Application ID:

Calhoun County Groundwater Conservation District
P.O. Box 1395, Port Lavaca, Texas 77979
www.calhouncountygcd.org

received 8-29-24

APPLICATION TO AMEND A PERMIT

Submit this application to request an amendment of an existing permit.

Item 1: Specify the name and address of the applicant:

Mr. Danny McGuire, President, Port O'Connor Improvement District
39 Denman Drive, Port O'Connor, Texas 77982

Item 2: Specify the permit identification number:

WV-20221114-01

Item 3: Specify the well identification numbers of the subject wells:

Item 4: Describe the requested amendment:

change proposed monitoring well locations to revised coordinates

Central Monitoring Well - 28°25'52.47"N -96°27'42.40"W
East Monitoring Well - 28°25'53.65"N -96°27'20.58"W
West Monitoring Well - 28°26'21.53"N -96°26'55.34"W

Item 5: Required Statement and Signature of the Applicant:

I certify, under penalty of law, that the information reported on and attached to the application was prepared under the direction or supervision of the applicant and is, to the best of the knowledge and belief of the applicant, true, accurate and complete.

DSMcG

Signature of Applicant

8-29-24

Date of Signature

Note: The district may request additional information not requested in this application in order to evaluate the request relative to the rules of the district.

received 8.27.24

Waiver and Variance

Section 1 – General Details:

This waiver and variance is granted in accordance with the provisions of the rules of the Calhoun County Groundwater Conservation District (the District) and acceptance of this waiver and variance constitutes an acknowledgment and agreement that the applicant, well operator, and well owner will comply with the terms and conditions of this waiver and variance and the rules of the district not affected by this waiver and variance to the extent that such terms and conditions comport with the Texas Water Code and the authorizing legislation of the District.

Waiver and Variance ID:	**WV-20221114-01**
Permitted Entity:	**Port O'Connor Improvement District**
Applicant Name:	**Mr. Danny McGuire, President** **39 Denman Drive** **Port O'Connor, Texas 77982**
Waiver Application ID:	**AWR-20220617-08**
Associated Permit Applications:	**ARW-20220717-01, ADW-20220617-02, ADW-20220617-03, ADW-20220617-04, ADW-20220617-05, ADW-20220617-06, AOWF-20220617-07**
Associated Permits:	**Drilling Permits: DP-20221114-02, DP-20221114-03, DP-20221114-04, DP-20221114-05, DP-20221114-06, DP-20221114-07; and Production Permit: OPWF-20221114-01-01.**
Associated District Rules:	**Rule 4.1: GENERAL PERMITTING POLICIES AND PROCEDURES,** **RULE 4.3: PERMITTING POLICIES AND PROCEDURES RELATED PRODUCTION PERMITS,** **RULE 5.2: WELL SPACING REQUIREMENTS OF NONGRANDFATHERED WELL FIELDS**

This waiver is conditioned upon the well operator and well owners otherwise complying with the Rules of the District and regulations of the State of Texas, as amended, applicable to operating water wells within the District. This waiver confers only the right to use the subject wells under the provisions of the Rules of the District and according to the terms of this waiver and variance. The wavier and variance term and conditions may be modified or amended pursuant to the Rules of the District. This waiver is conditioned upon the Permitted Entity and its successors maintaining the responsibility to provide water supply to the public within the contiguous tract of the service area associated with the associated permitting request.

Section 2 - Finding of Good Cause by the Board of Directors of the District:

The Board of Directors finds good cause to waive item 14 of Rule 4.1, item 10 of Rule 4.3, item 1 of Rule 5.2 and to authorize production in accordance with the terms of this waiver and variance. The basis of the finding of good cause to grant this waiver is the authorization of production of groundwater from wells drilled in close proximity to the Intracoastal Waterway, Espiritu Santo Bay, and Matagorda Bay and completed in surficial water strata generally known to produce groundwater with total dissolved solids concentrations in excess of 1,000 mg/L will likely 1) reduce future demand for groundwater with total dissolved solids equal to or less than 1,000 mg/L found in shallower strata in the vicinity of the well field site, 2) reduce the negative impacts associated with production of groundwater found in shallower groundwater-bearing strata previously developed in the vicinity of the well field site, and 3) produce valuable empirical data regarding the development of brackish groundwater resources near the coastline within the District to support scientifically-credible regulations and rules related to brackish groundwater development.

Section 3 - Waiver and Variance Granted:

The Board of Directors grants the following waivers and variances subject to the conditions established herein:

1. To the extent necessary, waive the requirement, established under item 14 of Rule 4.1, allowing a public water supply entity to consider all contiguous land within the boundary of its certificate of convenience and necessity (CCN) to be under its control for the purposes of evaluating the spacing and production limitations and application performance conditions of the District to additionally allow the permitted entity to consider all contiguous land within the boundary of its service area intersecting the subject well field to be under its control for the purposes of evaluating the spacing and production limitations and application performance conditions of the District;
2. Waive the requirements, established under item 10 of Rule 4.3, requiring an applicant seeking production permits associated with a non-grandfathered well field with a proposed aggregate capacity of 360,000 gallons per day or more to provide information demonstrating achievement of the enumerated performance conditions and allow the technical data provided by the permitted entity with the permit applications submitted on June 15, 2022 to be used to inform the District regarding the impacts of the operation of the proposed well field.
3. Waive the requirement, established under item 1 of Rule 5.2, prohibiting the location of a non-grandfathered non-exempt use well of a non-grandfathered well field closer to a well registered with the District and owned by a person other than the subject owner of groundwater resources than 1 foot for every one gallon-per-minute of the combined maximum authorized production rate per minute and allow the permitted entity to locate the proposed non-grandfathered non-exempt use wells no closer than 300 feet to a well registered with the District and owned by a person other than the permitted entity.
4. Waive the requirement, established under item 5 under Rule 4.11, requiring the applicant to attempt to obtain the waivers and identifying any required waivers that were not obtained and the reason the waiver was not obtained in instances in which the rules of the District allow for exceptions contingent on waiver by adjoining or adjacent landowners; and

5. Waive the performance standards established under item 13 of Rule 4.3 on the condition that the performance standards established in this waiver and variance shall apply.

Section 4 - Definitions:

The Board of Directors establishes the following definitions as part of this waiver:

1. **Production Well** means a well operated to produce groundwater with total dissolved solids concentrations in excess of 1,000 mg/L as authorized by this waiver and the associated production permit.
2. **Aquifer Monitoring Site** means an area located on the contiguous property on which the subject well field is located and is designated as an aquifer monitoring site at which monitoring wells shall be established and aquifer monitoring activities shall be conducted.
3. **Dedicated Aquifer Monitoring Well** means a well located within an Aquifer Monitoring Site designed for, dedicated to, and used solely for aquifer monitoring purposes.
4. **Average Water Level Measurement** means the average value of all water level depth measurements, collected on a 4-hour basis, from a Dedicated Aquifer Monitoring Well during a reporting period.
5. **TDS Conversion Factor** means the conversion factor derived from lab-measured specific conductivity and total dissolved solids from water samples collected from a Dedicated Aquifer Monitoring Well.
6. **Average TDS Concentration** means the average value of all temperature-corrected, specific conductivity measurements, collected on a 4-hour basis, observed in a Dedicated Aquifer Monitoring Well during a reporting period and converted to TDS concentrations by applying a TDS Conversion Factor.
7. **Production Period** means the 36-month period of time after the Initial Average Water Level Measurement and Initial Average TDS Concentration have been calculated and production of groundwater from any of the Production Wells have begun.
8. **Reporting Period** means the 3-month periods, ending on the last day of March, June, September, and December of each year during the Production Period.
9. **Initial Monitoring Period** means the period, with a duration of at least 10 days, of suspended groundwater production by the Permitted Entity before the Production Period.
10. **Baseline Monitoring Period** means the first 12-month period of the Production Period.
11. **Initial Average Water Level Measurement** means the Average Water Level Measurement observed in a Dedicated Aquifer Monitoring Well during the Initial Monitoring Period.
12. **Initial TDS Conversion Factor** means TDS Conversion Factor derived from lab-measured specific conductivity and total dissolved solids from water samples collected from a Dedicated Aquifer Monitoring Well during the Initial Monitoring Period.
13. **Initial Average TDS Concentration** means the Average TDS Concentration calculated by applying the Initial TDS Conversion Factor to the specific conductivity measurements collected from a Dedicated Aquifer Monitoring Well during the Initial Monitoring Period.
14. **Baseline Average Water Level Measurement** means the Average Water Level Measurement observed in a Dedicated Aquifer Monitoring Well during the Baseline Monitoring Period.

15. **Baseline TDS Conversion Factor** means TDS Conversion Factor derived from lab-measured specific conductivity and total dissolved solids from water samples collected from a Dedicated Aquifer Monitoring Well during the Baseline Monitoring Period.
16. **Baseline Average TDS Concentration** means the Average TDS Concentration calculated by applying the Baseline TDS Conversion Factor to the specific conductivity measurements collected from a Dedicated Aquifer Monitoring Well during the Baseline Monitoring Period.
17. **Produced Groundwater in Acre-Feet** means the volume, in acre-feet, of groundwater produced from the wells of the subject well field during a reporting period.
18. **Produced Groundwater Year-to-Date in Acre-Feet** means the volume, in acre-feet, of groundwater produced from the wells of the subject well field from January 1 of the report year to the end of the reporting period.
19. **Average Water Level Difference** means the difference between the Initial Average Water Level Measurement and the Average Water Level Measurement for a reporting period.
20. **Average TDS Difference** means the difference between the Initial Average TDS Concentration and the Average TDS Concentration calculated for a reporting period.

Section 5 – Conditions and Requirements

The Board of Directors establishes the following conditions and requirements, in addition to those requirements established by the Rules of the District not affected by this waiver and variance, in conjunction with granting this waiver.

Section 5.1 – New Production Well Construction Requirements

The following conditions and requirements related to well construction are established for the new Production Wells operated under permit OPWF-20221114-01-01:

1. The Permitted Entity shall not locate Production Wells closer than 50 feet to the nearest property line;
2. The Permitted Entity shall not locate Production Wells closer than 300 feet of a registered water well owned by another person; and
3. The Permitted Entity shall construct the Production Wells in a manner to facilitate the collection of water level measurements using a steel tape or electronic water-level measurement device and water samples directly from the well head.

Section 5.1.1 – Aquifer Monitoring Well Construction Requirements

The following conditions and requirements related to well construction are established for the Dedicated Aquifer Monitoring Wells required under permit OPWF-20221114-01-01:

1. The Permitted Entity shall construct the Dedicated Aquifer Monitoring Wells in a manner to facilitate the collection of water level measurements using a steel tape or electronic water-level measurement device and water samples directly from the well head.

Section 5.2 – Groundwater Production Limitations

The following conditions and requirements related to groundwater production are established for the water wells operated under production permit OPWF-20221114-01-01:

1. The Permitted Entity shall produce groundwater from the Production Wells solely for public water supply purposes;
2. The Permitted Entity shall not produce groundwater production from any Production Well at a rate exceeding 300 gallons per minute; and
3. The Permitted Entity shall not produce groundwater from the Production Wells in excess of 890 acre-feet per year.

Section 5.3 – Groundwater Production Monitoring Requirements

The following conditions and requirements related to groundwater production monitoring are established for the water wells operated under production permit OPWF-20221114-01-01:

1. The Permitted Entity shall measure groundwater production from each Production Well.

Section 5.4 – Aquifer Monitoring Requirements

The following conditions and requirements related to aquifer monitoring are established for the well field operated under production permit OPWF-20221114-01-01:

1. The Permitted Entity shall establish Aquifer Monitoring Sites within 100 feet for the following locations:
    a. West-Aquifer Monitoring Site: 28° 25' 52.47" N, 96° 27' 42.40" W;
    b. Center-Aquifer Monitoring Site: 28° 25' 53.65" N, 96° 27' 20.58" W;
    c. East-Aquifer Monitoring Site: 28° 26' 21.53" N, 96° 26' 55.34" W;
2. The Permitted Entity shall construct a Dedicated Aquifer Monitoring Well at each Aquifer Monitoring Site.
3. The Permitted Entity shall maintain each Dedicated Aquifer Monitoring Well until the conclusion of the Production Period.
4. The Permitted Entity shall install and maintain, at the expense of the Permitted Entity, monitoring equipment including water level measurement probes and specific conductivity probes at each Dedicated Aquifer Monitoring Well.
5. The Permitted Entity shall provide the District with access to the Dedicated Aquifer Monitoring Wells for the purpose of measuring aquifer conditions, installation of aquifer monitoring probes, and collection of groundwater samples, upon the District providing reasonable advance notice to the Permitted Entity.
6. The Permitted Entity shall measure and record water level measurements and specific conductivity measurements from each Dedicated Aquifer Monitoring Well on a 4-hour basis.

Section 5.5 – Reporting Requirements

The following conditions and requirements related to reporting are established for the well field to be operated under production permit OPWF-20221114-01-01:

1. For each reporting period, the following parameters shall be calculated and reported to the District for each Production Well by the Permitted Entity:
    a. The Produced Groundwater in Acre-Feet; and
    b. The Produced Groundwater Year-to-Date in Acre-Feet.
2. For each reporting period, the following parameters shall be calculated and reported to the District for both the current and previous reporting period for each Dedicated Aquifer Monitoring Well by the Permitted Entity:
    a. The Average Water Level Measurement;
    b. The TDS Conversion Factor;
    c. The Average TDS Concentration;
    d. The change of the Average Water Level Measurement as compared to the Average Water Level Measurement of the previous reporting period; and
    e. The change of the Average TDS Concentration as compared to the Average TDS Concentration of the previous reporting period.
3. The Permitted Entity shall submit the lab reports obtained by the Permitted Entity for deriving or revising TDS Conversion Factors within 30 days of the end of each reporting period.
4. The Permitted Entity shall submit a Performance Assessment Report within 90 days of the conclusion of the Production Period, prepared by qualified hydrogeologists and engineers, to provide a summary of groundwater production and aquifer monitoring data.
5. The Permitted Entity shall develop appropriate models and reports, prepared by qualified hydrogeologists and engineers, to accurately estimate potential water level and water quality impacts associated with the long-term operation of the well field within 90 days of the conclusion of the Production Period.

Section 5.6 – Operational Plans

The Permitted Entity shall submit the following items to the District:

1. A plan to implement a Production Well Construction Program by the Permitted Entity that ensures all Production Wells are properly designed, engineered, constructed. The plan shall specify the geophysical logging requirements, well construction and completion methods, and relevant protocols to be used during the construction, and completion of the Production Wells of the well field.
    a. The Permitted Entity shall not initiate the construction or complete the Production Wells until the plan is submitted to the District.
    b. The Permitted Entity shall submit a report to the District summarizing the outcomes and technical information developed, if any, prior to initiating groundwater production from the Production Wells.
2. A plan to implement a Monitoring Well Construction Program by the Permitted Entity that ensures all Dedicated Aquifer Monitoring Wells are properly designed, engineered, constructed. The plan shall specify the geophysical logging requirements, well

construction and completion methods, and relevant protocols to be used during the construction, and completion of the Dedicated Aquifer Monitoring Wells of the well field.

   a. The Permitted Entity shall not initiate the construction or complete the Dedicated Aquifer Monitoring Wells until the plan is submitted to the District.
   b. The Permitted Entity shall submit a report to the District summarizing the outcomes and technical information developed, if any, prior to initiating groundwater production from the Production Wells.

3. A plan to implement a Monitoring and Reporting Program that ensures the monitoring and associated analysis required of the Permitted Entity in this waiver will be conducted to facilitate the submittal of the periodic reports of groundwater production and aquifer monitoring as defined in this waiver.
   a. The District shall notify the Permitted Entity of the approval or rejection of the plan, including reasons for any such rejection, within 30 days of receiving the plan.
      i. In the event the plan is not approved within 30 days of submittal to the District, the plan shall be presented to the Board of Directors of the District for consideration at the next regular meeting of the Board of Directors.
   b. The Permitted Entity shall not produce groundwater from the Production Wells unless the District approves the plan.

Section 5.7 – Performance Responses

The following conditions and requirements as performance responses are established for the well field to be operated under production permit OPWF-YYYYMMDD-01:

1. In the event that the Baseline Average Water Level Measurement for a Dedicated Aquifer Monitoring Well exceeds Initial Average Water Level Measurement by 50 feet for two or more consecutive reporting periods, the Permitted Entity shall submit a plan prepared by a professional engineer or hydrogeologist proposing operational or facility modifications to improve well field performance to facilitate recovery of water levels to drawdowns less than 50 feet and have 6 months to implement operational changes and 24 months to implement proposed facility modifications.
2. In the event that the Baseline Average TDS Concentration for a Dedicated Aquifer Monitoring Well exceeds Initial Average TDS Concentration by 1,000 mg/L for two or more consecutive reporting periods, the Permitted Entity shall submit a plan prepared by a professional engineer or hydrogeologist proposing operational or facility modifications to improve well field performance to facilitate recovery of TDS concentrations to or below the Initial Average TDS Concentration plus 1,000 mg/L and have 6 months to implement operational changes and 24 months to implement proposed facility modifications.
3. The District recognizes that the Permitted Entity is responsible for providing water supply to the public.
4. The Permitted Entity recognizes that the District is responsible for protecting, conserving, and preventing waste of groundwater resources within Calhoun County for long-term sustainability within Calhoun County for the benefit of Calhoun County's landowners, citizens, economy, and environment.

5. The District and the Permitted Entity will endeavor to resolve conflicts such that the well field can be operated without interruption of public water supply and groundwater resources are conserved and protected.

Section 5.8 – Successful Compliance with Performance Criteria

At least 90 days before the end of the Production Period, the Permitted Entity shall either 1) submit an application to renew the associated production permits and an application to amend this waiver to extend the Production Period, 2) submit an application to renew the associated production permits and an application to amend this waiver and production permits, 3) submit an application for a new production permit(s) with or without an associated waiver request(s), or 4) submit notification to the District that the Permitted intends to allow the production permit to expire and cease production of groundwater from the Production Wells.

Authorization

On _____, the Board of Directors approved a motion to approve this waiver and variance and instructing the General Manager to issue the waiver and variance as described above.

_____ _____

Tim Andruss, General Manager Date

Waiver and Variance Acceptance

_____ 8.29.24

Danny McGuire, President of Port O'Connor Improvement District Date