



**Department of State Health Services (DSHS) Third Quarter 2014 Program Report to the Texas Radiation Advisory Board (TRAB)**

**September 19, 2014**

- DSHS in coordination with the TCEQ, RRC and the South Texas Chapter of the Health Physics Society coordinated the TEXAS RADIATION REGULATORY CONFERENCE, in Austin, TX, September 11 and 12, 2014.
- The U.S. Nuclear Regulatory Commission Management Review Board has found that the Texas Agreement State performance over the past four years has been adequate to protect public health and safety and compatible with the federal program.

**Radiation Safety Licensing Branch:**

**Radioactive Material Licensing Group**

- There has been one new licensing request from public water system in the past quarter. The city of Eden has started the process of installing a radium removal system. Their system is being installed by WRT and they will likely come under WRT's license. Additionally the city of San Angelo has been constructing their radium removal facility for treating water from the Hickory aquifer. San Angelo has not yet applied for a radioactive material license.
- There are presently 60 registered waste shippers and transporters. As of August 31, 2014, DSHS has billed \$588,442.10 to the waste shippers sending low-level radioactive waste to the WCS compact disposal site in Andrews County, Texas. In-Compact Shippers have been billed \$330,043.40 and Out-Of-Compact Shippers have been billed \$258,398.70. Effective August 1, 2014 we have billed over \$500,000 in shipper fees. As of August 1, 2014, having reached the \$500,000 cap for In-Compact shippers, we no longer collect the \$10 per cubic feet from the In-Compact Waste shippers, Vermont and Texas.

### **Radiation Machine Source Group**

- The US Food and Drug Administration (FDA), Division of Mammography Quality and Radiation Programs will conduct an annual audit of the State of Texas (STX) Mammography Accreditation program to assess its performance as an FDA-approved accrediting body under the Mammography Quality Standards Act (MQSA). Several representatives from the FDA conducted an onsite visit on September 17, 2014.

### **Radiation Enforcement**

- During the previous Fiscal Year 2014 (September 2013 – August 2014), the Enforcement Unit issued 217 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 \$315,920.00 in administrative penalties and 64 Revocations (All but three (3) of these revocations were due to non-payment of registration and license fees; The remaining three registrations were revoked due to not responding to Default Orders issued by the Department).

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

- Mr Chuck Flynn has assumed the duties of the Manager of Policy, Standards, and Quality Assurance Group
- No rules will be presented at the TRAB meeting on September 19, 2014.
- Status update of the following rules presented at the TRAB meeting on November 1, 2013.

§289.101 concerning Memorandum of Understanding between the Department of State Health Services and the Texas Commission on Environmental Quality regarding Radiation Control Functions (revised per Senate Bill (SB) 347)

§289.204 concerning Radiation Fee rule to include changes to the Perpetual Care Account caps (revised per SB 347)

- Both of these rules became effective on September 7, 2014 following the Health and Human Services Commissioner's (HHSC) 3rd review and approval to publish final adoption rules in the *Texas Register*.

- 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.

- These rules (known as our "RAM1 Combo" packet) were presented at the Department of State Health Services Council meeting on May 22, 2014, to recommend HHSC approval of the rules for publication in the *Texas Register* for a 30-day public comment period. The proposed rules were published on September 5, 2014. A public meeting is scheduled for September 23, 2014.

- Drafts of the following rules (known as our "RAM2 (Part 37)" packet) were made available for public comment on September 3, 2014. A public meeting was held on September 11, 2014 in conjunction with the 2014 Texas Radiation Regulatory Conference.

§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

- It is anticipated that these rules will be presented to the TRAB as proposed rules at the First Quarter 2015 meeting.

### **Radiation Inspection Branch**

#### **X-Ray Groups**

- The X-ray Inspections staff and Policies, Standards and Quality Assurance staff attended Staff Meeting in June 2014. The Staff Meeting focused on the introduction and training of new inspection software and rule updates.
- The X-ray Inspectors began using a new software program for paperless inspections beginning August 18, 2014. The group successfully submitted 9 inspections the first day the process went live.
- Four visitors from the South Korean government received 3 days of lecture presentations and on-site demonstrations of the Radiation Program's implementation of 25 TAC

§289.227. Specifically, implementation of rules regarding radiation dose control and documentation.

- A new X-ray Inspector began September 1, 2014 and will inspect based in Midland.

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

- 1032 remote inspections have been issued for FY2014. Staff are working on 334 open inspections.
- All three recently trained Mammography Quality Standards Act (MQSA) Inspectors are now performing mammography inspections exclusively.

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

- The Radioactive Materials Group annual staff meeting in Austin is scheduled for October 13-16.
- The US Army Corps of Engineers held a stakeholder meeting on September 9, 2014 to discuss the decommissioning of the U.S. Army nuclear barge Sturgis. The barge will be towed to Galveston in later this year and decommissioning activities will begin early next year. DSHS will monitor the decommissioning to ensure that any material released for recycling is non-radioactive.
- Radiation Branch staff attended the US Army Corps of Engineers meeting in Galveston regarding the decommissioning of the Sturgis, which once had a nuclear powered electric generator on board. Local law enforcement, city officials, port officials, TCEQ, and other State agency staff also attended.

### **Environmental Monitoring Group**

#### **Incident Investigation**

- On March 13, 2014, the Agency was notified by the licensee's site radiation safety officer (SRSO) that a radiographer trainee may have received an overexposure while performing radiography at a field site on March 12, 2014. The SRSO stated that the trainee was trying to remove the guide tube from an exposure device, a QSA 880 containing a 69 curie iridium-192 source, when he discovered the source had not been retracted to its fully shielded position. The Agency conducted an on-site investigation on March 26, 2014. The investigation found that the radiographer who had attached the drive assembly to the exposure device failed to connect the source pig tail to the drive cable prior to attaching the drive assembly. On April 20, 2014, the Agency was notified by the licensee that based on the information gained during a reenactment of the event; it had assigned a dose of 3.960 rem to the radiographers hand and a total effective dose equivalent (TEDE) dose of 12.0 rem for the event. This brought his annual exposures to 15.680 rem to the

hand and the TEDE dose to 12.369 rem. The licensee suspended the trainer's qualifications and conducted company-wide stand down meetings to review the event with all personnel. The licensee removed the trainees involved in the event from duties involving radiography work for the remainder of 2014 and required its SRSOs to perform five unannounced audits of its radiographers. The licensee and the radiographer trainer were cited for multiple violations.

- On June 2, 2014, the Agency was contacted by the radiation safety officer (RSO) for an industrial radiography registration. During a recent inspection by the Agency, it was noted that on March 18, 2014, a change to the registration was submitted by someone pretending to be the new RSO. The Agency approved the new RSO name and physical address on the registration. An Agency investigation revealed that one of the company's employees had thought he had to apply to the Agency for an RSO license when he applied for his job with the company. During a discussion with the Agency investigator, the individual understood this had been a mistake and stated he would not do it again. The registrant's human resources department is also investigating the individual's actions. The complaint was substantiated. No violations were cited.
- On July 3, 2014, the licensee notified the Agency that a Troxler model 4640 moisture/density gauge containing an 8 millicurie cesium-137 source had fallen from one of its trucks while en route from its facility in Austin to its facility in Buda, Texas. The licensee checked the travel route multiple times, notified local law enforcement and fire departments, and posted a reward. The licensee's investigation revealed that the technician had failed to secure the gauge and had left the tailgate down when he left the Austin facility. The licensee checked with local businesses and found one had video surveillance footage that showed the gauge falling from the truck in Austin and an individual, who could not be identified, picking it up from the side of the road. The gauge has not been recovered. The licensee checked all of its gauges for locks and ensured each had locking job boxes or chains/locks for transport. The licensee reviewed the incident and its causes with all of its employees that actively use the gauges. One violation was cited.
- On July 29, 2014, the Agency was notified by the licensee that a Humboldt model 5001EZ moisture/density gauge containing an 11 millicurie cesium-137 source and a 44 millicurie americium-241 source was damaged at a field site. The licensee's technician set up the gauge and began a compaction test, with the cesium source extended into the soil, on an area of a pad that compaction had been completed. He walked approximately 70 feet from the gauge to his vehicle. While his back was turned he heard a crunching noise and turned to discover that a compactor had advanced past its authorized stopping location and ran over the gauge. The area was secured until the licensee's radiation safety officer and a service company technician responded to the site. Radiation surveys were performed and no elevated readings were observed. The cesium source was returned to its shielded position. The non-repairable gauge was transported to the licensed service company's facility where it will be prepared, packaged, and returned to the manufacturer. As corrective action, the licensee has scheduled the technician for additional training. One violation was cited.

## **Emergency Preparedness**

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

- On June 10, 2014, A Federal Emergency Management Agency (FEMA) evaluated Reception Center Exercise was conducted in Benbrook, Texas for the Comanche Peak Nuclear Power Plant. One planning issue and one Area Requiring Corrective Action (ARCA) were identified during the exercise. The ARCA was corrected on the spot.

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

- FEMA has reviewed Offsite Response Organization plans and procedures for South Texas Project and returned 4 Requests for Additional Information (RAIs). DSHS, Texas Department of Emergency Management (TDEM) and Matagorda County responded with revised plans that will address the 4 RAIs. Plans submittals for the November 5, 2014 Hostile Action Based STP exercise have been approved by FEMA.
- The STP Dress Rehearsal drill will be September 24, 2014.
- An STP Hostile Action Based (HAB) Scenario Table Top was conducted on September 4<sup>th</sup> in Bay City, Texas. DSHS provided 5 exercise players to participate in discussions that addressed DSHS and other state agencies' roles would be during various Hostile-Action type scenarios.

## **PANTEX**

- DSHS and Pantex successfully participated in a scheduled full-scale DOE radiological release exercise on August 6, 2014. The DSHS Pantex planner is working with the Pantex exercise director to schedule future exercises within the next calendar year.
- DSHS staff members working under the Pantex Agreement In Principle (AIP) are currently revising the Emergency Response plan for the Pantex site.
- The Full-time DSHS/AIP planner position was been filled by Chris Timmerman (start date July 14, 2014)
- AIP staff members received and installed 3 new personnel contamination monitors in the Amarillo Reception Center. The 3 old personnel contamination monitors were relocated back to Austin and waiting installation on a mobile trailer for use throughout the State.

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

- DSHS/WIPP training staff provided one 8-hour First Responder Radiological Training classes to 22 first responders, including members of the Texas Department of Public Safety, Abilene and Eastland Fire Departments, and Dyess Air Force Base, in Abilene, TX on June 12<sup>th</sup>, 2014.

- In June 2014, DSHS/WIPP training staff also provided two 2 ½ hour presentations on DSHS response capabilities to managers and technicians from the Comanche Peak Nuclear Power Plant near Glen Rose, TX. Representatives from Somervell and Hood County emergency management were in attendance and answered questions on off-site radiological emergency response from the attendees.
- On June 31<sup>st</sup>, 2014, DSHS/WIPP staff participated in a nation-wide rollout of the Rad Responder Network. The network is designed to enable responders in the field to enter data and measurements from a mobile device such as a smart phone or tablet into an event specific, internet program, which can be shared in near real-time.
- DSHS/WIPP staff also provided technical assistance to a commercial metal recycling/scrap yard in Midlothian, TX. The purpose of the assistance was to test new vehicle and rail radiation monitors recently installed by the yard operators.
- DSHS/WIPP staff continues to monitor the status of the WIPP site near Carlsbad, NM. Radiological controls in certain buffer areas of the underground continue to be assessed and updated. Progress on re-entry into the affected panel is being made with plans to map Panel 7, Room 7 set for this fall.