

**Department of State Health Services (DSHS) Second Quarter 2010 Program
Report to the Texas Radiation Advisory Board
May 1, 2010**

General Program Information

The U.S. Nuclear Regulatory Commission (NRC) conducted its periodic audit of the radioactive materials program during the week of February 22. The audit, formally called the Integrated Materials Performance Evaluation Program (IMPEP), reviewed the five common performance indicators (technical staffing and training; status of materials inspection program; technical quality of inspections; technical quality of licensing actions; and technical quality of incident and allegation activities) as well as two non-common performance indicators (compatibility requirements and sealed source and device evaluation program).

The draft finding by the review team is that the Texas Agreement State program is adequate to protect health and safety and compatible with the NRC's regulatory program. The NRC Management Review Board will review the team's findings and make a final determination on May 19, 2010.

The department still is under a hiring freeze and a proposed five percent reduction in funding. Positions may only be posted for hiring after a justification is approved on a case-by-case basis.

Radiation Safety Licensing Branch:

Radioactive Material Licensing Group

- The radioactive material licensing group is now fully staffed. Mr. Stephen Stoutenburg has been hired as a medical license reviewer in the Medical and Academic Licensing Program.
- The Industrial Radiographer Certification Program is preparing to issue radiographer trainer authorizations on Certification cards. This process should take three months to complete.
- The Group has discussed with staff recommendations from the NRC IMPEP review and will implement those that will make licensing more effective.
- We are also in the process of hiring an additional Health Physicist who will be used mainly to implement and maintain current and future Federal safety and security mandates.

Radiation Machine Source Group

- The Radiation Machine Source Group (RMSG) staff continues to prepare for the implementation of the Laser Hair Removal (LHR) registration program. Rulemaking is for the LHR program in process.
- RMSG received approval to post and hire the HPI position for the coordinator of the mammography certification program. This position has been vacant since February 2010 due to staff retirement.
- The Environmental Specialist III (ESIII) position for the LHR program is still in the auditing process. This audit was originally submitted as an ES III and approved as an Environmental Specialist I. The audit was resubmitted and approved as an HPI. A meeting with HHSC HR is pending to go over the actual functions of the positions with the classification reviewers and to resolve this issue. This position is one of six reviewer positions allocated in the LHR program.

Radiation Policy, Standards, and Quality Assurance Group

- PSQA has posted two new Health Physicist I positions that will have responsibilities associated with quality assurance review of x-ray and radioactive material reports. These positions are a part of the Division's exceptional item request and have been granted an exception to the HHSC hiring freeze policy.
- PSQA staff members continue to be heavily involved in the department's efforts to implement HB449 concerning laser hair removal. Numerous comments were received on the proposed rule, and the rule package is being prepared for adoption.
- PSQA staff members participated in the 2010 IMPEP review of the radiation control program.
- PSQA staff members are currently drafting rules to implement new fluoroscopy and CT initiatives in current rule and to develop new rules for electronic brachytherapy. Numerous comments have been received on this draft rulemaking, and the department is considering holding stakeholder meetings for further discussion.
- The department has hosted the NRC Inspection Procedures course. Hosting such a course typically allows us to have more staff members participate in the course than if the course were held elsewhere. This helps us get more DSHS staff trained in a more timely manner. Chris Myers has been instrumental in handling the logistics for the course.
- Cindy Cardwell is participating on an NRC/State IMPEP Self-Assessment working group. The working group was partly formed in response to the NRC's IG report and partly because, even with a successful program like IMPEP, it is worthwhile to review its effectiveness periodically.

Radiation Inspection Branch

Charlotte Dokes was named the Inspections Unit Manager, effective March, 2010. Ms. Dokes has a nursing degree from Baylor University, and a Master's of Science in Administration from Central Michigan University. She started her career with the state more than 20 years ago in the former Department of Human Services, where she worked in Long-Term Care Investigations, PASARR Program, and Long-Term Care Licensing. She was recruited to the HHSC where she was the Director of Medicaid Utilization Review. Additionally, she assisted in the development and implementation of the first Medicaid fraud, waste, and abuse office. Following reorganization in 2003, she became the Deputy Inspector General for Compliance with the Texas Health and Human Services Commission's Office of Inspector General, where she was instrumental in obtaining the Texas Medicaid Fraud and Abuse Detection System. Ms. Dokes has extensive experience with audit practices and principles, strategic planning, budget planning, contracting, and working with the legislature. As the Deputy Inspector General, she supervised 250 employees in her Division.

Alice Rogers was recently elected Chair-Elect of the Conference of Radiation Control Program Directors.

Radioactive Materials (RAM) Inspections Group

- NRC inspection frequencies are being met for licensee inspections. Having a fully qualified inspector traveling statewide is of great use in maintaining currency of all inspections, especially in Beaumont, where the inspector is in training, and in the Dallas area, where the number of inspections is ever increasing.
- The NRC review of the RAM inspection group provided very positive results.
- Several inspectors attended the NRC Inspection Procedures Course in Austin. This is a core requirement for RAM inspectors. Texas hosted the course in order to have as many staff as possible admitted to the course.

X-Ray Inspections Group

- The X-Ray Group has posted a vacancy for an x-ray inspector position in Austin. Presently, we have one inspector working out of the Houston office who is still in training. X-ray staff from throughout the state will meet in Austin on May 3–7, 2010, to receive required continuing education training and regulatory updates.
- Currently, we have one laser inspector. The new inspector recently attended formal training on lasers. An internal laser working group is developing informational materials to be used for in house training of staff and guidance documents for inclusion on the Radiation Control Program website.
- Lisa Bruedigan, the X-Ray Group trainer, chairs the Computed Tomography Committee for the Conference of Radiation Control Program Directors (CRCPD). In this capacity, she recently attended the CRCPD annual meeting and presented a workshop on developments in CT. She also attended a CT Dose Summit in Atlanta, GA, on April 28–30 to participate in discussions on a national level and bring back relevant information for training x-ray inspection staff. The mission of the summit was to provide an interdisciplinary approach to optimizing image quality and managing patient dose. The summit provided practical information for users that will help them operate their CT scanners wisely, improving the quality and usefulness of CT images while reducing the radiation dose to patients.

Environmental Monitoring Group

Incident Investigation Program

- On March 17, 2010, an Agency manager received a phone call from a licensee informing them that one of their radiographers in the field was approached by an individual acting as an Agency inspector. The individual opened and closed the radiographers' truck doors, got into the dark room and looked at various items, and then went outside the two millirem barrier ropes and observed the radiographer perform his operations for about one hour. According to the radiographer, the individual was wearing a jacket with TDH on the back of it. The individual did not try to gain access to the source. Based on the questions asked and statements made by the individual, it appeared that this individual has a working knowledge of radiography.
- The Agency has experienced a similar incident involving someone impersonating an Agency inspector approximately one year ago. The description of the individuals involved and their actions do not match, and at this time it appears the two events are unrelated. Regardless, it was decided by IIP to issue an information notice to all radiography licensees reminding them that legitimate inspectors for the Agency are equipped with a credentialing document. It was also suggested that it is good practice to ask someone attempting to perform an inspection to provide this document to them.
- On March 19, 2010, at 2350 hours, the Agency was notified by the licensee's Radiation Safety Officer (RSO) that 120 millicuries of Iridium (Ir)–192 was stolen from one of their trucks parked at a Wal-Mart parking lot in Alice, Texas, at about 2320 hours. The Ir was contained in six 20-milliliter vials, each containing 20 millicuries (15 grams) of Ir–192 in the form of zero wash, a small particle ceramic matrix containing the radioactive Iridium–192. Each vial was placed into a labeled lead pig, and each pig was then shrink wrapped. The six pigs were then placed into a zip-lock bag. The zip-lock bag was placed into a tool box in the back of the pickup truck. The box was a plastic tote box that was not locked. The Alice Police Department investigated and placed one individual in custody. The individual later told them the location of the box. The materials were recovered on March 24, 2010, at an individual's home. The shrink wrap on the outside of the pigs was not breached, and dose estimates for

the people living in the house for the five days that the source was stored there appear to be below the limits.

- Through the course of the investigation, it appears that the materials were transported incorrectly. The materials should have been locked in a box that is bolted to the bed of the truck. The suspects were unaware that radioactive material was in the box.

South Texas Project

- South Texas Project (STP) began its Unit 2 Outage in the beginning of April.
- A FEMA-evaluated medical drill was performed on March 11, 2010, at Palacios Community Medical Center. The After Action Report written by FEMA included analysis of capabilities ranging from implementation of emergency worker exposure control to transportation and treatment of contaminated injured individuals. One area requiring corrective action (ARCA) was received for not having a physician present during the exercise. This will be corrected at the next exercise.
- STP has received FEMA's approval for upgrading their tone-alert radios within the 10-mile EPZ pending the following conditions: They will have to have a professional physically install the radios in every house, a physical inventory of the radios must be made annually and maintenance plans and procedures must be in place for field testing before activating the new radios. STP is in the process of rebutting these requirements, as they were never required with the existing radios.
- Siren upgrade – STP is in the process of upgrading the siren system to a battery back-up siren system. The goal is to have the brand new system in place by June 1, 2010. They have submitted the upgrade to Texas Division of Emergency Management (TDEM) and TDEM has forwarded it to FEMA for their review and approval.

Comanche Peak Nuclear Power Plant

- DSHS radiological emergency planners assisted TDEM in responding to local planning issues received from FEMA during the last evaluated exercise.
- Oral arguments are to be heard by the NRC Atomic Safety and Licensing Board (ASLB) concerning the opposition of Units 3 & 4 on April 15, 2010, in the Jury Selection Room of the Hood County Justice Center, 1200 W Pearl St., in Granbury.
- A reception center drill is scheduled for August 18, 2010, in Cleburne, and a medical drill is scheduled for September 14, 2010, at the Lake Granbury Medical Center in Granbury. An 8-hr hospital training class has been suggested prior to the FEMA-evaluated drill for emergency response participants and is tentatively scheduled for May 11, 12, and 13.

Waste Isolation Pilot Plant

- The Waste Isolation Plant Project (WIPP) has been in DSHS for 20 years. It has recently been moved to the Division for Regulatory Services under the Radiation Inspections Branch. The program is designed to train first responders and medical staff along the Interstate Highway 20 corridor. This is the route used to transport transuranic waste from Department of Energy facilities through Texas to the WIPP disposal facility near Carlsbad, New Mexico.
- An evaluated exercise is scheduled for June 9, 2010, involving emergency responders from Lindale and Tyler as well as DSHS and TDEM. The exercise will test response capabilities to coordinate actions and perform rescue and mitigation activities. The exercise is the sixth held in Texas since WIPP grant was instituted in the early 1990s.
- This program also provides calibration and maintenance of instruments stockpiled around the state. These instruments are from the Civil Defense era, and many are still serviceable. Much of the inventory is still maintained and calibrated by DSHS staff. Recently, due to cut-backs in staff and reorganization of emergency response duties, it was decided to discon-

tinue portions of this program. Some jurisdictions, such as City of Houston rely on these instruments as back up or primary radiation detection equipment. Local jurisdictions are being encouraged to seek funding to obtain more up-to-date instruments. The radiological monitor training for the non-WIPP corridor jurisdictions would still be available from another DSHS program, but on a limited basis.

Mammography Inspections Group

- The positions for one Remote Inspector and the Administrative Assistant assigned to the Remote Inspections remain open and frozen.
- The previous Remote Inspector, Daniel Moody, is continuing to process remote inspections, while he trains for his new X-Ray Inspector position. This is allowing the Remote Inspection Program to stay current with the established inspection schedule.
- No mammography inspections are past due. 338 mammography inspections have been completed for FY10, and we are on track to complete all inspections by the end of the year, with 222 remaining inspections.
- 1046 remote inspections have been issued for FY10. 878 of those inspections have been completed and closed. The program is currently waiting on responses from the remaining registrants.

Texas Commission on Environmental Quality Program Report to the Texas Radiation Advisory Board for May 1, 2010, Meeting

Low-level radioactive waste disposal: On September 10, 2009, the executive director of the Texas Commission on Environmental Quality (TCEQ) signed and issued to Waste Control Specialists, LLC (WCS), the license that authorizes the near-surface disposal of Class A, B, and C low-level radioactive waste from the Texas Compact and federal facility mixed low-level radioactive waste from the federal government. There are several preconstruction conditions currently being reviewed by TCEQ under a pending amendment application and a requirement for TCEQ written approval prior to the commencement of major construction that is also currently under consideration. TCEQ staff met with the licensee and representatives of utility waste generators to discuss the rate application package, which will establish fees for the Texas Compact facility. WCS is expected to file a rate application package with TCEQ in April 2010.

By-product material disposal: In November 2009, WCS completed disposal emplacement of 3,776 Silo 1 & 2 Fernald Waste Canisters into the WCS byproduct waste disposal facility in Andrews County. Disposal at the facility is currently limited only to Silo 1 & 2 Fernald Waste Canisters. WCS is continuing to provide environmental monitoring data related to the byproduct material disposal facility including the following: groundwater level and constituent measurements, ambient gamma measurement, measurement of constituents in soil, measurement of constituents in vegetation, the results of erosion studies, and other site-specific reports.

Uranium Mining: The South Texas Mining Venture, LLP's La Palangana *in-situ* uranium license was issued January 14, 2010. There are three pending new uranium license applications, RGR Hobson Project, Uranium Energy Corp (UEC) Goliad Project, and the Signal Equities Brevard Project. Underground Injection Control (UIC) applications are pending for *in-situ* mining permits for UEC and Signal Equities and for the first production area authorization (PAA) for the Signal Equities Brevard Project and the second PAA for the already-permitted STMV Palangana Project. Technical reviews for these applications are on-going. New owners (UEC) have purchased the physical holdings of the Everest Exploration operation under R03626 and have applied for

major amendment to reflect the new ownership. TCEQ continues to monitor reclamation activities at Tex-1 and Mt. Lucas subsites and COGEMA's subsites. A settlement has been reached on the IEC reclamation matter that has been pending in Travis County court. Staff members are continuing to work on groundwater and settlement issues at the three Title II impoundment sites.

Waste Processing and Storage: WCS (R04971) and NSSI (R01811) are both currently under review for license renewal.

Buried Waste: TCEQ continues to work on closing the historical buried radioactive waste sites that exist under TCEQ jurisdiction in Texas.

MOUs: TCEQ's work with the Railroad Commission of Texas on amendment to the Memorandum of Understanding between the two agencies is moving forward. Amended proposed Memorandum of Understanding language is currently open for public comment. A public meeting will be held on May 11, 2010, in Austin, Texas.