

General Screening Conditions

1. For a given medium containing a constituent with more than one risk-based concentration (i.e., one based on carcinogenic risk, one based on noncarcinogenic effects), the lower concentration shall be used. RBSLs for noncarcinogenic constituents will be based on a hazard quotient of 0.1. RBSLs for carcinogenic constituents will be based on a risk level of 1×10^{-6} .
2. If health-based criteria are not available for a constituent detected at the site, EPA may require that provisional RBSLs be proposed based conservatively on toxicity data reported in literature and/or health-based criteria for similar constituents. As additional toxicological data of adequate quality becomes available, the Permittee may incorporate such data into the RBSLs, subject to EPA approval.
3. The Permittee may use existing data (i.e. data collected prior to the effective date of the permit) or data collected during the RFI to characterize the nature and extent of contamination for a SWMU/AOC, constituent, media and/or exposure pathway. Data collected prior to EPA approval of a Quality Assurance Project Plan must have documentation supporting its quality. For either existing data or data collected during the RFI, the detection limits for the analytical methods used must meet the various screening criteria outlined below. Standard SW-846 method detection limits will not meet the various screening criteria outlined below for all constituents. For those constituents, the Permittee may choose to carry them forward through the RFI at one-half the detection limit, or use a more sensitive method which can meet the screening criteria.
4. The requirement to implement Corrective Measures at the Facility is not contingent upon exceedances of these screening levels. That is, if EPA determines that a constituent(s) present in a concentration below screening levels may pose a threat to human health or the environment, given site-specific exposure conditions, and there is reason to believe that the constituent(s) has been released from the facility, EPA may require a Corrective Measures. Likewise, EPA may deem no further action is necessary despite exceedances of these screening levels, with appropriate rationale.

References

- a. Toxicological Benchmarks for Wildlife: 1996 Revision. Sample, B.E., D.M. Opresko, and G.W. Suter II, Oak Ridge National Laboratory, Oak Ridge, TN, 1996.
- b. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision. Efroymsen, R.A., M.E. Will, G.W. Suter II, and A.C. Wooten, Oak Ridge National Laboratory, Oak Ridge, TN, 1997.
- c. Toxicological Benchmarks for Potential Contaminants of Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Processes. Will, M.E. and G.W. Suter II, Oak Ridge National Laboratory, Oak Ridge, TN, 1995.
- d. Toxicological Benchmarks for Screening of Potential Contaminants of Concern for Effects on Aquatic Biota on Oak Ridge Reservation: 1996 Revision (Suter, G.W. II and C.L.Tsao, Oak Ridge National Laboratory, Oak Ridge, TN, 1996).
- e. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision (Jones, D.S., G.W. Suter II, and R.N. Hull, Oak Ridge National Laboratory, Oak Ridge, TN, 1997).