ATTACHMENT F

Plain Language Summary

Plain Language Summary for Radioactive Materials License Major Amendment Application

URI, Inc. is submitting an application for a major amendment of radioactive material license (RML) number R03653. Currently, RML R03653 includes three facilities: one in Kleberg County (Kingsville Dome) and two in Duval County (Rosita and Vasquez). These facilities are collectively known as the Texas Uranium Project, which produces a uranium product (also known as yellowcake) that is used for nuclear power generation. The uranium is produced from underground sandstone formations using in-situ mining methods. This major amendment application would add a fourth facility in Live Oak County called the Upper Spring Creek ISR Project.

Application Information

The radioactive material license major amendment.

Applicant Name

URI, Inc., a subsidiary of enCore Energy Corporation

Type of Application

Major amendment of radioactive material license

License Number

Radioactive Material License No. R03653

Type and Amount of Radioactive Material to Be Authorized

The Texas Uranium Project facilities are capable of a yearly production rate of approximately 2 million pounds of yellowcake. The Upper Spring Creek ISR Project would we capable of producing up to 1 million pounds of yellowcake per year. Based on this the license production rate would increase to 3 million pounds per year.

Facility Name

Upper Spring Creek ISR Project, Live Oak County, Texas

Facility Location

641 E. FM1118, George West, TX 78363

Facility Information

What is the function of the proposed facility?

The proposed project is a uranium mine that will use in-situ mining methods. In this type of mining, groundwater with added oxygen and a source of carbonate is recirculated through a sandstone formation to recover naturally occurring uranium. The recovered uranium will be removed using ion exchange and the resin from the ion exchange will be transported to either Kingsville Dome or Rosita where the recovered uranium will be processed into the final product called yellowcake.

What does the facility produce?

The Upper Spring Creek ISR Project will produce loaded resin that will be transported to either Kingsville Dome or Rosita for processing into yellowcake, which is a dried uranium product. The yellowcake is

shipped in 55-gallon steel drums to a facility out of state that converts the yellowcake into a product that can be further concentrated and used as fuel for nuclear power generation.

Control of Radioactive Effluents and Radioactive Contamination

URI maintains a robust monitoring program to ensure that the facilities do not have an adverse impact on human health or the environment. The monitoring program is described in detail in the application and includes an environmental monitoring program, external radiation monitoring program, airborne radiation monitoring program, bioassay program, and contamination control program. Records for each of these programs are maintained by URI and reported to TCEQ as necessary.

What types of radioactive effluents are managed?

The main type of radioactive effluent is excess groundwater produced during mining. About 1 percent of the groundwater used for mining is disposed to keep it from spreading outside of the mining area. After the uranium is recovered, water treatment is used to restore the groundwater quality within the sandstone formation. This results in additional radioactive liquid effluent. Other types of liquid and solid radioactive effluent include liquid wastes produced by the processing plants and solid waste such as used filters and equipment resulting from uranium recovery and decommissioning activities.

The only significant airborne radioactive effluent is radon gas, which is recovered with uranium from the sandstone formation. Although most of the radon gas is recirculated and reinjected, a small amount is released during operations.

How are the radioactive effluents managed?

Liquid radioactive effluents associated with uranium mining and processing are disposed of in lined ponds and waste disposal wells. The lined ponds temporarily store the liquid effluent before injection into waste disposal wells permitted separately through TCEQ. Solid radioactive effluents are hauled to a licensed disposal facility.

During uranium recovery operations, the groundwater containing uranium and radon gas is kept in a pressurized system, such that radon gas is not released. During certain uranium processing steps and during an unplanned release, radon gas is released to the atmosphere. URI monitors radon concentrations during operations to demonstrate low levels of radon in air a short distance from the facilities.

How will the facility prevent spills, leaks, and releases?

Mining solutions are contained within wellfields by withdrawing more water than is injected. This is verified by measuring water levels and water quality in monitor wells installed around each wellfield. Pipeline pressures are monitored, and pipelines automatically shut down if the pressure suddenly increases or decreases. Processing facilities are curbed to contain any potential spills or leaks.

How will the facility clean up spills, leaks, and releases?

Spilled liquids captured within concrete containment curbs are collected and disposed of with other liquid waste. Any soils affected by spills are surveyed for potential radiological contamination. Any soils above release limits are removed and disposed.