TEXAS Health and Human Services | Texas Department of State Health Services

Department of State Health Services (DSHS) Third Quarter 2017 Program Report to the Texas Radiation Advisory Board (TRAB)

September 29, 2017

Radiation Safety Licensing Branch

Radioactive Material Licensing Group

- License review staff continue to work on revisions of regulatory guides.
- Staff participated in the Comanche Peak Nuclear Power Plant dry run and evaluated exercises.
- License review staff contacted non-RSRM licensees after the flooding from Hurricane Harvey in the coastal counties. (The RSRM licensees were contacted by the inspections group.) Most licensees were not affected by the flooding. Most flooding damage affected the electronics associated with RAM use and the loss of records.

Radiation Machine Group

- The U.S. Food and Drug Administration (FDA) staff conducted an annual onsite performance evaluation of the DSHS mammography States as Certifiers (SAC) program on August 23,2017 for the period of June 30, 2016 through July 1,2017. The evaluation is based on the review of certification files, Mammography Program Reporting Inspection System (MPRIS) data to evaluate certification issuances and data import and export activities against SAC program policies and procedures and the review of MQSA inspection violations records. Final results of the audit are pending.

Radiation Inspections Group

Radioactive Materials Inspections Group

The Radioactive Materials Group (Inspections) has confirmed that all radioactive material is secure for the select group of 154 licensees with sites (254) along the Texas Gulf coast. This was accomplished by contacting each licensee by phone or email over the period of August 27, 2017 through September 6, 2017 for confirmation once the licensee was able to physically access their licensed sites after hurricane Harvey passed through the area.

Mammography and Remote Inspections Group

- The US Food & Drug Administration (FDA) recently certified three additional DSHS staff under the Mammography Quality Standards Act (MQSA).
- Based on requirements from the FDA, Texas has added the EQUIP Initiative - Enhancing Quality Using the Inspection Program – to its inspection protocols of mammography facilities. Since the quality of mammograms is one of the most important determinants of the accuracy of mammography, the production of high quality clinical images by certified mammography facilities is one of the primary goals of the MQSA. Inspection questions related to the clinical image quality regulations have previously not been part of the annual inspection. As part of its EQUIP initiative, FDA's Division of Mammography Quality Standards developed inspection questions related to the image quality regulations and added them to the inspection program, thereby emphasizing the significance of continuous clinical image quality. EQUIP also highlights the responsibilities of the Lead Interpreting Physician (LIP) and other Interpreting Physicians (IP) in the clinical image quality process. These enhancements to the inspection process will EQUIP facilities to continue to provide quality mammography.

X-Ray Groups

- The X-Ray Groups have been performing inspections of hospital facilities impacted by Hurricane Harvey and needing to re-open or re-establish full operations. These inspections were limited in scope and performed in teams with inspectors from the DSHS Health Facilities Licensing Group, the Architectural Review Group and the Certified Laboratory Improvement Amendments Group. The inspections were

conducted to ensure the facilities can safely operate and provide services post hurricane.

- The Conference of Radiation Control Program Directors, Inc. (CRCPD) will sponsor X-Ray Group North manager Lisa Bruedigan to attend the International Atomic Energy Agency (IAEA) conference in Vienna, Austria in December 2017. On behalf of CRCPD she will present information on regulating computed tomography (CT) units in the United States(US) and on the Nationwide Evaluation of X-Ray Trends (NEXT) studies conducted by the US Food and Drug Administration.

Environmental Monitoring Group

Incident Investigations

- On September 5, 2017, the Agency was unable to contact a licensee that possessed three radiography devices. The Agency contacted the Operations Manager for the licensee and was informed the licensee had ceased operation in January 2017. The Agency searched the National Source Tracking System and found that a service provider had reported receiving the sources. The Agency contacted the service provider and verified it had received the sources.

- On August 4, 2017, the Agency was notified by the licensee's radiation safety officer (RSO) that on July 28, 2017, one of their technicians had lost a moisture/density gauge which they later recovered. The technician was using a Humboldt Scientific moisture density gauge containing a 10 millicurie cesium-137 source and a 40 millicurie americium-241 source. The technician locked the operating arm on the cesium source and locked the case, but failed to secure the case in the truck bed. The technician drove to a nearby convenience store to purchase some items. When the technician drove away from the store, the case with the gauge fell out of the truck on to the road way. The local fire department was contacted and took custody of the gauge. The fire department contacted the manufacturer and obtained the name of the gauge owner. The licensee was contacted and retrieved the gauge from the fire department. The sources remained inside the shielding and no individual of the general public received any significant exposure as a result of this event. The technician involved received disciplinary actions from the licensee.

- On September 15, 2017, the Agency was notified by the licensee's radiation safety officer (RSO) that an event involving two radiography crews had occurred. The RSO stated two crews had completed work at field sites near Midland, Texas, and contacted the licensee and stated they were terminating their employment with the licensee and going to work for a new company. The radiographers were instructed to take the trucks and sources to the licensee's location in Midland, Texas, and turn in their equipment. When the radiographers failed to show up at the Midland office in what the RSO thought was a reasonable period of time he contacted local law enforcement and reported the trucks and cameras were missing. Law enforcement pulled both trucks over about an hour out of Midland, Texas, and placed the radiographers in custody. The RSO stated law enforcement stayed with the trucks and exposure devices until members of the licensee's workforce could get to the location. The trucks and sources were returned to the Midland office. The RSO did not know the activities of the sources, but stated they were quantities of concern. The RSO stated he did not think the radiographers intended to steal the sources, but were going to return to Houston, Texas, using the licensee's vehicles.

- Two events involving recovery of lost or stolen radioactive devices were recovered under different circumstances.

  On October 16, 1998, the Agency was notified that a Humboldt model 5001 moisture/density gauge containing a 10 millicurie cesium-137 and a 40 millicurie americium-241 source was lost during transport from San Antonio to Laredo, Texas. A search of the transportation company’s warehouses and delivery location along the transportation route did not find the gauge. On May 17, 2017, the Agency received an email notification that a moisture/density gauge was for sale on eBay. A search of the eBay site found that the gauge serial number matched the serial number of the gauge reported missing in 1998. The Federal Bureau of Investigation (FBI) was contacted to assist in gathering information on the seller. Using the information gathered by the Agency and the FBI, the Agency was able to contact the seller and inform him that he could not possess or sell the gauge without a license issued by this Agency. On May 24, 2017, the seller surrendered the gauge to The Texas Department of Transportation (TXDOT). TXDOT was the original purchaser of the device and Agency staff arranged for TXDOT to collect the gauge and return it to the manufacturer. The seller routinely buys out inventory in warehouses that close and stores the items in his warehouse until he decides to

sell them. The gauge was just recently found while the seller was relocating items in his warehouse to a new location. The seller could not remember how his company came into possession of the gauge. No violations were cited.

On July 25, 1997, the Agency was notified that a moisture density gauge had been stolen from the back of a pickup truck. The gauge was not located and the file was never closed. On May 18, 2017, the Agency was contacted by the Federal Bureau of Investigation (FBI) reporting the gauge had been found in Houston, Texas at the same location the gauge had been reported stolen. The FBI stated the land lord was conducting an inspection of an apartment when the gauge was discovered. The licensee that owned the gauge is no longer in business so the gauge manufacturer was contacted and took possession of the gauge. The FBI requested additional information from the Agency regarding the initial investigation of the lost gauge. No violations were cited.

South Texas Project

- South Texas Project (STP) remained at 100 percent power during Hurricane Harvey, supporting power throughout the storm.

- A FEMA evaluated medical exercise at Matagorda Regional Medical Center in Bay City was scheduled to take place on September 13, 2017. Due to hurricane Harvey recovery activities, the exercise was cancelled. The medical center was evacuated prior to hurricane landfall, and is now re-opened and fully operational. A re-schedule date will be determined later this month. In order to meet Radiological Emergency Preparedness (REP) exercise requirements, the medical exercise has to occur before the end of the year. FEMA Region VI has agreed to an extension, if needed.

- In preparations for the May and June 2018 Ingestion Exercise, DSHS has been working with Federal Radiological Monitoring and Assessment Center (FRMAC), FEMA and STP to schedule various training and outreach activities:

- FRMAC AS-100 Assessment Scientist Training (3 Day) is scheduled for December 5-7, 2017. The course will provide Accident Assessment team members knowledge on how to use Turbo-FRMAC with other dose assessment programs and plume modeling.

- Matagorda County has requested to host a FEMA Recovery Workshop sometime in January or February 2018. A date has not been confirmed at this time. This workshop will focus on return, reentry and relocation aspects, and include an American Nuclear Insurers discussion on Price-Anderson -vs- Stafford reimbursement policies during a nuclear power plant release/event.

Comanche Peak (CP)

- DSHS was involved in a number of activities in preparation for an evaluated exercise scheduled for August 16, 2017. DSHS and Comanche Peak staff conducted Reception Center training in Stephenville TX, on June 20, 21 &22, 2017 for the local Fire and Police Departments.

- DSHS participated in a Comanche Peak drill on June 28th, 2017 at the Disaster District 4A Hurst (Hurst DDC 4A)/Fort Worth Joint Emergency Operations Center in preparation for the upcoming FEMA evaluated exercise.

- DSHS and Comanche Peak participated in a Dress Rehearsal drill on Wednesday, July 12th, 2017 and then the FEMA evaluated exercise on Wednesday, August 16th, 2017.

- During the FEMA evaluated exercise August 16th, 2017 no findings or planning issues were identified, and a Medical Service Drill (MS-1) at Texas Health Cleburne is scheduled for Wednesday, September 20th, 2017. The FEMA draft report containing results for both exercises will be available at the end of October 2017.

Waste Isolation Pilot Plant

- The Waste Isolation Pilot Plant continued to receive waste shipments from Waste Control Specialists (WCS), and the Savannah River Site (SRS) during this reporting period. Two remaining shipments from WCS are currently pending at this time and are expected to be scheduled for shipment later this year. No additional shipments from the SRS are currently scheduled, however, shipments from the Oak Ridge Site are currently scheduled to resume with approximately one shipment per week.

- A total of 19 radiological instrument sets were updated in 17 jurisdictions in the southern part of Dallas County.

- In August, Radiological First Responder classes were provided for the Wilmer Fire Department and also for the Edgecliff Fire Department. A total of 26 students were provided training.

Pantex

- The Department of Energy has approved the "Agreement in Principle" (AIP) contract for the federal contract years, 2017-2021. Our FY2018 budget has been funded in full.

- DSHS attended the Quarterly AIP Meeting held in Claude, Texas on 8/29. From this meeting we decided on a date (4/11/2018) for the Pantex Full Participation Exercise(FPE) which is planned to utilize the reception center. Additionally, we met the new Pantex Emergency management group manager. As the date for the FPE approaches, training will be offered to the local members.

- 22 instruments were calibrated for use by AIP members.

- DSHS continues to settle into the new staging area at Randall County Fire Station No.1 after a move from the previous staging area at Line Avenue.

- The Radiation Branch continues to participate, attend and support emergency exercises and drills as well as supporting environmental monitoring, sampling and radiological instrument maintenance and calibration.

Radiation Enforcement

From April 2017 – August 2017, the Enforcement Unit issued 169 Orders against individuals and companies that were found to have violated the Texas Regulations for Control of Radiation (25 Texas Administrative Code §§289.201 – 302). These Orders have resulted in the assessment of $278,865.00 in administrative penalties. One radiographer certification, 2 laser registrations, 29 X-ray registrations were revoked during this period. All but the radiographer certifications were revoked due to unpaid fees or

failure to update the registration so that their certificate is inaccurate (i.e., the facility is no longer in business at the location on the registration or operating under the same business name).

Radiation Policy, Standards, and Quality Assurance Group

- No rules will be presented at the TRAB meeting on September 29, 2017.

- The draft radioactive materials rules (known as our "RAM 2016/2017" packet) include:

  §289.251 concerning exemptions, general licenses, and general license acknowledgements
  §289.252 concerning licensing of radioactive material
  §289.253 concerning radiation safety requirements for well logging service operations and tracer studies
  §289.256 concerning medical and veterinary use of radioactive material
  §289.257 concerning packaging and transportation of radioactive material

  These rules are being reviewed by legal counsel and will be presented to TRAB at the 4th quarter 2017 meeting.

- A draft x-ray rule packet includes:

  §289.232 concerning radiation control regulations for dental radiation machines

  This rule will soon be reviewed by legal counsel and will be presented to TRAB at the 4th quarter 2017 meeting.