Environmental Justice as a New Driver for Sustainable Remediation at Superfund Sites

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Background/Objectives. Sustainable remediation (SR) has considered the environmental, social, and economic aspects of site remediation throughout the life cycle of a site project. The social and economic aspects of SR recently received a significant boost in importance with the United States Environmental Protection Agency (USEPA) Office Land and Emergency Management (OLEM) Environmental Justice (EJ) Action Plan, December 2021. The EJ Action Plan includes provisions dealing with Federal National Priority List (NPL) Superfund sites. Awareness of EJ and its application at Superfund Sites will be a key factor at these sites and for SR overall.

Approach/Activities. An overview of USEPA's EJ program and how it is being applied to Superfund Sites will be presented. The USEPA EJScreen tool uses demographic data default to American Community Survey (ACS 2015-2019, or earlier census data) and environmental data to create reports and maps that help identify EJ areas. Demographic data categories that are tool inputs for an area include people of color, low income, unemployment, linguistic isolation, less than high school education, and persons under age 5 and over age 64. The EJScreen tool environmental data categories that are tool inputs for an area include particulate matter (PM) 2.5, ozone, diesel matter, air toxics, traffic proximity, lead paint, Superfund site proximity, Risk Management Plan Facility (RMPF) proximity, hazardous waste proximity, underground storage tanks (USTs) and wastewater discharges. The user can develop a search area using zip codes, census tracts, radius from a pin drop on a map, and city or county boundaries. Reports and maps can be generated for the major data categories or a combined EJ Index map. USEPA’s EJScreen tool will be explained and examples of tool output for a Superfund Site with EJ concerns will be compared to a non-impacted affluent area in the San Francisco Bay Area.

Results/Lessons Learned. The presentation will inform on the importance of considering EJ at Superfund Sites and explain the use of the USEPA EJScreen tool.