

Case studies presented in this appendix provide an overview of the capping sites that are focused on the chemical isolation of contaminated sediments. Table A-1 presents a list of the case studies summarized in this appendix, which typically include the following information:

- site description
- site investigation and CSM summary
- remedy design and construction
- post-remedy monitoring
- references
- photos

Table A-1. Case study summary

No.	Site Description	Location	COCs	Remedy Description	References
1	Crude Oil Spill Site	Mayflower, Arkansas	Crude oil-related sheens	Excavation and backfilling, reactive capping, and in situ amendment placement	(Arcadis 2014a, 2014b, 2015, 2017)
2	Former Portland Gas Manufacturing Site	Portland, Oregon	Oily or tar-like materials, PAHs, TPH, BTEX, cyanide, metals	Dredging, amended capping, enhanced natural recovery, and monitored natural recovery	(Anchor QEA 2019, 2020, 2021; Oregon Department of Environmental Quality 2017)
3	Diamond Alkali Superfund Site, Lower 8.3 Miles of the Lower Passaic River	Essex and Hudson Counties, New Jersey	Dioxins/furans, PCBs, mercury, total(4,4')DDx, copper, dieldrin, PAHs, lead	Determination of site-specific cap material, porewater and sediment-porewater partition coefficients	(Arcadis 2021; Arcadis and Tech 2020)
4	East Branch Grand Calumet River	Calumet, Indiana	PAHs and metals	Dredging and reactive cap	(J.H. Hull et al. 2015)
5	Zidell Waterfront Property	Portland, Oregon	PCBs, metals, PAHs	Cap over riverbank and sediment bed	(Oregon Department of Environmental Quality 2023)
6	Linnton Terminal	Portland, Oregon	LNAPL	Multilayer cap	(Gentry et al. 2020)
7	Manistique River and Harbor	Manistique, Michigan	PCBs	Removal and disposal and amended cover placement with activated carbon	(EA and Foth 2013), (Arcadis of Michigan 2018, 2020), (Riley 2021)

Acronyms and Abbreviations:

BTEX = benzene, toluene, ethylbenzene, and xylene

COC = contaminant of concern

LNAPL = light nonaqueous-phase liquid

PAH = polycyclic aromatic hydrocarbon

PCB = polychlorinated biphenyl

TPH = total petroleum hydrocarbons