environmental
properties management, LLC

May 19, 2017

Mr. Ken Kalman
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

Mr. Paul Davis
Oklahoma Department of Environmental Quality
707 North Robinson
Oklahoma City, OK 73101

Re: Docket No. 70-925; License No. SNM-928
Report on the Vertical Distribution of Uranium in Alluvial Material

Dear Sirs:
Groundwater remediation plans include the installation of groundwater extraction wells in the alluvial material in the Cimarron River floodplain. *Facility Decommissioning Plan* (D-Plan), submitted in December 2015 stated that groundwater extraction wells will be screened across the saturated thickness of the aquifer.

NRC recommended an evaluation of vertical distribution of uranium in alluvial material. If uranium in concentrated in discrete zones, extraction well screens spanning only those zones would remove contaminant mass more efficiently, potentially increasing the rate of groundwater remediation.

In December 2016, groundwater samples were collected from discrete depth intervals at ten locations in the alluvial aquifer. A direct push rig with a Hydraulic Profiling Tool (HPT) yielded a hydraulic conductivity profile at each location. Evaluation of lab data and the HPT profiles indicates that uranium is not evenly distributed throughout the saturated thickness of the aquifer.

The enclosed report, "Vertical Distribution of Uranium in Groundwater" describes the field work performed, presents the data obtained, and describes the impact of the evaluation on the design of groundwater extraction wells. If you have questions or comments regarding this report, please contact me at jlux@envpm.com or 405-642-5152. Thank you.

Sincerely,

Jeff Lux

Jeff Lux, P.E.
Project Manager

Enclosure
cc: Mr. Robert Evans, NRC Region IV

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