



Radium or Uranium Removal System Cost Evaluation

Equipment, Installation and Start-up	WRT	Company A	Company B
Equipment – Complete Radium or Uranium Removal Treatment System including: treatment vessels, connection piping, pre- and post-filtering as required, controls and monitoring, etc.	√		
Produce detailed equipment drawings and specifications	√		
Equipment freight delivered to site	√		
On-site equipment inspection and testing prior to media installation	√		
Treatment media	√		
Treatment media freight delivered to site	√		
Media installation and disinfection	√		
On-site Operator training	√		
Operation and Maintenance Manuals for all equipment provided	√		

Radioactive Materials Licensing and Monitoring

Radiation Safety Awareness Training for Operators	√		
Annual refresher training for Operators	√		
Radioactive Materials License issued for system to operate and maintain for the length of the contract	√		
Renewal of Radioactive Materials License as required	√		
Radiation exposure badges for treatment site	√		
Radiation exposure badge monitoring, data management and archiving for the length of the contract	√		
Maintain central database for system performance, radiation monitoring and health and safety records	√		
On-staff Radiation Safety Officer accessible 24/7	√		

System Maintenance and Warranty

Periodic water analysis to monitor system performance	√		
Periodic media analysis to monitor system performance	√		
System spare parts	√		
Equipment maintenance for the length of the contract	√		
Equipment warranty for the length of the contract	√		
Guaranteed process performance and compliance with the MCL for the length of the contract	√		

√ = Included in WRT pricing



Radium or Uranium Removal System Cost Evaluation

Media Exchange and Replacement	WRT	Company A	Company B
Transfer of radium or uranium ownership from the Utility	√		
Replacement treatment media	√		
Replacement treatment media freight delivered to site	√		
On-site labor for media exchange	√		
Equipment required for media exchange	√		
Packaging and labeling of spent treatment media	√		
DOT documentation and permits for transportation	√		
Transportation of spent media to disposal site	√		
Licensed disposal of spent media	√		
Radiation survey of site and documentation after each media exchange	√		
Radiation training for media exchange labor / employees	√		
Guaranteed pricing that includes media exchange and disposal for the length of the contract	√		

Decontamination & Disposal of Equipment at End of Contract			
On-site labor for treatment media removal	√		
Equipment required for media removal	√		
Packaging and labeling of spent treatment media	√		
DOT documentation and permits for transportation	√		
Transportation of spent media to disposal site	√		
Licensed disposal of spent media	√		
Radiation survey and decontamination of treatment equipment	√		
Removal of treatment equipment from site	√		
Radiation survey and decontamination of site	√		
Documentation of site closure	√		

Liability and Risk Management			
Contractual responsibility for all radioactive aspects of the treatment system for the length of the contract	√		
Contractual responsibility for all radioactive residuals	√		

√ = Included in WRT pricing