



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

May 23, 2014

DSHS in coordination with the TCEQ, RRC and the South Texas Chapter of the Health Physics Society will be hosting the TEXAS RADIATION REGULATORY CONFERENCE, in Austin, TX, September 11 and 12, 2014

Radiation Safety Licensing Branch:

Radioactive Material Licensing Group

- Galveston has been selected as the site for the decommissioning of the U.S. Army nuclear barge Sturgis. CB&I Federal Services was selected to perform the work, and the barge will be towed to Galveston in late September or early October of 2014. The intent is for the dismantling and packaging of waste to be performed shipboard under U.S. Army jurisdiction. Waste will be shipped to the Texas low-level radioactive waste site and to out of state disposal facilities. The reactor last operated in 1976 and was defueled during the following two years. Once the decommissioning is complete the hull will be scraped at a shipyard in Brownsville. DSHS will monitor the decommissioning to ensure that any material released for recycling is non-radioactive.
- Nuclear Sources and Services Inc. (NSSI) has been chosen by TEPCO, the operator of the nuclear power plants in Fukushima Daiichi Japan, for a pilot plant project to remove tritium from coolant water that has all other radioactive contaminants removed. The NSSI process recovers all of the tritium for resale, so no waste will be generated. The U.S. NRC has made the determination that since no waste is generated this is not foreign waste and it may be imported under a standard import exemption. The project is scheduled to take place during the summer of 2014. Once the technology is proven, TEPCO will construct a full scale plant in Japan for treating the large volume of contaminated water they have collected.
- The Radiation Material Licensing Group addressed the Texas Board of Licensure for Professional Medical Physicists on February 4, 2014 regarding the process for recognition of the board's certifications by the Group. This included a request that the Board submit a letter requesting recognition. The Board agreed to request recognition,

and is in the process of preparing the letter. Once approved, the approval will be forwarded to the U.S. NRC so that the Board's certifications will be accepted by the NRC and all Agreement States.

- There have been no new licensing requests from public water system in the past quarter.
- There are presently 50 registered waste shippers and transporters. To date, DSHS has billed \$361,250 to the waste shippers sending low-level radioactive waste to the WCS compact disposal site in Andrews County, Texas.

Radiation Machine Source Group

- The x-ray and laser registration program continues to have a large volume of new applications, and the laser hair removal program has also had an increased workload.

Radiation Enforcement

- During the current Fiscal Year 2014 (September 2013 – April 2014), the Enforcement Unit issued 113 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 \$169,170.00 in administrative penalties and 18 Revocations (All 18 revocations were due to non-payment of registration fees).

Radiation Policy, Standards, and Quality Assurance Group

- Mrs. Barbara Taylor retired in April after a 25 year career in the radiation control program. Best wishes to Barbara J Taylor on her retirement!
- No rules will be presented at the TRAB meeting on May 23, 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)

- Public comment period for both Proposed rules from April 5 - May 5, 2014.

- No attendees for public meeting on Wednesday, April 16, 2014.

- No comments received for Proposed §289.101.
- Regarding Proposed §289.204, one commenter inquired about the intent of the rule language excluding "licensees that are authorized only for diagnostic nuclear medicine" and the justification for excluding these licensees.
- Tentative effective date of both revised rules is August 2014, pending Health and Human Services Commissioner (HHSC) 3rd review and approval to publish final adoption rules in *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.
 - Rules to be 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.

Radiation Inspection Branch

Mammography and Remote Inspections Group

- 808 remote inspections have been issued for FY2014, as of 05/05/2014. Staff are working on 325 open inspections.
- We are watching for information out of the Conference of Radiation Control Program Director's (CRCPD) meeting in Atlanta regarding a generic full field digital mammography quality control program.

The agency also has three Mammography Quality Standards Act (MQSA) Inspector Trainees in Maryland for the final course in their training to be Certified MQSA Inspectors.

X-Ray Groups

- The x-ray inspectors have been using new computer tablets to perform x-ray inspections since March 2014.
- In June, the X-ray Inspection Group will begin testing the next phase of the paperless inspection process with an anticipated go live date of July 21st.
- Two inspectors in the X-ray Inspection North Group completed their training in fluoroscopy inspections.
- The X-ray Inspection Group conducted a site visit to see Varian's new Integrated Conical Collimator Verification and Interlock (ICVI) device on a linear accelerator for cancer treatment.
- South Koreans have requested a chance to observe how the Texas law regarding radiation dose control and recording is implemented. Quoted from their request: *"The Korean government has been considering a similar legislation, and would like to learn more about the processes of implementation of the law from the experts involved. After reviewing the radiation dose control of other systems, we have discovered that the Texas has the most organized system. Therefore we concluded that learning from Texas would provide the most insight to serve as a basis of the Korean legislation."* Four Koreans will during the second week of July 2014.

Radioactive Materials (RAM) Inspections Group

- The Inspection Unit's Radioactive Materials Group received a **Satisfactory** rating for the 2014 IMPEP evaluation categories of Status of Materials Inspection Program and Technical Quality of Inspections. Satisfactory is the best possible rating. The next evaluation by the Nuclear Regulatory Commission will be in 4 years.

Environmental Monitoring Group

Incident Investigation

- On March 13, 2014, the Agency was notified by the licensee's site radiation safety officer (SRSO) that one of its radiographer trainees may have received an over exposure while performing radiography at a field site on March 12, 2014. The SRSO stated while trying to remove the guide tube from a QSA 880 radiography camera containing a 69 curie iridium-192 source the trainee 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 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. The time the radiographer was in contact with the guide tube was verified to be about 10 seconds by the licensee's reenactment. The distance the radiographer was standing from the exposed source while changing locations was 24 inches and the time exposed was set at 3 minutes 30 seconds. On April 20, 2014, the Agency was notified by the licensee they had assigned a dose of 4.0 rem to the

radiographers hand and a whole body dose of 12.0 rem. The investigation of this event is still ongoing.

Emergency Preparedness

Comanche Peak Nuclear Power Plant (CPNPP)

- DSHS and CPNPP successfully participated in a rescheduled FEMA Plume Phase exercise on January 29th, 2014. The exercise was rescheduled because of the Federal Government (FEMA) shutdown in 2013.
- DSHS, Texas Department of Emergency Management (TDEM), CPNPP, Hood and Somervell Counties and FEMA meet on April 16th, 2014 at Comanche Peak to review local plan updates required to meet the FEMA Hostile Action Based (HAB) criteria.
- DSHS provided radiation detectors - 5 Ludlum 14-C's each to Hood and Somervell Counties in support of the NPP.
- DSHS and TDEM meet on April 23rd, 2014 to discuss the State plan updates required to meet the FEMA HAB criteria.

South Texas Project (STP)

- Emergency plan reviews both for onsite and offsite are currently ongoing, and the deadline for submitting plan changes is June 23, 2014.
- FEMA evaluated Palacios Community Medical Center for an STP Medical Drill on February 4, 2014. The Exercise After Action Report has been published by FEMA.

PANTEX

- DSHS/Agreement In Principle (AIP) staff members are currently attending and participating in various planning meetings regarding the upcoming August 6, 2014 exercise. DSHS staff has submitted objectives and continue to develop plans for the upcoming exercise.
- The Full-time DSHS/AIP planner position became vacant during this reporting period. Action is currently underway to post this position for hire. AIP staff members continue to review air and water samples and also provide repair and calibration support regarding the support equipment currently assigned to the AIP/PANTEX project.

Waste Isolation Pilot Project (WIPP)

- DSHS/WIPP training staff provided five 8-hour First Responder Radiological Training classes to a total of 76 first responders in Terrell, Marshall and Clyde, Texas. DSHS/WIPP staff continued to develop and plan for a radiological transportation exercise regarding the shipment of U.S. Department of Energy transuranic waste. Local

officials from Andrews County, the State of New Mexico, the State of Texas and the Waste Isolation Pilot Plant re-scheduled the exercise for April 3, 2014. The exercise was successfully held.

- DSHS/WIPP program staff members continue to respond to calls from various state agencies and concerned Texas citizens regarding the February 14, 2014 WIPP incident. A news document was developed and provided to the DSHS Public Information Officer regarding the WIPP incident.