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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 10, 2018

Mr. Paul Michalak, Chief
Agreement State Programs Branch
Division of Materials Safety, Security, State, and Tribal Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington D.C. 20555-0001

Re: TCEQ Response to Draft IMPEP Report Dated March 13, 2018

Dear Mr. Michalak,

Thank you for the letter and draft report submitted to the Texas Department of State Health Services (DSHS) and the Texas Commission on Environmental Quality (TCEQ) (Commission) on March 13, 2018. As you state in your letter, the U.S. Nuclear Regulatory Commission (NRC) uses the Integrated Materials Performance Evaluation Program (IMPEP) in the evaluation of Agreement State programs. The draft report attached to the letter documents the results of the Agreement State review held in Texas on January 29 - February 9, 2018.

The Commission appreciates the IMPEP Review Team's determination to close all previous recommendations from the 2014 IMPEP review and 2016 IMPEP special review. The Commission is pleased that the NRC's IMPEP Review Team has recommended that the Texas Agreement State's Program be found to be at the highest attainable level to adequately protect public health and safety and is compatible with the NRC's program. We are also pleased that the IMPEP Review Team has recommended that the next IMPEP review take place in approximately four years.

The Commission is also aware that the IMPEP Review Team has three program recommendations for the TCEQ. Our agency takes these recommendations seriously and appreciates the opportunity to respond to these suggestions as well as comment on other parts of the IMPEP Review Team's draft report. The sequence of our responses follows the comments and recommendations in the draft report.

Comment 1

(Section 4.1) Compatibility Requirements

Our first comment regards the IMPEP Review Team's statements about legislation that directly affected the Commission. House Bill 2662 and Senate Bill 1330 affected the Commission whereas Senate Bill 1667 affected the Texas Low-Level Radioactive Waste Disposal Compact Commission. The draft report also states that the Senate Bills addressed issues with fees and the status of the Commission as a State Agency. As stated in Section 1.0 of the draft report, the Texas Commission on Environmental Quality is referred to as "the Commission." Therefore, the use of Commission in Section 4.1 in reference to Senate Bills 1667 and 1330 incorrectly identifies the Texas Commission on Environmental Quality as the affected agency. The sentence

should be corrected to read, “The Senate Bills addressed issues with fees and the status of the Texas Low-Level Radioactive Waste Disposal Compact Commission as a State Agency.”

Comment 2

(Section 4.1) Compatibility Requirements

In Section 4.1 under Discussion, the draft report states “The team noted that the State’s rules and regulations are subject to “sunset” laws.” The TCEQ as an agency is subject to a “sunset” review; however, the rules and regulations are statutorily subject to a quadrennial review. We ask that this be clarified by stating that our rules and regulations are subject to a “sunset” equivalent law.

Comment 3

(Section 4.3) Low-Level Radioactive Waste Disposal Program – Technical Staffing and Training

The IMPEP Review Team recommended that Texas review and update the recently developed formal training and qualification program to identify the training needs of the low-level radioactive waste (LLRW) program and ensure it meets the essential objectives of IMC 1248 and apply it to staff currently going through the qualification process. The Commission is updating its training and qualification program for the low-level radioactive waste program while working with the NRC State Agreements Officer to ensure that the program meets the essential objectives of IMC 1248. Staff who are currently going through the qualification process will be required to follow the training and qualification program as soon as it is determined to be compatible with IMC 1248.

Comment 4

(Section 4.3) Status of Low-Level Radioactive Waste Disposal Inspection Program

The IMPEP Review Team commented that the low-level radioactive waste program regulates three additional licenses in addition to the WCS disposal site. The team reviewed all of the inspection reports for the review period for each licensee (eight total). Five of the inspections were conducted at an appropriate frequency (annually); however, three of the inspections were conducted at a frequency more than 100 percent greater than the established frequency. Written communication of the inspection findings occurred in four of the eight cases; however, no communications were issued within either 30 calendar days, or within 60 calendar days.

Background Information on Inspections:

It is the Commission’s understanding that the IMPEP Team findings are related to Ascend Performance Materials Texas Inc. (Ascend), Iso-Tex Corp. (Iso-Tex) and Nuclear Sources and Services, Inc. (NSSI).

Ascend is a non-commercial waste burial site. Based on the IMPEP Team findings, inspections of this site were not conducted in 2014 and 2015. Inspection details are as follows:

- Prior to 2014, an inspection was conducted in July 2013.
- Several attempts were made to conduct inspections during October and December 2015. However, because of unavailability of appropriate licensee staff, an inspection could not be conducted.
- During the review period, inspections were conducted in April and June 2016, and in June 2017.
- During the periodic meeting on February 11, 2016, the status of the inspection program at this site was discussed.

- The Commission believes that Ascend is not subject to 10 CFR, part 61 or NRC IMC 2401.

Iso-Tex is an inactive radioactive waste burial site only. Based on the IMPEP Team findings, inspections of this site were not conducted in 2014 and 2015. Inspection details are as follows:

- In early 2000 the Iso-Tex site was referred to enforcement for not fulfilling the license requirements and not providing financial assurance for the decommissioning of the burial site. The site is currently in litigation within the TCEQ's Office of Legal Services. The TCEQ is working with the owner of the burial site through the owner's attorney towards decommissioning of the site. Except for site maintenance by the licensee, no other activities are conducted by the licensee at the site.
- Prior to 2014, an inspection was conducted in May 2013.
- During the review period, inspections were conducted in April and June 2016 and June 2017.
- The Commission believes that Iso-Tex is not subject to 10 CFR, part 61 or NRC IMC 2800 or 2401.

NSSI is a radioactive waste processing site only. Based on IMPEP Team findings, inspections of this site were not conducted in 2014. Inspection details are as follows:

- Prior to 2014, an inspection was conducted in May 2013.
- During the review period, inspections were conducted in October 2015, June 2016, and June 2017.
- The Commission believes that NSSI is not subject 10 CFR, part 61 or NRC IMC 2401.

The Commission is currently revising its existing low-level radioactive waste program inspection procedures to reflect inspection frequencies and include steps for documenting any special cases or decisions for decreasing the inspection frequency consistent with IMC 2800. Also, the commission is committed to conveying the inspection findings to the licensee within 30 days after the completion of an inspection, as initiated with the 10/23-24/2017 inspection at the Texas Low-Level Radioactive Waste Disposal facility. The Commission has revised its existing low-level radioactive waste program inspection procedures to state that the inspection findings will be communicated to the licensee within 30 days after the completion of the inspection.

The Commission respectfully requests that the above inspection information be considered and the draft report be revised, if appropriate.

Comment 5

(Section 4.3) Technical Quality Inspection - Inspectors Accompaniments

The draft report states that during the Inspector's Accompaniments, "Performance weaknesses were discussed with inspector 2 during the onsite portion of the review."

According to "SA -102: Reviewing the Common Performance Indicator, Technical Quality of Inspections", prior to the inspector accompaniments, the assigned review(s) should: Discuss with the program's inspector the methods that will be used in evaluating the inspector's performance and how feedback will be provided to the inspector and his or her management.

Also, in SA 102, Appendix C: Frequently Asked Questions

Q9: What if there are concerns regarding an inspector's performance during inspector accompaniment?

A9: "Under no circumstances should a team member conducting an inspector accompaniment allow an item that is of immediate health and safety or security concern to continue to be unidentified during an inspection. If this occurs, it is the responsibility of the reviewer...If the concerns are not of immediate health and safety or security significance, or are of unknown health and safety or security significance, the reviewer should allow the accompaniment to continue, but document the concerns in the accompaniment report and discuss the issues with the inspector at the conclusion of the inspection and subsequently (e.g. end of the day, end of the week, or the following week) with the inspector's supervisor as well as the Team Leader."

"In all cases, after the inspector has concluded the on-site inspection, the review team member should take a few moments with the inspector and discuss any observed or identified performance issues with the inspector. This will allow for meaningful dialogue between the review team member and the inspector to clarify any issues prior to the review team member briefing the inspector supervisor and/or program management."

Except for the limited communication with inspector 2 during the inspections, the IMPEP Review Team member did not discuss or clarify any observed or identified performance issues with inspector 2 at the end of each inspection accompaniment until the on-site review on January 29-February 2, 2018, approximately 3 months after the inspector accompaniments. Inspector 2 held a meeting with the reviewer during the on-site review to clarify the items of concern noted by the reviewer during the accompaniments. The inspector was questioned on four aspects of the inspections: inspector autonomy; working knowledge of the licenses; familiarity with facility operations; and questioning/interviewing skills. The inspector felt that the concerns were addressed during the meeting with the reviewer.

The inspection reports reflected the type of inspections performed at each site and no issues had been found by the IMPEP Review Team with the inspection reports. In fact, the IMPEP Review Team determined that the inspection reports were thorough, complete, consistent, and had sufficient documentation to ensure that licensee performance with respect to health, safety, and security was acceptable. The findings were well-founded, supported by regulations, and appropriately documented.

Comment 6

(Section 4.3) Low-Level Radioactive Waste Disposal Program - Technical Quality of Low-Level Waste Licensing Actions

The IMPEP Review Team recommends that Texas provide training to its staff on the newly revised standard operation procedures to ensure consistency in low-level waste licensing actions. The Commission has been scheduling the necessary training sessions for Radioactive Materials Section staff to discuss all final SOPs for the section and all staff will be required to acknowledge that they have reviewed, understand and will follow all SOPs relevant to their job duties, which will be specified for each person.

Comment 7

(Section 4.4) Uranium Recovery Program - Discussion

In Section 4.4 under Discussion, the draft report states "At the time of the IMPEP review, the Texas Uranium Recovery Program consisted of three conventional mill licenses in decommissioning status and currently undergoing groundwater assessments, three in-situ uranium recovery licenses in "stand-by" status, and one licensee newly approved, but not in

operation.” This sentence should be corrected as follows: “At the time of the IMPEP review, the Texas Uranium Recovery Program consisted of three conventional mill licenses in decommissioning status and currently undergoing groundwater assessments, three in-situ uranium recovery licenses in “stand-by” status, one new application still under review, and three licenses issued but not in operation.”

Comment 8

(Section 4.4) Uranium Recovery Program - Technical Staffing and Training

The IMPEP Review Team recommends that Texas review and update the recently developed formal training and qualification program to identify the training needs of Uranium Recovery (UR) program and ensure it meets the essential objectives of IMC 1248 and apply it to staff currently going through the qualification process. The Commission is updating its training and qualification program for the uranium recovery program while working with the NRC State Agreements Officer to ensure that the program meets the essential objectives of IMC 1248. Staff who are currently going through the qualification process will be required to follow the training and qualification program as soon as it is determined to be compatible with IMC 1248.

Comment 9

(Section 4.4) Technical Quality of Inspections - Inspectors Accompaniments

The IMPEP Review Team accompaniments of inspector 2 were conducted at the South Texas Mining Venture (Hobson facility) and Energy Fuels Resources (Alta Mesa facility). The draft report stated that during the accompaniments inspector 2 demonstrated knowledge gaps, focused on areas not covered by the license and looked to inspector 1 for guidance during the inspection. Furthermore, the report stated concerns with inspector 2 include the inability to demonstrate performance of a complete inspection without assistance, not having a complete working knowledge of the license that was being inspected, and not understanding the operation of the facility.

According to “SA -102: Reviewing the Common Performance Indicator, Technical Quality of Inspections”, prior to the inspector accompaniments, the assigned review(s) should: Discuss with the program’s inspector the methods that will be used in evaluating the inspector’s performance and how feedback will be provided to the inspector and his or her management.

Also, in SA 102, Appendix C: Frequently Asked Questions

Q9: What if there are concerns regarding an inspector’s performance during inspector accompaniment?

A9: “Under no circumstances should a team member conducting an inspector accompaniment allow an item that is of immediate health and safety or security concern to continue to be unidentified during an inspection. If this occurs, it is the responsibility of the reviewer...If the concerns are not of immediate health and safety or security significance, or are of unknown health and safety or security significance, the reviewer should allow the accompaniment to continue, but document the concerns in the accompaniment report and discuss the issues with the inspector at the conclusion of the inspection and subsequently (e.g. end of the day, end of the week, or the following week) with the inspector’s supervisor as well as the Team Leader.”

“In all cases, after the inspector has concluded the on-site inspection, the review team member should take a few moments with the inspector and discuss any observed or identified performance issues with the inspector. This will allow for meaningful dialogue between the review team member and the inspector to clarify any issues prior to the review team member briefing the inspector supervisor and/or program management.”

Except for the limited communication with inspector 2 during the inspections, the review team member did not discuss or clarify any observed or identified performance issues with inspector 2 at the end of each inspection accompaniment until the on-site review on January 29-February 2, 2018, approximately 3 months after the inspector accompaniments. Inspector 2 held a meeting with the reviewer during the on-site review to clarify the items of concern noted by the reviewer during the accompaniments. The inspector was questioned on four aspects of the inspections: inspector autonomy; working knowledge of the licenses; familiarity with facility operations; and questioning/interviewing skills. The inspector felt that the concerns were addressed during the meeting with the reviewer.

The inspection reports reflected the type of inspections performed at each site and no issues had been found by the IMPEP Review Team with the inspection reports. In fact, the IMPEP Review Team determined that the inspection reports were thorough, complete, consistent, and had sufficient documentation to ensure that licensee performance with respect to health, safety, and security was acceptable. The findings were well-founded, supported by regulations, and appropriately documented.

Comment 10

(Section 4.4) Status of the Uranium Recovery Inspection Program

The draft report states “The Commission performed 31 inspections during the review period. The Commission performed five inspections overdue at intervals that exceed the IMC 2641, “In-Situ Leach Facilities Inspection Program,” and IMC 2801, “Uranium Mill 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program” frequencies by more than 100 percent. Additionally, at time of the review one inspection was overdue.” The Review Team also recommends that Texas revise its uranium recovery program inspection procedures to specify that inspection findings will be communicated to licensees within 30 days of the completion of an inspection.

Background Information on Inspections

It is the Commission’s understanding that the IMPEP Review Team findings are related to Rio Grande Resources, ExxonMobil Corporation, Conoco Phillips Company and Waste Control Specialists (WCS).

Rio Grande Resources is a conventional uranium mill 11e.(2) byproduct material disposal facility in post monitoring status. Based on the IMPEP Team findings, an inspection of this site was not conducted in 2015. Inspection details are as follows:

- During the review period, inspections were conducted in September 2014, March 2016 and February 2017.
- During the review period, site closure/decommissioning had already been completed and the site was in post monitoring status (i.e., Maintenance of the impoundments and undergoing groundwater assessments).

ExxonMobil Corporation is a conventional uranium mill 11e.(2) byproduct material disposal facility in post monitoring status. Based on the IMPEP Team findings, an inspection of this site was not conducted in 2015. Inspection details are as follows:

- During the review period, inspections were conducted in December 2014, June 2016 and March 2017.
- During the review period, site closure/decommissioning had already been completed and the site was in post monitoring status (i.e., Maintenance of the impoundments and

undergoing groundwater assessments).

Conoco Phillips Company is a conventional uranium mill 11e.(2) byproduct material disposal facility in post monitoring status. Based on the IMPEP Team findings, an inspection of this site was not conducted in 2015. Inspection details are as follows:

- During the review period, inspections were conducted in December 2014, June 2016 and May 2017.
- During the review period, site closure/decommissioning had already been completed and the site was in post monitoring status (i.e., Maintenance of the impoundments and undergoing groundwater assessments).

WCS is an inactive uranium 11e.(2) Byproduct Material disposal site. Currently, the licensee is not authorized to accept byproduct material for disposal. The IMPEP Team findings stated that the 2017 inspection was overdue. Inspection details are as follows:

- The Commission initiated an inspection in August 2017 and attempted two other times during 2017 to complete the inspection, but was not successful due to other activities (i.e., waste shipment inspections), weather condition, and unavailability of certain licensee staff and resident inspectors.
- The overdue inspection was conducted in March 2018.

The Commission is currently revising its existing uranium recovery program inspection procedures to reflect inspection frequencies and include steps for documenting any special cases or decisions for decreasing the inspection frequency consistent with IMC 2801 and IMC 2641. Also, the Commission has revised its existing uranium recovery inspection program procedures to state that the inspection findings will be communicated to the licensee within 30 days after the completion of the inspection.

The Commission respectfully requests that the above inspection information be considered and the draft report be revised, if appropriate.

Comment 11

(Section 4.4) Uranium Recovery Program - Technical Quality of Licensing Actions

The Review Team recommends that Texas provide training to its staff on the newly revised standard operation procedures to ensure consistency in uranium recovery licensing actions. The Commission has been scheduling the necessary training sessions for Radioactive Materials Section staff to discuss all final SOPs for the section and all staff will be required to acknowledge that they have reviewed, understand and will follow all SOPs relevant to their job duties, which will be specified for each person.

Comment 12

(Section 4.4) Uranium Recovery Program - Evaluation

With respect to the findings under Status of Uranium Recovery Inspection Program and Technical Quality of Inspections, the Commission has the following comments:
The first objective of the inspection program is to verify that inspections of licensed activities focus on health and safety and security issues, as stated in the various NRC Inspection Manual Chapters.

According to NRC Management Directive 5.6, it is the policy of the NRC to evaluate the Agreement State Radiation Control Programs to ensure that public health and safety is being

adequately protected. To receive a “Satisfactory, But Needs Improvement” rating, the review generally needs to indicate that the program occasionally does not address potentially important health, safety, and environmental concerns or it indicates periodic problems with respect to completeness, adherence to procedures, management review, thoroughness, technical quality and consistency.

The concerns raised by the IMPEP Review Team related to the inspection findings were as follows; not communicating the inspection findings to the licensee within 30 days, five overdue inspections, and the enhancement/development of the existing training program that meets the IMC 1248 objectives, are not of a health and safety nature. None of the findings mentioned during the IMPEP review, including the inspector accompaniments, identified a programmatic weakness that would have an impact on public health and safety and security of licensed materials. The Commission is unclear why the draft report (Item C-Evaluation, page 36) stated that inspections of uranium recovery licensed activities did not focus on health, safety, and security. In fact, the IMPEP Review Team determined that the inspection reports were thorough, complete, consistent, and had sufficient documentation to ensure that licensee performance with respect to health, safety, and security was acceptable. The inspection findings were well-founded, supported by regulations, and appropriately documented.

While the inspection program may have not fully met some of the criteria (not of a health and safety nature) under the Status of the Uranium Recovery Inspection Program for a “Satisfactory” rating, all of the criteria for a “Satisfactory” rating under Technical Quality of Inspection have been met.

Considering the IMPEP Review Team findings related to the uranium recovery program that are not health, safety, and environmental concerns, the Commission respectfully requests the IMPEP Review Team to consider changing the finding for the Uranium Recovery Program from “Satisfactory, But Needs Improvement” to “Satisfactory.”

Recommendations from the Draft Report

As stated at the beginning of this letter and in the draft report, the Review Team made three program recommendations. Each is addressed below.

1. The Review Team recommends that Texas review and update the recently developed formal training and qualification program to identify the training needs of the low-level radioactive waste and uranium recovery programs and ensure it meets the essential objectives of IMC 1248 and apply it to staff currently going through the qualification process.

The Commission is updating its training and qualification program for low-level radioactive waste and uranium recovery programs while working with the NRC State Agreements Officer to ensure that the program meets the essential objectives of IMC 1248. Staff who are currently going through the qualification process will be required to follow the training and qualification program as soon as it is determined to be compatible with IMC 1248.

2. The Review Team recommends that Texas revise its low-level radioactive waste and uranium recovery program inspection procedures to specify that inspection findings will be communicated to licensees within 30 days of the completion of an inspection. Additionally, Texas should ensure that future inspection results are sent out within 30 days of the completion of an inspection.

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The Commission is committed to conveying the inspection findings to the licensee within 30 days after the completion of an inspection. The Commission has revised its existing low-level radioactive waste and uranium recovery program inspection procedures to state that the inspection findings will be communicated to the licensee within 30 days after the completion of the inspection.

3. The Review Team recommends that Texas provide training to its staff on the newly revised licensing standard operating procedures to ensure consistency in low-level radioactive waste and uranium recovery licensing actions.

The Commission has been scheduling the necessary training sessions for Radioactive Materials Section staff to discuss all final SOPs for the section and all staff will be required to acknowledge that they have reviewed, understand and will follow all SOPs relevant to their job duties, which will be specified for each person.

The TCEQ is very appreciative of the efforts made by the IMPEP Review Team to understand, evaluate, and recognize the Commission's Low-Level Radioactive Waste Disposal Program and its Uranium Recovery Program. The safe regulation of these programs is of paramount importance to the TCEQ and the citizens of Texas. Therefore, we are pleased that the IMPEP Review Team recommended the Texas Agreement State Program be found adequate to protect public health and safety and compatible with the NRC's program. We look forward to continued communication and cooperation with your agency.

Sincerely,



Charles Maguire, Director
Radioactive Materials Division
Texas Commission on Environmental Quality



Kelly Cook, Director
Critical Infrastructure Division
Texas Commission on Environmental Quality

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