

**Wyandotte County Radioactive Material Transportation Accident Exercise**  
*Sponsored by Kansas City Fire Department, Edwardsville Fire Department, and Wyandotte  
County Emergency Management Agency*  
with support from the  
*United States Department of Energy*  
**Transportation Emergency Preparedness Program**  
**Exercise Date: November 9, 2006**

**EXECUTIVE SUMMARY**

This report documents the efforts and results of the planning, preparing, and conducting of an exercise in Wyandotte County, Kansas to validate responders' ability to respond and mitigate a transportation accident involving radioactive material. Early in the planning and preparing for the exercise, county officials completed the Transportation Emergency Preparedness Program Needs Assessment that assisted in determining the current level of preparedness for responding to transportation accidents involving radioactive material. Based on the Needs Assessment results, several planning and training sessions were held to prepare responders for the tabletop and full field response exercise. Wyandotte County Emergency Management Agency (WCEMA), Edwardsville Fire Department (EFD), Kansas City Kansas Fire Department (KCKFD), Wyandotte County Sheriff (WCS), and the Transportation Emergency Preparedness Program (TEPP) successfully completed the conduct of a tabletop and full field response exercise involving a wrecked shipment of simulated radioactive material. Emergency responders from several emergency response agencies within Wyandotte County, KS participated in the tabletop exercise on November 6th and the full response exercise on November 9th, 2006. The exercise involved a multiple vehicle accident in which one vehicle was hauling a simulated shipment of radiopharmaceuticals. As a result of the accident, the vehicle hauling the radioactive materials overturned and several packages were ejected. Two of the containers were ruptured when the van rolled over on them and released their contents onto the roadway. The accident involved a total of two casualties with Providence Medical Center receiving and treating one of the casualties. The second casualty was loaded into a Life Net Air Ambulance and was simulated to be flown to the hospital for treatment. As responders arrived, incident command was established, priorities for lifesaving and protecting property were implemented. Responders also quickly recognized that hazardous materials were involved in the accident and requested the appropriate mutual aid support to assist with the accident. To assist in scene size up, mitigation, and recovery operations, the Kansas City Kansas Fire Department's Hazardous Materials Team arrived, obtained needed briefings from the Incident Commander, and implemented scene contamination surveys for responders that entered the accident scene. Upon the arrival of the state Radiation Authority, they received a status briefing on activities completed and discussed needed support items. After a discussion with command staff to establish entry and scene assessment activities, the Radiation Authority partnered with the KCKFD HazMat Team to conduct a detailed scene assessment. The assessment included surveys and mapping of the accident scene documenting the extent of the released radioactive material. At the beginning of the exercise planning process, each agency elected to develop exercise specific objectives. To assist each agency in the evaluation of their objectives, the TEPP Planning Tools—which are modeled after the Federal Emergency Management Agency (FEMA) Program Manual on Hazardous Materials Exercise Evaluation Methodology (HM-EEM)—were used as the basis for the exercise evaluation. TEPP also used exercise evaluation guidance developed by the Department of Homeland Security Exercise and Evaluation Program (HSEEP) to evaluate responders' performance in the exercise. The Exercise Controller/Evaluator Team identified several noteworthy practices that the various agencies can continue to build upon. Also, Controller/Evaluators identified several improvement areas for each agency.