

Green Remediation:
Examples of Best Management Practices for Core Elements
ADD YOUR OWN

Energy Requirements of the Treatment System

- ▶ Consider use of optimized passive-energy technologies (with little or no demand for external utility power) for polishing steps that enable all remediation objectives to be met
- ▶ Look for energy efficient equipment and maintain equipment at peak performance to maximize efficiency
- ▶ Periodically evaluate and optimize energy efficiency of equipment with high energy demands
- ▶ Consider installing renewable energy to replace or offset electricity requirements otherwise met by the utility

Air Emissions

- ▶ Minimize use of heavy equipment requiring high volumes of fuel
- ▶ Use cleaner fuels and retrofit diesel engines to operate heavy equipment, when possible
- ▶ Reduce atmospheric release of toxic or priority pollutants
- ▶ Minimize dust export of contamination

Water Requirements and Impacts on Water Resources

- ▶ Minimize fresh water consumption and maximize water reuse during daily operations and treatment processes
- ▶ Reclaim treated water for beneficial use such as irrigation or as part of optimized remedy
- ▶ Use native vegetation requiring little or no irrigation
- ▶ Prevent impacts such as nutrient loading on water quality in nearby water bodies

Land and Ecosystem Impacts

- ▶ Use minimally invasive in situ technologies, where feasible
- ▶ Use passive energy technologies such as bioremediation and phytoremediation as primary remedies or finishing steps, where possible and effective
- ▶ Minimize soil and habitat disturbance
- ▶ Minimize bioavailability of contaminants through adequate contaminant source and plume controls
- ▶ Reduce noise and lighting disturbance

Material Consumption and Waste Generation

- ▶ Minimize extraction or destruction of natural resources such as oil and timber
- ▶ Use technologies designed to minimize waste generation
- ▶ Re-use materials during treatment processes and daily operations whenever possible
- ▶ Recycle routine waste and recycle or salvage scrap material during construction and demolition

Long-Term Stewardship Actions

- ▶ Integrate an adaptive management approach into long-term controls for a site
- ▶ Install renewable energy systems to power long-term cleanup and future activities on redeveloped land
- ▶ Use passive sample devices for long-term monitoring, where feasible
- ▶ Solicit community involvement to increase public acceptance and awareness of long-term activities and restrictions