Clarification Sheet, Saint Louis River U.S. Steel Site Preassessment Screen

July 31, 2020

The Natural Resource Trustees have evaluated a comment received from U.S. Steel on the characterization in the Preassessment Screen (PAS) of the potential that there may be injuries to terrestrial biological resources (mammals, birds, invertebrates, and plants) at the Site. The PAS as publicly released by the Trustees included the following analysis as the third paragraph on page 36:

To further confirm the exposure of terrestrial biota to hazardous substances, the Trustees reviewed results of the Ecological Risk Assessment (ERA) completed for the U.S. Steel Site, as presented in Barr Engineering and AECOM (2015a). Based on comparison to adverse effects levels, the ERA found adverse effects to terrestrial plants, soil invertebrates, invertivorous birds, and mammals. Plants and invertebrates had reduced viability and function due to exposure to PAHs, lead, and zinc. Invertivorous birds and mammals had reduced survival, growth, and reproduction due to exposure to PAHs, lead, and zinc (Barr Engineering and AECOM, 2015a). The ERA found a low potential for risk to herbivorous birds and carnivorous vertebrates exposed to soil and aquatic open areas (Barr Engineering and AECOM, 2015a). These results indicate that some terrestrial biota are exposed to hazardous substances released at the U.S. Steel Site at levels that are sufficiently elevated to cause adverse effects.

In particular, U.S. Steel took issue with the characterization in this paragraph that the Ecological Risk Assessment "found" adverse effects to terrestrial plants, soil invertebrates, invertivorous birds, and mammals. The Trustees have modified the language in this paragraph as follows to re-characterize the analysis as indicating a potential for natural resource injuries based upon the findings in the ERA.

The third paragraph on page 36 of the PAS is therefore modified as follows:

To further confirm the exposure of terrestrial biota to hazardous substances, the Trustees reviewed results of the Ecological Risk Assessment (ERA) completed for the U.S. Steel Site, as presented in Barr Engineering and AECOM (2015a). Based on comparison to adverse effects levels, the ERA found a potential for adverse effects to terrestrial plants, soil invertebrates, invertivorous birds, and mammals. No-Effect Hazard Quotients calculated from published toxic reference values and measurements of contaminants at the Site exceeded one for plants and invertebrates in shrub-scrub/forested wetland areas, indicating the potential for reduced viability and function due to exposure to PAHs, lead, and zinc. Lowest-Effect Hazard Quotients exceeded one for invertivorous birds and mammals in upland and shrub-scrub/forested wetland areas, indicating possible reduced survival, growth, and reproduction due to exposure to PAHs, lead, and zinc (Barr Engineering and AECOM, 2015a). The ERA found a low potential for risk to herbivorous birds and carnivorous vertebrates exposed to soil and aquatic open areas (Barr Engineering and AECOM, 2015a). These results indicate that terrestrial biota are exposed to hazardous substances released at the U.S. Steel Site at levels that are sufficiently elevated to suggest that additional information collection and evaluation may be warranted due to the potential for adverse effects.