Bioremediation Strategies:

High arsenic and other anionic metals:
(Mulch with matsutake, shaggy mane mushrooms, discard mushrooms)

Phase one: phytoremediation
Raise pH to increase solubility
Treat with compost tea high in humic acid, fulvic acid, phosphorus (bat guano?)
Phytoremediate with mustard greens
Harvest and safely dispose of them
Retest—treat again?

Phase two:
Lower pH to decrease solubility
Aerate soil
Treat with aerated compost tea, mycorrizal fungi added at end of brew

Lead and Cationic metals
(mulch with morels, agaricus bitorquis)
Phytoremediate:
Lower pH
Grow out mustard greens, sunflowers, tobacco? other plants
When greens are well grown, chelate with EDTA
Harvest within seven days, discard
Retest, repeat?
Then..sequester
Raise pH with lime
Aerate, add ACT, with mycorrhizal fungi at last stage of brewing
Add compost, organic matter

Pesticides:
Start anaerobic
Spray with EM
Mulch with white rotters
Retest

Mercury
Spray with EM?
Mulch with oyster mushrooms or (boletus edulis)
Discard mushrooms
Retest
Raise pH,
Add organic material, ACT

Fuel contamination
Spray with EM?
Mulch with oyster mushrooms
Follow with compost, aeration
ACT

Or, just go directly to:
Spray with EM, ACT, aerate soil, mulch

Could test various approaches

PAHs

Spray with EM?
Mulch with oyster mushrooms
Follow with compost, aeration
ACT

Mixed Anionic/Cationic Heavy Metals

(Mulch with matsutake, shaggy mane mushrooms, morels, agaricus bitorquis, discard mushrooms)

Cationic removal phase:
Test soil, if necessary lower pH with amendments
Grow out mustard greens, sunflowers, tobacco, etc.
When greens are well grown, chelate with EDTN
Harvest within seven days, discard
Retest—repeat?

Anionic removal/cationic binding phase:
Raise pH with lime
Treat with compost tea high in humic acid, fulvic acid, phosphorus (bat guano?)
Phytoremediate with mustard greens
Harvest and safely dispose of them
Retest—treat again?

Finishing:
Aerate soil
Add compost for neutral pH
Treat with aerated compost tea, mycorrizal fungi added at end of brew

Treatment can be adjusted depending on which metals predominate.

Mixed Fuel/PAHs/pesticides and Heavy Metals:

Begin with EM spray and oyster mushroom inoculation as first phase, then continue as above.