TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

for a Petition for Rulemaking

AGENDA REQUESTED: December 15, 2016

DATE OF REQUEST: November 22, 2016

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Derek Baxter, (512) 239-2613

CAPTION: Docket No. 2016-1878-PET. Consideration of a petition for rulemaking under Section 20.15 of 30 TAC Chapter 20, Rulemaking.

The petition was filed with the Texas Commission on Environmental Quality (commission) on October 28, 2016, by Lloyd Gosselink on behalf of the Owner/Operator Members of the Uranium Committee of the Texas Mining and Reclamation Association (TMRA-UC). TMRA-UC requested that the commission revise rules in 30 TAC Section 305.62 (Amendments); 30 TAC Section 331.84 (Monitoring Requirements); 30 TAC Section 331.105 (Monitoring Standards); 30 TAC Section 331.107 (Restoration); 30 TAC Section 336.109 (Fees after Request for Termination of License); and 30 TAC Section 336.208 (Radiation Safety Officer). The requested revisions to the commission's rules address requirements for both injection well permitting and radioactive materials licensing for uranium mining operations, including: license amendment categories; the timing of monitor well sampling; the criteria for establishing a detected excursion; the selection of groundwater constituents monitored during the restoration period and stability demonstration; the timing of the submission of Production Area Authorization amendment applications for restoration table value revisions; provisions for the proration or waiver of annual licensing fees; and the training requirements for Radiation Safety Officers. (Alisha Stallard, Don Redmond) (Project No. 2017-005-PET-NR)

Brent Wade
Deputy Director

Charles Maguire
Division Director

Derek Baxter
Agenda Coordinator

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners **Date:** November 22, 2016

Thru: Bridget C. Bohac, Chief Clerk
Richard A. Hyde, P.E., Executive Director

From: Brent Wade, Deputy Director
Office of Waste

Subject: Consideration of a Petition for Rulemaking

Docket No.: 2016-1878-PET

Project No.: 2017-005-PET-NR

Who Submitted the Petition:
On October 28, 2016, the Texas Commission on Environmental Quality (commission) received a petition from Lloyd Gosselink on behalf of the Owner/Operator Members of the Uranium Committee of the Texas Mining and Reclamation Association (TMRA-UC or petitioner).

What the Petitioner Requests:
TMRA-UC requests that the commission revise rules in 30 TAC §305.62 (Amendments); 30 TAC §331.84 (Monitoring Requirements); 30 TAC §331.105 (Monitoring Standards); 30 TAC §331.107 (Restoration); 30 TAC §336.109 (Fees after Request for Termination of License); and 30 TAC §336.208 (Radiation Safety Officer). The requested revisions to the commission's rules address requirements for both injection well permitting and radioactive materials licensing for uranium mining operations, including: license amendment categories; the timing of monitor well sampling; the criteria for establishing a detected excursion; the selection of groundwater constituents monitored during the restoration period and stability demonstration; the timing of the submission of Production Area Authorization amendment applications for restoration table value revisions; provisions for the proration or waiver of annual licensing fees; and the training requirements for Radiation Safety Officers. TMRA-UC's claims that the subject rule provisions in current form are confusing, burdensome, costly, and inconsistent.

Recommended Action and Justification:
The executive director recommends the commission initiate rulemaking. The executive director agrees that existing rules could be improved for clarity. However, the executive director further recommends that rulemaking include thorough stakeholder involvement on all the issues raised by the petitioner.

In addition, the executive director is expecting revisions to applicable federal requirements for in situ uranium mining operations. On January 26, 2015, the United States Environmental Protection Agency (EPA) proposed extensive changes to its rules in 40 Code of Federal Regulations Part 192 Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings (80 FedReg 4156) that establish technical requirements for the protection of groundwater at in situ uranium operations. If adopted by EPA, the rules would need to be implemented by TCEQ to fulfill the requirements of an Agreement State program. EPA's changes to the regulatory program could supersede,

supplement or even render moot the requested rule revisions in TMRA-UC's petition for rulemaking.

Also, the executive director respectfully recommends initiating stakeholder meetings after the closure of the 85th Texas Legislative Session. This will allow the stakeholder process to consider any statutory changes that may result from the session. Additionally, this will allow the executive director to closely monitor federal activities regarding EPA's Part 192 rulemaking.

Applicable Law:

- Texas Government Code, §2001.021, which establishes the procedures by which an interested person may petition a state agency for the adoption of a rule;
- 30 TAC §20.15, which provides such procedures specific to the commission;
- Texas Health and Safety Code (THSC), §401.051, which authorizes the commission to adopt rules relating to control of sources of radiation
- THSC, §401.2625, which provides the commission sole and exclusive authority to grant licenses for source material recovery and processing, and for storage, processing or disposal of by-product material.
- Texas Water Code (TWC), §5.103, which provides the commission authority to adopt rules necessary to carry out its powers and duties under the laws of the state.
- TWC, §27.019, which provides the commission authority to adopt rules required for the performance of commission responsibilities under the Injection Well Act.

Agency Contacts:
Alisha Stallard, Rule Project Manager, Radioactive Materials Division, (512) 239-6453
Don Redmond, Staff Attorney, (512) 239-0612
Derek Baxter, Texas Register Coordinator, (512) 239-2613

Attachment:
Petition

cc: Chief Clerk, 2 copies
Executive Director's Office
Marshall Coover
Erin Chancellor
Stephen Tatum
Jim Rizk
Office of General Counsel
Alisha Stallard
Derek Baxter

Lloyd Gosselink
ATTORNEYS AT LAW

816 Congress Avenue, Suite 1900
Austin, Texas 78701
Telephone: (512) 322-5800
Facsimile: (512) 472-0532
www.lglawfirm.com

44195
OLS1
Texas Register

Mr. Embrey's Direct Line: (512) 322-5829
Email: tembrey@lglawfirm.com

October 28, 2016

Mr. Richard A. Hyde, P.E.
Executive Director
Texas Commission on Environmental Quality
12100 Park 35 Circle, Building F, Suite 4214
P.O. Box 13087
Austin, Texas 78711-3087

VIA HAND DELIVERY

Re: Petition for Rulemaking for Revisions to Chapters 305, 331, and 336 of TCEQ Rules

Dear Mr. Hyde:

Enclosed please find a Petition for Rulemaking filed on behalf of the Owner/Operator Members of the Uranium Committee of the Texas Mining and Reclamation Association ("TMRA-UC") requesting administrative rules that would revise the rules of the Texas Commission on Environmental Quality ("TCEQ") regarding monitoring and sampling requirements for uranium mining operations, the definition of excursions, restoration sampling, restoration table amendments, fees, and radiation safety officer requirements. We respectfully request that this Petition be set for consideration and Commission action and look forward to working with all concerned on this matter.

If you have any questions regarding this petition, please feel free to call me at your convenience.

Sincerely,

Ty H. Embrey

THE/heg

Enclosure

cc via email: Ms. Patricia Duron
Texas Commission on Environmental Quality, General Law Division

Petition for Rulemaking

Name and Address of Petitioner:

Owner/Operator Members of Uranium Committee of Texas Mining and Reclamation Association
c/o Ty Embrey
Lloyd Gosselink Rochelle & Townsend, P.C.
816 Congress Avenue
Suite 1900
Austin, Texas 78701

Purpose of Proposed Rule Revisions:

The Texas Commission on Environmental Quality ("TCEQ") rules that regulate the mining of uranium in Texas were significantly updated and overhauled in an extensive two phase rulemaking process that lasted from 2007 to 2009 and that was based on the enactment of Senate Bill 1604 by the Texas Legislature in 2007. The owner/operator members of the Uranium Committee of the Texas Mining and Reclamation Association (TMRA-UC) have identified several regulatory challenges in the TCEQ rules after operating under the current TCEQ regulatory framework that the owner/operator members of TMRA-UC believe need to be addressed.

The owner/operator members of TMRA-UC request the following proposed revisions to the TCEQ rules:

Chapter 305 of TCEQ Rules (30 TAC Chapter 305 Consolidated Permits)

1. Section 305.62(i)(1)(J) Types of amendments for radioactive material licenses authorized in Chapter 336 of this title (relating to Radioactive Substance Rules)

Currently, Section 305(i)(1)(J) reads as follows:

> "(1) Major amendments. A major amendment is one which:
>
> (J) authorizes a reduction in financial assurance amounts."

This language is unduly burdensome on the uranium mining industry. When a site has undergone major restoration/reclamation and the TCEQ has acknowledged the significant reduction in liability, a request to adjust the surety amount to reflect current conditions post restoration/reclamation essentially includes a $10,000 fee per this rule.

Recommended Change – Add language or a new subsection to denote the exact situation above (i.e. a reduction in financial assurance amounts related to the completion of restoration/remediation activities) as a situation that would **not** require compliance with the procedures/fees associated with a "major amendment."

Section 305(i)(1)(J) should be revised as follows:

> "(1) Major amendments. A major amendment is one which:
>
> (J) authorizes a reduction in financial assurance amounts, **unless such a reduction occurs as a result of completed restoration or remediation activities.**"

Chapter 331 of TCEQ Rules (30 TAC Chapter 331 Underground Injection Control)

2. Section 331.84 – Monitoring Requirements

Currently, Section 331.84(c) reads:

> "Fluid level when required by permit and the parameters chosen to measure water quality in monitor wells completed in the injection zone shall be monitored twice a month. For a given calendar month, the second sample shall be collected 15 days after the first sample is collected."

It is extremely difficult, logistically, for operators to coordinate collecting the two samples exactly within the required 15 day cycle, especially the fact that some permittees have hundreds of monitor wells requiring sampling twice each month. Factors that can unnecessarily burden permittees to consistently meet the strict 15 day sampling interval established in the regulations include inclement weather, equipment breakdowns, availability of employees (e.g. jury duty, medical appointments, vacations), weekends, and holidays. From the standpoint of risk to the environment, there is negligible environment risk/harm posed if the samples are not taken exactly 15 days apart, so long as the twice monthly schedule also established within the regulation is maintained.

Recommended Change –

Section 331.84(c) should be revised as follows:

> (c) Fluid level when required by permit and the parameters chosen to measure water quality in monitor wells completed in the injection zone shall be monitored twice a month. For a given calendar month, **the first sample shall be collected prior to the 15th day of the month and** the second sample shall be collected ~~15 days after the first sample is collected~~ **between 10 and 20 days from when the first sample was collected.**

Alternatively, if the TCEQ staff agrees that the 15 day requirement is unnecessarily burdensome, TCEQ could develop and adopt guidance on a reasonable interpretation of 331.84(c) in that as long as the sampling occurs twice a month, compliance is maintained.

3. Section 331.105(3) – Excursions

Several sections of Chapter 331 (Underground Injection Control) of the TCEQ rules address excursions from uranium mining operations and the detection of those excursions. TMRA-UC requests for the TCEQ rules to be revised to create consistency with the regulations of the Nuclear Regulatory Commission (NRC). TMRA-UC is asking for the TCEQ rules to be revised to define excursions as the occurrence of two control parameters that exceed the upper control limits for the control parameters.

One of the reasons the TMRA-UC is asking for such changes in addition to creating consistency with NRC regulations is that the proposed rule changes would result in the reduction of false excursions.

The pertinent excursion regulations in the NRC regulations are found in NUREG 1569 Section 5.7.8.3(5) and the language is as follows:

"The applicant defines operational approaches for the monitoring program. The monitoring program must indicate which wells will be monitored for excursion indicators, the monitoring frequency, and the criteria for determining when an excursion has occurred. An acceptable excursion monitoring program should indicate that all monitor wells will be sampled for excursion indicators at least every 2 weeks during in situ leach operations.

An excursion is deemed to have occurred if two or more excursion indicators in any monitor well exceed their upper control limits."

Recommended Changes:

Section 331.105(3) should be revised as follows:

"(3) Verifying analysis. If the results of a routine sample analysis or instrument measurement show that the value of **at least two** control parameters in designated monitor wells are equal to or above the upper limit established for that permit/mine area, the operator shall complete a verifying analysis of samples taken from each apparently affected well within two days."

4. Sections 331.107(d)(1) and (d)(2) and (g)(3) – Restoration Sampling

TMRA-UC thinks the restoration sampling requirements of Section 331.107 need to be revised to focus the TCEQ rules on only the key constituents that are true indicators of restoration progress. Operators can sample key constituents in the operators' own laboratories within days. Under current TCEQ rules, the requirements that all samples be analyzed for all constituents' results in all baseline samples having to be sent to third party laboratories. This process could take up to a month to receive results back from the third party laboratory. If there is a problem or issue with a sample, then it is too late to resample because of the time period between samples. This sampling is not necessary while restoration is ongoing.

Moreover, the only parameters that should be required to be sampled during stability monitoring phase are any parameters that were amended. This effort to focus the sampling that occurs during the stability monitoring phase would create more efficiency and cost savings for the TCEQ and operators without impacting the protection of the groundwater resources in the vicinity of the mining operations. This proposed rule change reflects the TCEQ's current interpretation and the implementation of the TCEQ rules regarding stability sampling periods.

The Nuclear Regulatory Commission has regulations, NUREG-1569 Section 6.1.3(3), that provide the applicant the ability to select the constituents to be monitored and such a list of monitored constituents is not required to include all restoration constituents. NUREG-1569 Section 6.1.3(3) provides as follows:

"Restoration plans should also include a list of monitored constituents, a monitoring interval, and the sampling density (wells/acre). An acceptable constituent list should be based on chemistry of the production and restoration solutions used and on the host rock geochemistry. In the interest of minimizing expense, the applicant may propose a limited set of indicator constituents to monitor restoration progress and a sampling density that does not include all production and injection wells.

The applicant should specify the criteria that will be used to determine restoration success."

Recommended Changes:

Section 331.107(d)(1) and (d)(2) should be revised as follows:

"(d) Reports. Beginning six months after the date of initiation of active restoration of a permit or production area, as defined in the mine plan, the operator shall provide to the executive director semi-annual restoration progress reports until the stability monitoring period is initiated for the production area. This report shall contain the following information:

(1) analytical data generated **to monitor restoration progress** during the previous six months;

(2) graphs of analysis for each restoration parameter for each baseline well **or for each amended restoration parameter for each baseline well, if an amendment occurs;**"

Section 331.107(g)(3) should be revised as follows:

"(3) If the restoration table is amended, restoration sampling shall commence and proceed as described in subsection (f) of this section, except **that only the parameters that were amended in accordance with this section will be sampled and** the stability period shall be for a period of two years unless the owner or operator can demonstrate through modeling or other means that a period of less than two years is appropriate for a demonstration of stability."

5. Section 331.107 (g) – Amendment of Restoration Table

Section 331.107(g) pertains to the steps that a permittee is to follow when amendment of an existing restoration table is desired. 30 TAC 331.107(g) describes the timeline and corresponding steps to follow in order to submit an application for an amendment to the restoration table. The application must be submitted within 120 days of receipt of authorization from the executive director to cease restoration operations, and sampling to support the amendment application can be initiated 60 days following TCEQ authorization to cease restoration operations.

Based on the current language, the 120 day submission timeline laid out in the regulations cannot be met as demonstrated below:

Time (days)	Task
0	TCEQ approves cessation of restoration operations
60	collect 1st of 3 sets of samples
90	collect 2nd of 3 sets of samples
120	collect 3rd of 3 sets of samples

This basic timeline demonstrates that the 120 day submission requirement mandated in existing TCEQ regulations cannot be complied with given that the permittee cannot even begin to collect the 3rd round of samples until day 120. With analytical results not likely to be received for 30 days following collection (due to radium-226 analysis), along with additional time necessary to review the data and incorporate it into the technical document, permittees cannot comply with the 120 day submission deadline as required under § 331.107(g).

Stability Demonstration

Another inconsistency present within the current regulatory language is that 331.107(g)(2)(B) states TCEQ must find that "the values for the parameters describing water quality have stabilized for a period of one year." Use of the term "stabilized" results in confusion as to timing for submitting an application.

If the term "stabilized" has the meaning as presented within 331.107(f), TCEQ (and the permittee) would have to wait an entire year after receiving the application in order to meet this approval criterion because the data used to demonstrate stability would be obtained just prior to submission of the amendment application.

TMRA believes that the term "stabilized" within 331.107(g)(2)(B) is not associated with the stability sampling required under 331.107(f) and that the requirements under 331.107(f) are not initiated until after TCEQ approves the restoration effort or the

restoration amendment application. It would be beneficial to the regulated industry for TCEQ to clarify this inconsistency.

Duration of Stability Monitoring

Another discrepancy in the current regulatory language is that if stability sampling, as defined under 331.107(f), can be initiated prior to obtaining approval of the amendment application, it appears then that the actual stability monitoring period will exceed the two year time period. This appears to conflict with the requirements of 331.107(g)(3), which state that the two year stability period commences upon approval of the amendment application.

These inconsistencies in the existing regulatory language described above make it difficult to understand the appropriate path to follow for a permittee to successfully obtain amendments to restoration goals. TMRA-UC believes some minor modifications to the existing language would resolve this dilemma without removing any of the checks and controls necessary for review and approval of an amendment application.

Recommended Changes:

Section 331.107(g) should be revised as follows:

(g) Amendment of restoration table or range table values. After an appropriate effort has been made to achieve restoration in accordance with the requirements of subsection (a) of this section, the permittee may cease restoration operations, reduce bleed and request that the restoration table be amended. **The permittee shall notify the executive director of his or her intent to cease restoration operations and reduce the bleed. The permittee shall submit a minor amendment application to amend the restoration table within 120 days of receipt of authorization from the executive director to cease restoration operations and reduce the bleed.** ~~An amended restoration table value for each parameter listed in the restoration table cannot exceed the maximum value for the respective parameter in the permit range table required under §331.82(e)(7) of this title. With the request for amendment of the restoration table values, the permittee shall submit the results of three consecutive sample sets taken at a minimum of 30-day intervals from all production area baseline wells used in determining the restoration table to verify current water quality.~~ **The amendment request shall include data collected from baseline wells within the production area encompassing at least one (1) year's time and consisting of at least three (3) sample sets taken at a minimum of 30 day intervals that demonstrates water quality is not fluctuating over time. This demonstration may include data collected under §331.107(d).** ~~Stabilization sampling may commence 60 days after cessation of restoration operations. The permittee shall notify the executive director of his or her intent to cease restoration operations and reduce the bleed 30 days prior to implementing these steps. The permittee shall submit an application for an amendment to the restoration table within 120 days of receipt of authorization from the executive~~

~~director to cease restoration operations and reduce the bleed.~~ If any **proposed** restoration table value for any parameter listed in the restoration table will exceed the maximum value for the respective parameter in the permit range table, the permittee must submit an application for a major amendment of the permit range table.

TMRA-UC also believes the correct term in the first line of 331.107(g)(3) should be "stability sampling" rather than "restoration sampling".

Section 331.107(g)(3) should be revised as follows:

(3) If the restoration table is amended, ~~restoration~~ **stability** sampling shall commence and proceed as described in subsection (f) of this section, except the stability period shall be for a period of two years unless the owner or operator can demonstrate through modeling or other means that a period of less than two years is appropriate for a demonstration of stability.

Chapter 336 of TCEQ Rules (30 TAC Chapter 336 Radioactive Substance Rules)

6. Section 336.109 - Fees after Request for Termination of License

Section 336.109 allows for the annual fee to be prorated or waived. This rule should be addressed to make certain that a facility that has been restored and is waiting for NRC approval, which can take a year or more and cause another fee to be charged, will not be subject to the fee. Imposing additional fee(s) on an operator that has completed all required steps and is simply awaiting NRC approval is improper and beyond the control of the operator.

Recommended Changes:

Section 331.109 should be revised as follows:

(a) If a licensee requests termination of a license, the amount of the annual fee due on the next fee payment due date may be prorated based on the number of months completed through the month of the termination request out of the 12-month period covered by the annual fee. As an example, if a licensee requests termination of a license on August 20 and the next annual fee is due on or before November 30, the annual fee for that year may be prorated as 9/12 of the applicable fee amount. After the next annual fee due date, the annual fee may be waived pending the final determination on the termination request. The annual fee may be prorated or waived as provided in this subsection if the executive director has reasonable basis to find, from information provided by the licensee, that the licensee has satisfied the applicable requirements for decommissioning and closure **or if restoration has been completed and the licensee is awaiting approval by the U.S. Nuclear Regulatory Commission**. If the executive director has insufficient information or finds that the licensee has not satisfied the requirements for decommissioning and closure, the annual fee shall not be prorated or waived and shall be the full amount.

(b) If an annual fee has been prorated or waived under subsection (a) of this section and the executive director later determines, before making the final determination on the request for termination, that the licensee has not met the decommissioning and closure requirements, then any amount of annual fees not paid due to proration or waiving shall be payable immediately upon notice to the licensee.

7. Section 336.208(a)(3) - Radiation Safety Officer

Currently, the language of Section 336.208(a)(3) reads as follows:

> "(a) Qualifications of the designated radiation safety officer (RSO) are adequate for the purpose requested and include as a minimum:
>
> > (3) have at least four weeks of specialized training in health physics or radiation safety applicable to uranium or mineral extraction/recovery, radioactive waste processing, or radioactive waste or by-product material disposal operations from a course provider that has been evaluated and approved by the agency."

The following is the language from NRC Reg Guide 8.31, which is what TCEQ says they were trying to be consistent with:

> "3. Specialized Training: At least 4 weeks of specialized classroom training in health physics specifically applicable to uranium recovery. In addition, the RSO should attend refresher training on UR facility health physics every 2 years."

Recommended Changes: It would be most beneficial to the industry, and also follow closely NRC guidance, if TCEQ accepted retroactively any radiation safety / health physics training that a RSO candidate has taken during the course of his role as an RSO at any facility in the US.

> Section 336.208(a)(3) should be revised as follows:
>
> "(3) have at least ~~four weeks~~ **forty hours** of specialized training in health physics or radiation safety applicable to uranium or mineral extraction/recovery, radioactive waste processing, or radioactive waste or by-product material disposal operations. ~~from a course provider that has been evaluated and approved by the agency.~~ **The Commission may approve credit towards the specialized training requirement for any radiation safety / health physics training that a RSO candidate has received during the course of the RSO candidate's time serving as an RSO at any facility in North America. In addition, the RSO should attend refresher training on uranium or mineral extraction/recovery, radioactive waste processing, or radioactive waste or by-product material disposal operations health physics every 2 years."**

Texas Commission on Environmental Quality

DECISION OF THE COMMISSION
REGARDING THE PETITION FOR RULEMAKING
FILED BY URANIUM COMMITTEE OF THE TEXAS MINING AND RECLAMATION ASSOCIATION

Docket No. 2016-1878-PET
Rule Project No. 2017-005-PET-NR

On December 15, 2016, the Texas Commission on Environmental Quality (Commission) considered the petition for rulemaking filed by Lloyd Gosselink on behalf of the Owner/Operator Members of the Uranium Committee of the Texas Mining and Reclamation Association (TMRA-UC). TMRA-UC filed the request on October 28, 2016, and requested that the Commission revise rules in 30 TAC § 305.62 (Amendments); 30 TAC § 331.84 (Monitoring Requirements); 30 TAC §331.105 (Monitoring Standards); 30 TAC § 331.107 (Restoration); 30 TAC § 336.109 (Fees after Request for Termination of License); and 30 TAC § 336.208 (Radiation Safety Officer).

IT IS THEREFORE ORDERED BY THE COMMISSION, pursuant to Administrative Procedure Act, Texas Government Code, § 2001.021; Texas Water Code, § 5.102, § 5.103, and 27.019, and Texas Health and Safety Code, § 401.051 to initiate rulemaking concerning the issues raised in the petition.

This Decision constitutes the decision of the Commission required by the Texas Government Code, § 2001.021(c).

TEXAS COMMISSION ON
ENVIRONMENTAL QUALIT

_____
Bryan W. Shaw, Ph.D., P.E., Chairman

_____
Date Signed