



**Department of State Health Services (DSHS) Second Quarter 2015 Program Report to the Texas Radiation Advisory Board (TRAB)**

**June 12, 2015**

**Radiation Safety Licensing Branch**

**Radioactive Material Licensing Group**

- The US ARMY barge Sturgis has arrived in Galveston. They are presently conducting training and the decommissioning will start in late June or early July. The Army Corp of Engineers has submitted their release plan for Agency review. The plan includes procedures for releasing parts of the barge that are not considered contaminated or activated.
- There have been no new water treatment licenses or amendments this quarter.
- There are presently 65 registered waste shippers and transporters. To date DSHS has billed \$781,648.70 to the waste shippers sending low-level radioactive waste to the WCS compact disposal site in Andrews County, Texas.

**Radiation Machine Source Group**

- The Radiation Machine Group is reviewing the application for a new proton therapy center. Texas Oncology, McKesson Specialty Health and Baylor Health are collaborating to build the Texas Center for Proton Therapy in the Dallas/Fort Worth Area.
- The US Food and Drug Administration (FDA), Division of Mammography Quality and Radiation Programs will conduct an annual onsite audit of the State of Texas (STX) Mammography Certification program to assess its performance as an FDA-approved States as Certifiers Agency (CA) under the Mammography Quality Standards Act (MQSA). Several representatives from the FDA will conduct the evaluation on August 4, 2015.

## **Radiation Enforcement**

- From February 2015 to May 2015, the Enforcement Unit issued 54 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 \$70,750.00 in administrative penalties. Of the 54 Orders, only one was a Revocation Order issued as a result of failing to pay registration fees.

## **Radiation Policy, Standards, and Quality Assurance Group**

- The proposed RAM2 (Part 37) rules will be presented at the TRAB meeting on June 12, 2015, for approval.

§289.201 concerning general provisions for radioactive material

§289.202 concerning standards for protection against radiation from radioactive materials

§289.251 concerning exemptions, general licenses, and general license acknowledgements

§289.252 concerning licensing of radioactive material

§289.257 concerning packaging and transportation of radioactive material

- On March 27, 2015, the third draft of the RAM2 (Part 37) rules was posted on the DSHS Radiation website for a 30-day comment period and a GovDelivery email notice of that posting was sent. We received no comments and are proceeding with the rules as proposed. The proposed rules will be presented to the DSHS Council on September 10, 2015, following approval of the rules by the TRAB.

- Status update of the following rules presented at the TRAB meeting on January 31, 2014.

§289.201 concerning general provisions for radioactive material

§289.202 concerning standards for protection against radiation from radioactive materials

§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

§289.255 concerning radiation safety requirements and licensing and registration procedures for industrial radiography

§289.256 concerning medical and veterinary use of radioactive material

§289.257 concerning packaging and transportation of radioactive material.

- The proposed packet RAM1 (Combo) rules packet was presented and approved by the DSHS Council on May 22, 2014. Following approval by the HHSC Executive Commissioner, the final rules were posted in the *Texas Register* and became effective on March 22, 2015.

## **Radiation Inspection Branch**

### **Environmental Monitoring Group**

#### **Incident Investigations**

On April 15, 2015, a licensee notified the Agency that on April 14, 2015, one of its technicians was removing a cesium-137 source, with a current activity of 694 millicuries, from an Ohmart SHLG-1 nuclear gauge. The licensee reported that when he removed the source sleeve from the gauge, his alarming rate meter alarmed. The technician surveyed his work area and found the area and portions of his body were contaminated. The technician was immediately decontaminated by the licensee's radiation safety officer (RSO). The licensee swabbed the technician's nasal passages and found contamination. The licensee sent the technician's dosimetry for immediate processing and is in the process of determining the internal dose estimate. Internal dose estimates from whole body scans indicated about a 125 mrem dose from inhalation of the radioactive material. Surveys by the licensee later determined that the cesium - 137 contamination was carried outside the work room. Employees working in the building were sent home until a proper assessment could be conducted. Access to the building was restricted to only those individuals responding to the event. The licensee has secured the services of contractors to assist in the recovery from this event. The licensee has surveyed all of its employees and their vehicles. Residences of employees determined to have contaminated themselves or their vehicles were also surveyed for contamination. The licensee is currently decontaminating all homes and vehicles found contaminated. The Agency is performing verification surveys for contamination following the licensee's remediation. There is some evidence that contamination found during radiation surveys may not have been from a single event. The Agency continues to investigate the event and perform surveys as new information is obtained. The investigation into this event is ongoing.

An unrelated event was reported on April 13, 2015. The Agency was notified by a landfill that a load of waste had caused its radiation monitor to alarm. The landfill provided a spectrum which showed the isotope as cesium-137. An on-site investigation confirmed the material to be dirt/mud inside a roll-off container contaminated with cesium-137. The Agency conducted an investigation to determine the origin of the material. The possible origin was identified by using the route sheets from the collection vehicle and driving the route using a very sensitive radiation detection system. Radiation was detected in one area in a ditch beside a street on the route and was confirmed as cesium-137. The location is in a drainage ditch beside the street and is approximately 8 x 15 feet. A barrier was placed around the area. There are no residences in the immediate vicinity. The City of Houston has hired a contractor to remediate the site. The Agency is coordinating with the City and reports from the contractor indicate a high reading of 200 mrem/hr at one spot in the ditch with lower readings in other parts of the soil. The Agency has not yet been able to identify a responsible licensee. An investigation into this event is ongoing.

## **Emergency Planning**

### **South Texas Project (STP)**

On February 18, 2015 FEMA evaluated Matagorda General Hospital for their required annual Medical Scenario (MS-1) exercise for STP. The state participated as a controller. Local emergency response staff and STP adequately demonstrated the set-up of a Radiation Emergency Area (REA) and treatment of a contaminated injured patient. The After Action Report (AAR/IP) was published on March 13, 2015 and all objectives were identified as 'Met' satisfactorily.

### **Comanche Peak Nuclear Power Plant (CPNPP)**

- On April 1st, 2010 approximately 50 DSHS staff members participated in a Dress Rehearsal (DR) at the CPNPP that included Texas Division of Emergency Management, NRC and Hood and Somervell Counties. The DR was in preparation for the upcoming FEMA Evaluated Hostile Action Based (HAB) exercise.
- DSHS, CPNPP, TDEM, and FEMA will continue to coordinate in the planning process in anticipation of the upcoming FEMA Evaluated Hostile Action Based event (HAB) to be held on June 10th, 2015. DSHS will provide approximately 50 staff members to participate in the exercise along with HHSC, TCEQ and DPS Commercial Vehicle Enforcement Troopers. The exercise is designed to show reasonable assurance that the utility, state, and offsite organizations can protect the health and safety of the public. The exercise will be evaluated by FEMA Region VI and an After Action Report / Improvement Plan (AAR/IP) will be developed. The state and local organizations will demonstrate knowledge of the emergency plans and procedures and their proper implementation.

### **Waste Isolation Pilot Project (WIPP)**

- DSHS WIPP staff provided briefings to local officials in five jurisdictions regarding the Waste Isolation Pilot Plant in February, March and April. In addition, radiological emergency response instrumentation was updated along the WIPP transportation route in Fort Worth, Coppel, Duncanville, Irving and in Crane, Texas.
- During the month of March and April, five 8-hour First Responder Radiological Emergency Preparedness classes were provided to 63 emergency responders in Taylor and in Howard counties.

- Department of Energy (DOE) staff members at the WIPP facility continue to move forward in the recovery phase resulting from the February 14, 2014 incident. Initial closure of Panel 7, Room 7 is ongoing and expected to be completed in June. On May 13, workers installed a steel bulkhead on the air intake side of Panel 7, Room 7 – thereby completing the first of two steps required for initial closure activities in that area. To complete isolation of that area, workers will next install a steel bulkhead to close the air exhaust side of Room 7. Summer of 2016 continues to be the target date for WIPP to start receiving shipments again.
- DSHS/WIPP personnel continue to schedule briefings for local officials and training to first responders during May, June and July.

### **Pantex**

- DSHS staff provided training during the month of April on Basic Radiation Training and operation of Canberra Personal Radiation Detectors was given to 15 local volunteer fire fighters from the Town of Washburn.
- On May 6<sup>th</sup>, 2015 DSHS, SECO, DPS, Carson County, Armstrong County, and City of Amarillo discussed the upcoming 5 year contract that begins October 1, 2016 to September 30, 2021. Specifically discussed was the scheduling of full-participation exercises with Pantex and the surrounding counties and state agencies. It was recommended that 2 full scale exercises and a recovery tabletop be conducted during the next 5 year budget cycle. Dates have not been identified.
- DSHS will be sending 4 people and 1 individual from the Media Relations Office to observe and participate in the Joint Information Center Drill in Amarillo being held on June 16<sup>th</sup>, 2015.

### **X-Ray Groups**

- Five new X-ray Inspectors started with the program this quarter. 4 have completed initial classroom training and all are accompanying senior inspectors for inspection training. One will complete classroom training in July.
- Three Inspectors have completed initial inspection training and are inspecting independently on basic modalities.
- A week of classroom training is scheduled in August for 8 inspectors to train on higher risk modalities. These inspectors will also accompany senior inspectors for inspection training at that time.

- X-ray Inspections staff meeting took place in June 1-5. A variety of topics were presented by Radiation Program staff and outside speakers. Topics included CT and Fluoroscopic equipment and safety, a case study of a Cath Lab complaint and radiation meter training. Staff also participated in a site trip to a local hospital for hands on fluoroscopic radiation safety awareness training with local licensed medical physicists.
- Lisa Bruedigan and Helen Watkins participated in the May national CRCPD conference in St. Louis.

### **Mammography and Remote Inspections Group**

- 720 remote inspections have been issued for FY2015. Staff are working on 398 open remote inspections.
- The open Remote Inspector position has been filled and the new inspector trainee will start 6/1/2015.
- All mammography inspections are being conducted timely, none are past due.
- The FDA MQSA Inspector Certification Course began January 19. Two staff members have completed the course training and will begin performing inspections independently in June.

### **Radioactive Materials (RAM) Inspections Group**

- The Inspection Unit Radioactive Materials Group is staffed with 9 fully trained inspectors, 2 that have completed a substantial portion of their training, and 1 that has progressed midway through our training program.
- We have received the approval of the NRC to provide the Inspection Procedures course for approximately 22 of our Radiation Program staff. The NRC has provided training material and will assist in a few of the presentations in addition to 10 of our Radiation Program staff presenting course topics. The training will be provided in Austin on July 27 – 31, 2015.