TEXAS CHEMICAL COUNCIL
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Electronic Submission

Chairman Christi Craddick
Commissioner Wayne Christian
Commissioner Jim Wright
1701 N. Congress
Austin, Texas 78701

RE: Texas Railroad Commission Rulemaking related to Class VI UIC Injection Wells

Mr. Chairman and Commissioners:

The Texas Chemical Council (TCC) writes to comment on the Railroad Commission of Texas' (Commission) Proposed Amendments to 16 TAC Chapter 5 and Application for Class VI Primacy from the U.S. Environmental Protection Agency (Proposed Rule). TCC is a statewide trade association of chemical manufacturers representing more than 60 member companies who own and operate over 200 manufacturing and research facilities across Texas. The business of chemistry provides employment for approximately 500,000 Texans and its products are the state's top non-energy export with more than $50 billion in state exports annually to customers around the world. A number of TCC members have a great interest in the regulations surrounding Class VI wells and appreciate the opportunity to comment.

TCC fully supports the Commission's application for primacy from the U.S. Environmental Protection Agency (EPA) for the permanent geologic sequestration and storage of carbon dioxide (CO_2) via Class VI underground injection control (UIC) wells. TCC greatly appreciates both the EPA and Commission's efforts towards achieving that goal. TCC submits these comments to offer a perspective on changes to improve the rule as well as identify provisions that may be overly burdensome or operate as deterrents to the use of Class VI wells when put into practice.

TCC is aware of Congressmen Doggett and Castro's July 14th letter to EPA stating that local regulators in Texas cannot be trusted to protect the public and raising concerns regarding the Commission's ability to ensure enforcement of subsurface injections and adhere to environmental justice standards. TCC is confident in the Commission's technical and regulatory expertise and strongly supports the Commission's application in obtaining enforcement primacy for the federal Class VI UIC program.

1. GENERAL

TCC requests clarification on the Commission's use of "operators" throughout the Class VI UIC well provisions as opposed to "owners and operators" as used in the federal regulations. For

reference, "operator" is defined in the Commission's regulations as "[a] person, acting for itself or as an agent for others, designated to the Railroad Commission of Texas as the person with responsibility for complying with the rules and regulations regarding the permitting, physical operation, closure, and post-closure care of a geologic storage facility, or such person's authorized representative." 16 Tex. Admin. Code § 5.102(21). "Owner" is undefined. The federal UIC regulations state that "the owner or operator of any 'facility or activity' [are] subject to regulation under the UIC program." 40 C.F.R. § 144.3. Due to this general discrepancy, TCC would like additional clarification on how the use of "operator" as opposed to "owner and operator" will impact the applicability of these provisions on its members.

2. 5.102 - DEFINITIONS

TCC writes to support the revisions to the definition of anthropogenic carbon dioxide (CO_2) to include CO_2 has been captured from, or would otherwise have been released into, the atmosphere. This revision clarifies the applicability of the regulations to CO_2 resulting from direct air capture technologies. *See* Section 5.102(2). Similarly, TCC supports the corresponding revision to the definition of "carbon dioxide (CO_2) stream" in Section 5.102(7).

In addition, TCC writes to support the revisions to the definitions of "anthropogenic CO_2 injection well" in Section 5.102(3) and "geologic storage" in Section 5.102(28) to clarify that the regulations apply to the various phases of carbon dioxide (i.e. gaseous, liquid, or supercritical). This revision applies additional consistency with the federal Class VI UIC regulations, which refer to different phases of carbon dioxide.

TCC requests that the amendments to the definition of "good faith claim," as proposed in Section 5.102(30), be further revised. These definitions modify good faith claim to encompass "a perpetual property interest" rather than "a continuing possessory right". This contrasts with how the term has been used in other Commission regulations. *See, e.g.,* 16 Tex. Admin. Code § 3.15(a)(5). The proposed definition broadens the scope of a good faith claim beyond how it has been used previously without clear explanation. TCC requests that the Commission revise the definition back to "continuing possessory right" or "continuing property interest" as the term "perpetual" drastically changes the nature of the property interest.

3. 5.201 - APPLICABILITY AND COMPLIANCE

TCC seeks to address the proposed language in Section 5.201(h) that requires an operator to "apply for a permit to drill (Form W-1) prior to drilling a stratigraphic test well, notify the UIC Section of the application, and submit a completion report (Form W-2/G-I) once the well is completed." Under this provision, "if the operator plans to convert the stratigraphic test well to a Class VI injection well, the well construction shall meet all requirements of this subchapter for a Class VI injection well. Any stratigraphic test well drilled for exploratory purposes only shall be governed by the provisions of the [Commission's] rules in Chapter 3 applicable to the drilling, safety, casing, production, abandoning, and plugging of wells." TCC notes that this differs from current regulations as Class V wells would not generally be subject to primacy requirements under the Class VI program. TCC requests clarifying language regarding these requirements. Practically, this

revision seems to require that the ultimate purpose of the well be predetermined and constructed for that purpose before knowing whether and how the well can even be used, nullifying the need for an exploratory well in the first instance. Specifically, TCC requests that the regulation is revised so that it is evident that these requirements are not applicable to wells that are not subsequently converted to Class VI injection wells. To be clear, TCC fully understands and supports there may be additional well criteria upon conversion but disagrees with any requirement to apply such heightened requirements speculatively and perhaps needlessly.

4. 5.203 - PERMIT APPLICATION REQUIREMENTS

TCC would like to express support for the numerous revisions to the permit application provisions to incorporate additional consistency with the federal regulations for Class VI permit applications. TCC appreciates the coordination between EPA and the Commission to create a robust regulatory scheme.

The Commission proposes to amend §5.203(f) to clarify that the plan for logging, sampling, and testing applies to logging, sampling and testing before injection. This results in two separate authorizations related to Class VI wells: (1) authorization to drill the well and perform logging, sampling and testing, and (2) authorization to inject. Under the regulations, an applicant is required to submit a plan for logging, sampling, and testing of each injection well following the Commission's grant of authority to drill a well but prior to authorization to inject CO_2.

5. 5.204 - NOTICE OF PERMIT ACTIONS AND PUBLIC COMMENT PERIOD

In Section 5.204(b)(5), the Commission proposes that, "[u]pon making a final permit decision, the director shall issue a response to comments . . . The Commission shall post the response to comments on the Commission's internet website." These amendments are consistent with 40 C.F.R. § 124.17, with the revision that the response to comments should be posted on the Commission's internet website. This provides increased specificity of how the response to comments will be made public. TCC is supportive of these revisions and the Commission's commitment to transparency in the permitting process.

6. 5.205 - FEES, FINANCIAL RESPONSIBILITY, AND FINANCIAL ASSURANCE

The Commission proposes nearly a dozen new requirements with respect to financial assurance requirements. These proposals, by and large, are in line with EPA financial assurance requirements, and TCC is supportive of these changes.

TCC would like to highlight a section that may benefit from further Commission guidance in the future. TCC notes that the Commission's regulations do not specify the financial assurance instruments that qualify under the regulations as satisfactorily demonstrating financial assurance. EPA regulations list which financial instruments must be used: trust funds; surety bonds; letter of

credit; insurance; self insurance (*i.e.*, Financial Test and Corporate Guarantee); escrow account; and any other instrument(s) satisfactory to the Director. *See* 40 C.F.R. § 146.85. While Section 5.205(c)(2)(D) states that "[b]onds and letters of credit filed in satisfaction of the financial assurance requirements for a geologic storage facility must comply with the following standards as to issuer and form", this does not clarify if bonds and letters of credit are the only sufficient instruments to demonstrate financial assurance. TCC respectfully requests clarification on the appropriate instruments an operator can use to demonstrate financial assurance.

7. 5.206 - PERMIT STANDARDS

TCC supports the Commission's proposal requiring that "within 30 days after the completion or conversion of an injection well subject to this subchapter, the operator must file with the division a complete record of the well on Commission Form W-2, Oil Well Potential Test, Completion or Recompletion Report and Log showing the current completion" and opposed to "the appropriate form." Section 5.206(c)(2). TCC appreciates the additional specificity and clarity provided in the regulation.

TCC requests additional clarity on Section 5.206(d)(1), wherein the Commission identifies the information that the operator must submit, and the director must consider before granting approval for the operation of a Class VI injection well. This includes a list of information detailed in proposed subsections (i) through (x). Proposed subsection (i) lists the final AOR based on modeling, using data obtained during logging and testing of the well and the formation as required by subsection (d)(1)(B)(ii), (iii), (iv), (v), (vi), (vii), (viii) and (x). While this language nearly matches the EPA requirements, it includes two additional requirements. The EPA requirements do not require the operator to submit and for the director to consider (1) data obtained from final injection well construction procedures and (2) a demonstration of mechanical integrity prior to being granted approval for the operation of a Class VI injection well. *See* 40 C.F.R. § 146.82(c). TCC believes the submission of this additional information creates an undue burden and would recommend that this section be revised so that operators would submit the information required by subsections (d)(1)(B)(ii), (iii), (iv), (vi), (vii), and (x), but delete subparts (v) and (viii).

Additionally, TCC would like to highlight a potential drafting error in Section 5.206(d)(1)(B)(ii). The Commission proposes that prior to approval for the operation of a Class VI injection well, the operator shall submit and the director shall consider "any relevant updates, based on data obtained during logging and testing of the well and the formation as required by §5.203(f) of this title, to the information on the geologic structure and hydrogeologic properties of the proposed storage site and overlying formations, submitted to satisfy the requirements of clauses (iii), (iv), (v), (vii), and (x) of this subparagraph". Section 5.206(d)(1)(B)(ii). This appears to likely be a drafting mistake, both in the reference to Section 5.203(f) and the references to the sections (iii), (iv), (v), (vi), (vii), and (x). Federal regulations require consideration of any relevant updates, based on data obtained during logging and testing of the well and the formation as required by paragraphs (c)(3), (4), (6), (7), and (10), or correspondingly for the Commission's regulations Section 5.206(d)(1)(B)(iii), (iv), (vi), (vii), and (x). *See* 40 C.F.R. § 146.82(c)(2). To comply with federal regulations, it appears the Commission may have switched the references in this provision, and it appears the Commission may be referring to incorrect subsections in its references. TCC encourages the Commission to further review this section and provide clarity on the requirements.

In Section 5.206(k)(5), the Commission is proposing to require that for authorization of storage facility closure, following the director's authorization of storage facility closure and the operator's plugging of all wells, the operator must submit and submit a plugging record (Form W-3) as required by Section 3.14. TCC supports this revision and the demonstration of consistency throughout the Commission's regulations.

8. 5.207 REPORTING AND RECORD KEEPING

The Commission proposes in Section 5.207(a)(2)(A) that certain reports for specific issues be reported within 24 hours of discovery, i.e.,

> (i) the discovery of any significant pressure changes or other monitoring data that indicate the presence of leaks in the well or the lack of confinement of the injected gases to the geologic storage reservoir; (ii) any evidence that the injected CO2 stream or associated pressure front may cause an endangerment to a USDW; (iii) any noncompliance with a permit condition, or malfunction of the injection system, which may cause fluid migration into or between USDWs; (iv) any triggering of a shut-off system (i.e., down-hole or at the surface); and (v) any failure to maintain mechanical integrity.

This provision also requires that the information must be reported in writing within five working days of discovery and that the written submission shall contain "a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance." Section 5.207(a)(2)(A). Federal regulations do not include a similar requirement. *See* 40 C.F.R. § 146.91. TCC believes the written reporting requirement is unduly burdensome and that reporting the issues listed above within 24 hours of discovery should be sufficient for the purposes of notice under the regulation. TCC recommends that this condition to report such findings within five working days be removed.

The Commission is proposing that annual reports must include "other information as required by the permit." Section 5.207(a)(2)(D)(vi). TCC believes this requirement is unnecessarily vague and may make compliance with the regulation difficult. TCC recommends that the Commission clearly identify and list any requirement that must be included within an annual report.

TCC has concerns with the Commission's proposal that the operator of a Class VI well "must retain all *testing* and monitoring data collected pursuant to the plans required under §5.203(j), including wellhead pressure records, metering records, and integrity test results, and modeling inputs and data used to support AOR calculations for at least 10 years after the data is collected." Section 5.207(e)(3) (emphasis added). This requirement to retain testing data is inconsistent with EPA's regulations, which state "[m]onitoring data collected pursuant to § 146.90(b) through (i) shall be retained for 10 years after it is collected" and imposes an undue burden on well operators. 40 C.F.R. § 146.91(f)(3). TCC recommends that the Commission modify the requirement so that only monitoring data collected pursuant to plans required under §5.203(j) are necessary to be retained.

Further, TCC has concerns with the Commission's proposal that an operator must retain "data and information used to develop the demonstration of the alternative post-injection storage facility care timeframe, and the closure report collected pursuant to the requirements of §5.206(k)(6) and (m) of this title for 10 years following storage facility closure." Section 5.207(e)(4). EPA regulations states that only "if appropriate" an operator must only retain "data and information used to develop the demonstration of the alternative post-injection site care timeframe, and the site closure report collected pursuant to requirements at §§ 146.93(f) and (h) shall be retained for 10 years following site closure." 40 C.F.R. § 146.91(f)(4). As "data and information used to develop the demonstration of the alternative post-injection storage facility care timeframe and the closure report collected pursuant to the requirements of § 5.206(k)(6) and (m)" may not always be collected for each facility, TCC recommends that the Commission include that this information must only be retained if it is appropriate for the facility.

9. CONCLUSION

TCC would like to express its gratitude to the Commission and EPA for their ongoing coordination and efforts to streamline the transition of Class VI well permitting authority to the Commission.

TCC supports the comments of the Texas Oil and Gas Association (TXOGA).

TCC is grateful for the opportunity to provide comments in support and furtherance of carbon capture, utilization, and storage to improve environmental quality and enhance the responsible development Texas' natural resources.

Sincerely,

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