

## **DATA SHOWS DRAMATIC INCREASE LEVELS OF RADON EMISSIONS AT WHITE MESA URANIUM MILL**

The 2014 Annual Tailings Wastewater Monitoring Report<sup>1</sup> shows a dramatic increase in the Cells 1, 4A, and 4B radium content. As shown in the Table below, based on the Environmental Protection Agency (EPA) formula<sup>2</sup> for determining radon emissions from White Mesa liquid impoundments, the radon emissions from Cells 1, 4A, and 4B, have increased dramatically. The standard for radon-22 emissions for Cells 2 and 3 (existing impoundments) is 20 pCi/m<sup>2</sup>-sec.

<b>White Mesa Solution Impoundments: Radium Content and Radon Emissions</b>				
<b>Cell</b>	<b>2013 Gross Radium Alpha</b>	<b>2013 Radon Emissions</b>	<b>2014 Gross Radium Alpha</b>	<b>2014 Radon Emissions</b>
Cell 1	32,700 pCi/L	228.9 pCi/m <sup>2</sup> -sec	331,000 pCi/L	2,317 pCi/m <sup>2</sup> -sec
Cell 3	81,900 pCi/L	573.3 pCi/m <sup>2</sup> -sec	19,700 pCi/L	137.9 pCi/m <sup>2</sup> -sec
Cell 4A	15,800 pCi/L	110.6 pCi/m <sup>2</sup> -sec	240,000 pCi/L	1,680 pCi/m <sup>2</sup> -sec
Cell 4B	14,600 pCi/L	102.2 pCi/m <sup>2</sup> -sec	148,000 pCi/L	1,036 pCi/m <sup>2</sup> -sec

The 2014 Annual Wastewater Monitoring Report provided information regarding the reasons for the increase in gross radium alpha, based on the August sampling event.

According to the 2014 Report:

- During June, July, and August operating period fresh water was not added to the Mill process. Re-circulated tailings liquids were used for process water. Re-circulated fluids were then returned to the tailings system or evaporation ponds.
- From August 2013 to August 2014, the Mill's production was limited, resulting in less fresh water added to the Mill process and therefore to the cells. The decrease in the addition of fresh water resulted in concentration of existing fluids.

---

<sup>1</sup> 2014 Annual Wastewater Monitoring Report; Groundwater Quality Discharge Permit UGW370004, White Mesa Uranium Mill, November 24, 2014. <http://www.deq.utah.gov/businesses/E/energyfuels/docs/2014/12Dec/TailingsReport2014Annual.pdf>

<sup>2</sup> Risk Assessment Revision for 40 CFR Part 61 Subpart W — Radon Emissions from Operating Mill Tailings Task 5 – Radon Emission from Evaporation Ponds; S. Cohen and Associates, November 9, 2010; Table 6, page 17. <http://www.epa.gov/radiation/docs/neshaps/subpart-w/riskassessmentrevision.pdf> Associates, November 9, 2010; Table 6, page 17.

- Drought conditions resulted in less precipitation, therefore, less rainwater and storm water going into the cells. Drought also caused higher evaporation rates.

These conditions will continue, as Energy Fuels Resources (USA) Inc. has announced that they will put the Mill on standby in early 2015. Therefore, there will continue to be high levels of radon emissions from the solutions in these 4 impoundments. Yet, the EPA and Utah Division of Air Quality (DAQ) have done nothing to address this situation. In fact, the EPA maintains that radon emissions from liquid impoundments are ZERO.