BIG BEND GROUNDWATER MANAGEMENT DISTRICT NO. 5

125 S. Main
Stafford, Kansas 67578
(620) 234-5352 Fax (620) 234-5718

FORM CP-10
APPLICATION FOR PERMIT TO DRILL AND CONSTRUCT A CASED CATHODIC PROTECTION BOREHOLE
Referencing Kansas Corporation Commission Regulations K.A.R. 82-3-700 through K.A.R. 82-3-710

Permit Application Number CPB-_____

To the Big Bend Groundwater Management District No. 5:

Applicant: _____

Address: _____
(P.O. Box or Street) (City) (State) (Zip Code)

Telephone: _____
(Area Code) (Telephone)

Application to the Big Bend Groundwater Management District No. 5 for a permit to drill and construct a cathodic protection borehole in and through the Big Bend aquifer in the county of _____ state of Kansas, to the extent and in accordance with the following:

1. The location of the proposed cathodic protection borehole is in the ___ quarter of the ___ quarter of the ___ quarter of Section _____, Township _____ south, Range _____ west and more particularly described as being near a point _____ feet north and _____ feet west of the apparent southeast corner of said section.
2. The proposed use of the cathodic protection borehole is to provide cathodic protection of the applicant's _____ facility from electrochemical corrosion.
3. The land surface elevation is _____ feet above mean sea level and the method of measurement used was (a) ☐ surveyed, (b) ☐ topographic map or (c) ☐ other _____.
4. The depth to surface or top of bedrock or shale is _____ feet below land surface (bls).
5. The depth to the water table of the fresh water aquifer is _____ feet bls.
6. Aquifer salinity as indicated by chloride concentration is _____ mg/L and was determined by: (a) ☐ published report, (b) ☐ test well data, or (c) ☐ other _____.
7. The total depth of the cathodic protection borehole is _____ feet bls.
8. A non metallic surface casing equipped with centralizers will be installed in the surface casing borehole when drilling has penetrated _____ feet bls, which is a minimum of 20 feet below bedrock or shale surface as listed in paragraph #4.
9. Casing centralizers will be installed on the surface casing beginning at the surface casing's total depth and at 40 feet intervals along the complete length of the surface

casing at depths of _____, _____, _____, _____, _____, _____, _____, _____ feet bls.

10. The diameter of the surface casing borehole will be a minimum of six inches larger than the outside diameter of the surface casing. The diameter of the borehole containing the surface casing will be _____ inches and the outside diameter of the surface casing will be _____ inches.

11. The standard dimension ratio (SDR) of the surface casing calculated by dividing the surface casing's outside diameter (OD) of _____ inches by its minimum wall thickness (MWT) of _____ inches equals _____.

12. A pitless surface casing adapter will be installed in the surface casing _____ feet bls.

13. The annular space between the surface casing and the borehole will be grouted using: (a) ☐ cement, (b) ☐ neat cement, (c) ☐ bentonite clay grout, (d) ☐ bentonite cement or (e) ☐ other _____ from a total surface casing depth of _____ feet bls to _____ feet bls.

14. The top of the surface casing will be fitted with a watertight cap and will: (a) ☐ terminate _____ feet above land surface, (b) ☐ terminate in a water resistant and structurally sound vault _____ feet bls or (c) ☐ be buried _____ feet bls.

15. The anodes will be installed beginning at a depth of _____ feet bls to a total depth of _____ feet bls.

16. Anode conductor (backfill) material will be installed beginning at a depth of _____ feet bls to a total depth of _____ feet bls.

17. An anode vent pipe will be installed and completed _____ feet above land surface.

18. A concrete base or pad ☐ will / ☐ will not be constructed around the above ground surface casing or vault.

19. Will the use of a drilling pit threaten to contaminate fresh and usable groundwater? ☐ Yes ☐ No. If Yes complete sections (a) and (b).

    (a) The pit will be: (i) ☐ constructed so that the bottom and sides have a hydraulic conductivity no greater than 1 x 10^{-7} cm/sec., (ii) ☐ constructed above ground, or (iii) ☐ a portable above ground tank, and

    (b) The applicant has submitted a surface pond application to the Director, Conservation Division, Kansas Corporation Commission. ☐ Yes ☐ No.

20. Has the applicant filed a completed Form KSONA-1 and plat map with this application? ☐ Yes ☐ No.

21. Does the Form KSONA-1 indicate that the applicant has provided the surface owner with a copy of this application, including the Form KSONA-1 and plat map? ☐ Yes ☐ No.

22. A construction plan is submitted with the application and shows or illustrates the information contained in paragraphs #4 through #18.

23. The cathodic protection borehole will be abandoned and plugged if it: (a) is not completed due to unforeseen circumstances, (b) either contaminates or threatens to contaminate a fresh water aquifer, (c) encounters uncontrollable artesian flow, (d)

has exhausted its anodes and replacement anodes are not installed within one year, or (e) has not been used for one year and the applicant does not demonstrate intentions to use it.

24. The applicant understands and agrees to comply with K.A.R. 82-3-700 through 82-3-710. Further, the applicant may request an exception to these regulations pursuant to K.A.R. 82-3-100(b).

25. Dated at _____, Kansas, this _____ day of _____, 20____

_____
(Applicant)

By _____
(Signature)

_____
(Title)

APPLICANT DO NOT CONTINUE BELOW DOUBLE LINE

For Big Bend Groundwater Management District #5 Use

1) Application received on _____/_____/_____.

2) Application review by _____

_____
(Title)

3) The application is hereby denied. The denial was based on the following findings:

_____

_____

_____

_____

4) The application meets or exceeds Cathodic Regulations K.A.R. 82-3-700 through K.A.R. 82-3-710 and is hereby approved by the Big Bend Groundwater Management District No. 5 this _____ day of _____, 20_____

_____
Orrin Feril, Manager
Big Bend Groundwater Management District No. 5