SUPPLEMENTAL INFORMATION

HEAVY METAL CONCENTRATIONS IN MOJAVE DESERT TORTOISES (*GOPHERUS AGASSIZII*) RELATED TO A MITIGATION TRANSLOCATION PROJECT, IVANPAH VALLEY, CALIFORNIA, USA

BRIAN COHN, BRYAN WALLACE, CHRIS GROUIOS, BRETT DICKSON, RICK SCHERER, AMANDA KISSEL, MIRANDA E. GRAY, AND T.G. JACKSON⁷



FIGURE S1. Spatial distributions of (A) lead (Pb) concentrations in blood samples collected from Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area. Dark-blue circles show values below detection limits, light-blue circles show values above detection limits, but below minimum values reported in peer-reviewed literature, and all other values are within the range of literature values.



FIGURE S2. Spatial distributions of selenium (Se) concentrations in blood samples collected from Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area. Dark-blue circles show values below detection limits, light-blue circles show values above detection limits, but below minimum values reported in peer-reviewed literature, and all other values are within the range of literature values.



FIGURE S3. Spatial distributions of iron (Fe) concentrations in blood samples collected from Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area. Fe values are shown in generalized bins because no published values were available.



FIGURE S4. Spatial distributions of arsenic (As) concentrations in blood samples collected from Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area. Samples below detection limits are shown in gray.



FIGURE S5. Frequency distributions of lead (Pb) concentrations in soil samples collected during health assessments of Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area.



FIGURE S6. Frequency distributions of selenium (Se) concentrations in soil samples collected during health assessments of Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area.



FIGURE S7. Frequency distributions of iron (Fe) concentrations in soil samples collected during health assessments of Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area.



FIGURE S8. Frequency distributions of Arsenic (As) concentrations in soil samples collected during health assessments of Desert Tortoises (*Gopherus agassizii*) in the Ivanpah Valley study area. For reference, published values of As soil concentrations from Chaffee and Berry (2006) are shown in the panel.



FIGURE S9. Concentrations of (A) lead, Pb, and (B) arsenic, As, in Desert Tortoise (*Gopherus agassizii*) blood samples versus the proximity of *G. agassizii* home ranges to Interstate 15, Ivanpah Valley, California, USA. For each individual tortoise in each active season, home range area was derived using a 95% fixed-kernal density estimation approach and resultant utilization distribution (UD; see Farnsworth et al. 2015).