



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

June 23, 2017

Radiation Safety Licensing Branch

Radioactive Material Licensing Group

- License review staff have attended NRC training classes.
- License review staff continue to work on revisions of regulatory guides
- License review staff had a training opportunity to observe the preoperational testing of safety systems and a portion of the source loading as part of the preoperational activities for the construction of new irradiator in Fort Worth.
- Vanessa Danese participated in the Mississippi IMPEP with the NRC IMPEP team.
- Jason Kelly will be leaving in July for a job in the private sector in Chicago, IL.

Radiation Inspections Group

Radioactive Materials (RAM) Inspections Group

- The Radioactive Materials Group (Inspections) has mailed the annual request for alternate emergency contact information to select licensees along the Texas gulf coast to assist in contacting licensees during and after an emergency such as a hurricane.

Mammography and Remote Inspections Group

- We have 3 staff members in the final mentoring stage of MQSA Inspector training. All three have successfully completed the online and classroom portions of the training. The final stage requires each trainee to conduct inspections under the mentorship of a senior MQSA Inspector. Mentoring should be completed by August 31st.

X-Ray Groups

- The X-ray Group is currently performing about 90% of all inspections with no notice. This has led to an increase in staff productivity as less time is spent scheduling inspections. Since the implementation of unannounced routine inspections, over 5000 inspections have been successfully conducted.
- Staff meeting is currently being planned for September. The staff meeting will focus on emergency response preparedness, inspection interview and observation techniques, and new technologies and trends in the industry.
- Branch Manager, Helen Watkins, participated in the annual CRCPD conference in Scottsdale, Arizona.
- Managers Jerry Cogburn and Lisa Bruedigan hosted a booth at the Texas Dental Conference in San Antonio in May. A multitude of participants in the conference visited the booth and were provided with pamphlets and information regarding regulations and dental facility inspections.

Environmental Monitoring Group

Incident Investigations

- On February 8, 2016, the Agency was notified by the licensee that three packages received were contaminated with technetium-99m. One of the packages was transporting thallium-210, and the other two were not radioactive materials shipments. The contamination did not seem to have come from the contents of the packages themselves, the receiving facility, or the origin facility. An inspector dispatched by the Agency confirmed that no other obvious sources of contamination were identifiable at the licensee's facility. The shipping company truck and driver were recalled to the location and surveyed for contamination by the licensee's personnel under supervision of the Agency inspector and no contamination was found. The origin facility does not handle technetium-99m as confirmed by Illinois radiation control and by the Nuclear Regulatory Commission's investigations. The shipping company's internal investigation revealed only one technetium-99m shipment around the same time, which did not cross paths with the packages involved in this incident, and which was received without contamination. No potential source for the contamination has been identified.
- On April 28, 2017 the Agency was notified that a trainee who was not operating the radiography camera was overexposed. After receiving limited information from the licensee an on-site investigation was conducted on June 7, 2017. The trainee was experienced in rope rappelling, which was required for this imaging shot. Suspended 30 feet above ground the trainee was exposed to radiation while sitting in his sling harness. Meanwhile, the trainer was developing the film. The film was good and when the trainee started to disconnect the guide tube from the 51.8 curie Ir-192 source, he noticed that the connector would not release. He held the connector for about 8 seconds, which produced low exposure to the hand although while the film developed- about 20 minutes- the trainee suspended in air received 5.392 rem as indicated by his personal dosimeter. Root cause was no post exposure survey. Excessive noise prevented the trainee from hearing his alarming rate meter. It is believed he will not experience any adverse health effects from the incident. The trainee has been removed from radiography work and is assigned other duties. Violations were cited.

- 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 material 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 existence 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 will be conducting a Combined Functional Drill on June 21, 2017. This drill will include offsite response organization participation. DSHS will be providing support at the STP Emergency Operations Facility and Joint Information Center, and also at the Matagorda County Emergency Operations Center.
- As part of preparations for the 2018 Ingestion Pathway and Recovery exercise, STP will be conducting required 8-hour Pressurized Water Reactor (PWR) Training for Radiological Emergency Response Team (RERT) members. The course will cover PWR basics of operations, emergency classification levels (ECLs) and emergency action levels (EALs), and an overview of the site's Emergency Response Operations (ERO) in the event of an emergency.
- Other preparations include a walkthrough and discussion of operations for a new reception center located within one of two FEMA grant-funded hurricane shelters that were built in the County. TAMU Veterinarian Emergency Team (VET) will be there to perform a demonstration of pet treatment, monitoring and decon.

DSHS Radiation Control Program and Food and Drug Program will be conducting an Agricultural Recovery Seminar on July 20, 2017 in Austin for a number of agencies with Agricultural recovery responsibility. The seminar will explore agricultural recovery efforts that will have to take place during the long-term recovery of a large-scale radiological event.

- On September 13, 2017 there will be a medical exercise at Matagorda Regional Medical Center in Bay City where FEMA REP Program will be evaluating the hospital's capability to activate a Radiation Emergency Area and treat a patient contaminated with radiological material.

Comanche Peak (CP)

- DSHS is involved in a number of activities in preparation for an evaluated exercise scheduled for August 16, 2017. DSHS and Comanche Peak staff will conduct Reception Center training in Stephenville TX, on June 20, 21 & 22, 2017 for the local Fire and Police Departments.
- DSHS will participate in a Comanche Peak drill on June 28th, 2017 at the Disaster District 4A Hurst (Hurst DDC 4A)/Fort Worth JEOC in preparation for the upcoming FEMA evaluated exercise.

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

Waste Isolation Pilot Plant

- On April 8, 2017, WIPP received the first shipment to the facility in more than three years. A total of five waste generator sites are expected to send 128 shipments of waste to the site through January 2018 with the majority of shipments arriving from Idaho National Laboratory. Shipments through Texas from the Oak Ridge and Savannah River sites are expected to ship at a rate of approximately one to two shipments per week. In addition, two shipments from Waste Control Specialists were shipped to the site in May and two additional shipments are currently scheduled for late June.
- Last April, in preparation for the resumption of shipping, WIPP staff members sponsored road shows along the active transportation route in Midland and in Pecos, Texas. The road shows gave attendees the opportunity to see the actual shipping package and become familiar with WIPP transportation protocols.

Pantex

- The Department of Energy has approved the "Agreement in Principle" (AIP) contract for the federal contract years, 2017-2021.
- Pantex, in conjunction with DSHS created their own offsite monitoring teams to bridge the gap between an event and DSHS field team arrival in Amarillo with monitoring assets. The two agencies are currently working on the methodology for transfer of field monitoring data from Pantex to DSHS.
- DSHS is currently relocating its current planned emergency response staging area in cooperation with the City of Amarillo's need to use the current location for other purposes. The new location offers easier access to offsite locations around Pantex Plant and better facilities for DSHS radiological emergency response operations.
- Members from the AIP entities traveled to Oak Ridge, TN to observe a Joint Tennessee/DOE Exercise on the Oak Ridge Reservation. From this

exercise the attendees brought back ideas and strategies to improve our emergency preparedness planning regarding Pantex.

- 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 February 2017 – May 2017, the Enforcement Unit issued 95 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 \$174,230.00 in administrative penalties; two radiographer certifications were revoked during this period.

Radiation Policy, Standards, and Quality Assurance Group

- No rules will be presented at the TRAB meeting on June 23, 2017.
- The draft radioactive materials rules (known as our "RAM 2016/2017" packet) includes:

§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 still have not been posted via GovDelivery for public comment. Our Division is holding off on all rules until September 1, 2017.