Downstream Water Rights</b>	<b>Fort Peck Tribes Reserved Right</b>	<b>Flow Rate Legally Available</b>
Jan	9840	5178	0	325	4337
Feb	9316	5178	0	360	3778
Mar	6901	5178	0	325	1398
Apr	6622	5178	85	420	939
May	7662	5178	85	854	1545
Jun	8312	5178	85	1220	1829
Jul	8554	5178	85	1750	1541
Aug	9072	5178	85	1465	2344
Sep	8023	5178	85	883	1877
Oct	7726	5178	85	407	2056
Nov	7818	5178	69	336	2235
Dec	9365	5178	0	325	3862

**Table 7**

<b>Legal Availability-Volume (AF)</b>					
<b>Month</b>	<b>Volume Physically Available at POD</b>	<b>FWP Instream Right</b>	<b>Downstream Water Rights</b>	<b>Fort Peck Tribes Reserved Right</b>	<b>Volume Legally Available</b>
Jan	603979	317826	4	20000	266149
Feb	516479	287068	4	20000	209407
Mar	423583	317826	4	20000	85753
Apr	394380	307573	391	25000	61416
May	471370	317826	391	52500	100653
Jun	494766	307573	391	72500	114302
Jul	520804	317826	391	107500	95087
Aug	557916	317826	391	90000	149699
Sep	477599	307573	391	52500	117135
Oct	475298	317826	391	25000	132081

<b>Nov</b>	464913	307573	271	20000	137069
<b>Dec</b>	574824	317826	4	20000	236994

24. The comparisons in Tables 8 and 9 show water is legally available throughout the proposed period of diversion. The monthly volumes for the comparison are equal to the total requested volume divided by the period of use (189.13 AF/12 months=AF/month).

**Table 8**

<b>Comparison-Flow Rate (CFS)</b>			
<b>Month</b>	<b>Flow Rate Legally Available at POD</b>	<b>Flow Rate Requested</b>	<b>Flow Rate Remaining</b>
<b>Jan</b>	4337	6.68	4330
<b>Feb</b>	3778	6.68	3771
<b>Mar</b>	1398	6.68	1391
<b>Apr</b>	939	6.68	932
<b>May</b>	1545	6.68	1538
<b>Jun</b>	1829	6.68	1822
<b>Jul</b>	1541	6.68	1534
<b>Aug</b>	2344	6.68	2337
<b>Sep</b>	1877	6.68	1870
<b>Oct</b>	2056	6.68	2049
<b>Nov</b>	2235	6.68	2228
<b>Dec</b>	3862	6.68	3855

**Table 9**

<b>Comparison-Volume (AF)</b>			
<b>Month</b>	<b>Volume Legally Available at POD</b>	<b>Volume Requested</b>	<b>Volume Remaining</b>
<b>Jan</b>	266149	15.8	266133
<b>Feb</b>	209407	15.8	209391
<b>Mar</b>	85753	15.8	85737
<b>Apr</b>	61416	15.8	61400
<b>May</b>	100653	15.8	100637

Jun	114302	15.8	114286
Jul	95087	15.8	95071
Aug	149699	15.8	149683
Sep	117135	15.8	117119
Oct	132081	15.8	132065
Nov	137069	15.8	137053
Dec	236994	15.8	236978

CONCLUSIONS OF LAW

25. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

*E.g.*, ARM 36.12.101 and 36.12.120; Montana Power Co., 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

26. It is the applicant’s burden to present evidence to prove water can be reasonably considered legally available. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005) (it is the applicant’s burden to produce the required evidence.); *In the Matter of*

*Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.

27. Use of published upstream gauge data minus rights of record between gauge and point of diversion adjusted to remove possible duplicated rights shows water physically available. Using same methodology and adding rights of record downstream of point of diversion to the mouth of the stream shows water legally available. *In the Matter of Application for Beneficial Water Use Permit No. 41P-105759 by Sunny Brook Colony* (DNRC Final Order 2001); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992);

28. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. § 85-2-311(1)(a)(ii), MCA. (FOF 22-24)

### **Adverse Effect**

#### **FINDINGS OF FACT**

29. The majority, 122.76 AF, of the requested volume will be diverted for hydrostatic testing on a short-term basis prior to being discharged near where the water was diverted. Short of minor spillage while filling the pipe this use will be non-consumptive. The remainder of the requested volume, 66.37 AF will be diverted as needed throughout the year for horizontal directional drilling, pump station construction, and dust control operations.

30. The Applicant will monitor water withdrawal rates through the use of in-line flow meters that will measure all pump diversions and as such can direct the contractor to cease operations if needed.

31. The Department finds there will be no adverse effect because the amount of water requested is legally available at the points of diversion on the Missouri River and the Applicant's plan to curtail their appropriation during times of water shortage is adequate.

## CONCLUSIONS OF LAW

32. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.
33. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(5).
34. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.
35. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their “historic beneficial use.” See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.
36. It is the applicant’s burden to produce the required evidence. E.g., Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-

2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Bostwick Properties, Inc. ¶ 21.

37. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8.

38. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. § 85-2-311(1)(b) , MCA. (FOF 29-31)

### **Adequate Diversion**

#### **FINDINGS OF FACT**

39. A combination of pumps will be used to for the diversion of water for hydrostatic testing to achieve the maximum flow rate of 3000 GPM. Cornell single stage 8-inch centrifugal pumps (90 psi) driven by a Detroit diesel engine will divert water through a single screened intake in the Missouri River. Peerless three stage 6-inch pumps will be used to move the water into the pipeline section for testing. This second pump will be capable of pumping a higher pressure (350 psi) that is required to overcome the elevation differences in the test section. Back up pumps will be manifold into prevent delays into testing due to pump failure. The total volume of the withdrawal would be limited by the capacity of the first pump/pumps up to 3,000 GPM. In-line flow meters will be installed to monitor all diversions. The Applicant provided pump data including pump curves and design specification of the typical water diversion layout. (Department File).

40. A separate pump diversion will withdraw water from a floating screened intake for filling trucks. The proposed pump is a 6-inch three stage Byron Jackson pump that will be used to provide water for horizontal directional drilling, pump station construction and dust control purposes. The pump is also powered by a Detroit engine and is capable of delivering 300 GPM and all diversions will be measured using an in-line flow meter. The Applicant provided pump data including pump curve for this pump and design specification of the typical water diversion layout. The horizontal directional drilling process involves the use of a drilling fluid (also

referred to as drilling mud) made up primarily of water. Bentonite clay is added to the water to enhance lubricating the drill head and cutting tool, spoil transport and caking properties of the drilling fluid. Water will be trucked to pump stations along the pipeline route construction and will be used for mixing concrete and hydro testing the pump station. Water for dust control will be trucked along the pipeline right-of-way and access roads as needed. This pump will not be diverting water at the same time water is being diverted for hydrostatic testing.

41. The Department finds the diversion means are adequate for the proposed industrial uses.

### CONCLUSIONS OF LAW

42. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate.

43. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

44. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA (FOF 39-41).

### **Beneficial Use**

#### FINDINGS OF FACT

45. The Applicant proposes to use the water for industrial purposes in the construction of an oil pipeline. Specifically, the water will be used for four purposes within the scope of the project. Horizontal directional drilling will make use of the water as a hydraulic drilling fluid for drilling the pipeline under the Missouri River with an anticipated use of 20.26 AF at a maximum withdrawal rate of 300 GPM. The requested volumes for the horizontal directional drilling process are estimates of the volume of water that will be required by the drill contractor to mix with the bentonite drilling mud during the horizontal directional drilling process. The water will

be withdrawn intermittently during the drilling process to maintain the required volume and level of viscosity of the drilling mud. The requested volume of water includes additional water for contingencies that could be encountered during the drilling process. The contingencies include unforeseen geological conditions, the variation of soil types, and the loss of drilling fluids through voids or cracks in the geological formations.

46. Hydrostatic testing of the pipeline will require 122.76 AF of water, withdrawn at a rate of 3000 GPM, which will be injected into the 36-inch pipeline and pressurized to ensure that there is no leakage of the pipe. For hydrostatic testing of the pipeline, approximately 50 gallons of water per foot of pipe is needed to fill the pipe plus additional water for contingencies, primarily the need to retest portions of the pipeline. There are two spreads of pipe at the proposed project area for a total length of 163 miles. The flow rate of 3000 GPM is required to reduce the potential for entrainment of air in the pipeline while filling the pipe for hydrostatic testing.

47. Construction of the pumping stations will use 0.54 AF at a rate of 300 GPM. The water will be used for mixing concrete and some dust control surrounding the pump station.

48. The requested volumes for dust control are conservative totals that are based on the combination of TransCanada past experiences with dust control during construction and the limited availability of alternative water sources for dust control near the construction spreads. Dust control will consume 45.57 AF at a rate of 300 GPM. The volume is based on the area along the pipeline right-of-way and access roads, assuming a drier than normal season. The flow rate of 300 GPM is needed to fill trucks in a timely manner.

49. To monitor the withdrawal volumes, in-line flow meters will be installed on pumps withdrawing water for hydrostatic testing and horizontal directional drilling.

#### CONCLUSIONS OF LAW

50. #Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.

51. #An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13,

60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds*, Dee Deaterly v. DNRC et al, Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

52. Amount of water to be diverted must be shown precisely. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

53. Applicant proposes to use water for an industrial purpose which is a recognized beneficial use. § 85-2-102(4), MCA. Applicant has proven by a preponderance of the evidence industrial is a beneficial use and that 189.13 AF of diverted volume and 6.68 CFS of water requested is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA, (FOF 45-49)

### **Possessory Interest**

#### **FINDINGS OF FACT**

54. The applicant signed the affidavit on the application form affirming the applicant has possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. This appropriation is specifically for hydrostatic testing, horizontal directional drilling, pump station construction, and dust control along the pipeline right-of-way and access roads. No water can be used in the absence of right-of-way agreements which constitute written consent.

#### **CONCLUSIONS OF LAW**

55. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

56. Pursuant to ARM 36.12.1802:

(1) An applicant or a representative shall sign the application affidavit to affirm the following:

(a) the statements on the application and all information submitted with the application are true and correct and

(b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

57. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. § 85-2-311(1)(e), MCA. (FOF 54)

### **PRELIMINARY DETERMINATION**

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 40S 30119937 should be GRANTED.

The Department determines the Applicant may temporarily divert water from the Missouri River, by means of a pump, from January 1-December 31 at 6.68 CFS up to 189.13 AF, from points on either side of the river in the NE of Section 32, T27N, R42E, Valley and McCone Counties, for industrial use from January 1-December 31. The proposed place of use is the right-of-way and access roads along the pipeline route beginning in the NW of Section 5, T37N, R32E, Phillips County, passing through Valley and McCone Counties, and ending in the NW of Section 27, T18N, R50E, Dawson County.

### **NOTICE**

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection, the application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the permit or change in appropriation right, the department will grant the permit or change subject to conditions necessary to satisfy applicable criteria.

DATED this 24<sup>th</sup> day of April 2019.

/Original signed by Denise Biggar/  
Denise Biggar, Regional Manager  
Glasgow Water Resources Office  
Department of Natural Resources and Conservation

**CERTIFICATE OF SERVICE**

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 24<sup>th</sup> day of April 2019, by first class United States mail.

TRANSCANADA KEYSTONE PIPELINE LP  
700 LOUISIANA STREET, SUITE 700  
HOUSTON, TX 77002

EXP, ATTN: JOHN AURIEMMA  
1800 WEST LOOP SOUTH, SUITE 850  
HOUSTON, TX 77027

\_\_\_\_\_  
NAME

\_\_\_\_\_  
DATE