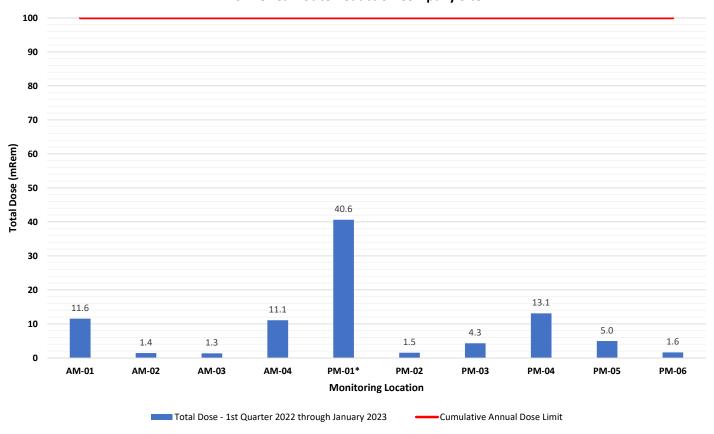
## Total Dose Summary by Monitoring Location 1<sup>st</sup> Quarter 2022 - January 31, 2023 Former Carnotite Reduction Company Site



## Notes:

\*The total dose at monitoring location PM-01, located along the site's north fenceline, was elevated in 2<sup>nd</sup> quarter 2022 due to proximity to waste bag storage.

**Total Dose - 1<sup>st</sup> Quarter 2022 through January 2023 =** The sum of the calculated 1<sup>st</sup> quarter 2022, 2<sup>nd</sup> quarter 2022, 3<sup>rd</sup> quarter 2022, 4<sup>th</sup> quarter 2022, and January 2023 doses from air particulate sample results<sup>a</sup>, radon sample results<sup>b</sup>, and environmental optically stimulated luminescence (OSL) dosimeter results<sup>c</sup> used for gamma radiation monitoring. These dose estimates were obtained by use of survey methods designed to conservatively demonstrate compliance with the dose limits for individual members of the public in 32 Illinois Administrative Code (IAC) Section 340.310.

Cumulative Annual Dose Limit = Equal to the annual dose limit of 100 millirem (mRem) listed in Illinois Administrative Code Title 32 Subpart D Section 340.310.

<sup>a</sup> **Air particulate samples** are collected at monitoring locations AM-01, AM-02, AM-03, and AM-04 and analyzed in accordance with the Illinois Emergency Management Agency (IEMA)-approved Field Sampling Plan for Site Remediation, Revision 1 (FSP) and Quality Assurance Project Plan for Site Remediation, Revision 1, (QAPP) dated August 2021 and February 2021, respectively. The dose is calculated in accordance with the IEMA-approved Annual Environmental Monitoring Report and Public Dose Evaluation, Fourth Quarter 2020 through Third Quarter 2021, Former Carnotite Reduction Company Site, (EMR/PDE) dated January 19, 2022. The public dose evaluation is compliant with IEMA requirements, which do not require a human health or ecological risk assessment based on U.S. Environmental Protection Agency guidance.

Because air particulate is not collected at the six passive monitoring stations that monitor radon and gamma radiation dosimetry only (PM-01 through PM-06), these passive monitoring locations were assigned the air particulate dose equal to the nearest particulate monitoring station.

- <sup>b</sup> Radon samples are collected and analyzed in accordance with the FSP and QAPP. The dose is calculated in accordance with the EMR/PDE and reflects the net radon concentration excluding the background concentration. The radon dose is calculated in accordance with U.S. Nuclear Regulatory Commission guidance DUWP-ISG-01 "EVALUATIONS OF URANIUM RECOVERY, FACILITY SURVEYS OF RADON AND RADON PROGENY IN AIR AND DEMONSTRATIONS OF COMPLIANCE WITH 10 CFR 20.1301, FINAL REPORT" dated June 2019.
- <sup>c</sup> Environmental OSL Dosimeter samples are collected and analyzed in accordance with the FSP and QAPP. The dose reflects the net dose excluding the background dose.