

Rapid Design and Analysis of Groundwater Remediation Systems

Course Outline

No.	Section	Start	Stop	Sub-Sect Duration	Section Duration
0	Registration	7:30	8:00		30
1	Introduction	8:00	8:15		15
2	Groundwater Remedial Technologies & Guidance Overview				25
	Overview of In-Situ & Ex-Situ Remedial Technologies (focus on hydraulic remedies)	8:15	8:30	15	
	CT Regulations and Other Guidance	8:30	8:40	10	
3	Remediation Calculator Toolkit Overview				25
	AEM Method Overview	8:40	8:50	10	
	Calculator Toolkit Overview	8:50	9:05	15	
4	Extraction and Injection Wells				60
	- lecture on well hydraulics and remedial systems	9:05	9:30	25	
	- exercise	9:30	10:05	35	
	BREAK	10:05	10:20		15
5	Trenches				50
	- lesson on trench hydraulics and remedial systems	10:20	10:40	20	
	- exercise	10:40	11:10	30	
6	Vertical Barriers (slurry walls; sheetpile walls)				60
	- lesson on vertical barrier hydraulics and remedial systems	11:10	11:35	25	
	- exercise	11:35	12:10	35	
	LUNCH BREAK	12:10	1:10		60
7	Permeable Reactive Barriers & Funnel and Gate Systems				60
	- lesson on PRB and F&G hydraulics and remedial systems	1:10	1:35	25	
	- exercise	1:35	2:10	35	
8	Adjusting Calculators to Site Conditions				40
	Adding Hydrogeologic Complexity	2:10	2:30	20	
	Stepwise Modeling Example (moving from calculator to a groundwater model when necessary)	2:30	2:50	20	
	BREAK	2:50	3:05		15
9	Graphics and Data Output	3:05	3:25		20
10	Remediation System Design Problem				90
	Intro (intro to site setting and contamination; remedial system design constraints; etc.)	3:25	3:40	15	
	Exercise	3:40	4:40	60	
	Design Problem Wrap Up and Discussion	4:40	4:55	15	
11	Final Course Wrap Up and Q&A	4:55	5:00		5