

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.01	.00			PROGRAM MANAGEMENT, SUPPORT & INFRASTRUCTURE (OPTIONAL) (Installation / Complex-Wide Activities)				.22	.00		GENERAL REQUIREMENTS (Optional Breakout)
.01	.01	.00		Program Management							
.01	.01	.01		Program Planning							
.01	.01	.02		Compliance Management							
.01	.01	.03		Pollution Prevention Management							
.01	.01	.04		Conservation / Environmental Restoration Management							
.01	.02	.00		Program Support							
.01	.02	.01		Training / Certification							
.01	.02	.02		Public Affairs / Community Relations							
.01	.02	.03		Administrative Support				.22	.02		Administration Job Office
.01	.02	.04		Procurement - Equipment & Material				.22	.03		Warehouse, Materials Handling, and Purchasing
.01	.02	.05		Engineering & Supervision				.22	.01		Supervision and Management
.01	.02	.06		Surveying and Quality Control				.22	.04		Engineering, Surveying, and Quality Control
.01	.02	.07		Legal Support / Regulatory Interaction							
.01	.02	.08		Medical / Health & Safety				.22	.07		Health & Safety
.01	.02	.09		Consulting Costs							
.01	.03	.00		Program Infrastructure							
.01	.03	.01		Cost of Ownership				.22	.08		Temporary Construction Facilities-Ownership
.01	.03	.02		Insurance, Interest, and Fees				.22	.12		Insurance, Interest, and Fees
.01	.03	.03		Cost of Money							
.01	.03	.04		General & Administrative							
.01	.03	.05		Award Fee							
.01	.03	.06		Fixed Fee							
.01	.03	.07		Support Services							
.01	.03	.08		Project Utilities				.22	.10		Project Utilities
.01	.03	.09		Miscellaneous Project Expenses				.22	.11		Miscellaneous Project Expenses
.01	.03	.10		Equipment Maintenance and Motor Pool				.22	.05		Equipment Maintenance and Motor Pool
.01	.03	.11		First Aid, Fire Protection, Traffic Control, and Security				.22	.06		First Aid, Fire Protection, Traffic Control, and Security
.01	.04	.00		Construction Management				.33	.00		Supervision & Administration (S&A) Construction Management
.01	.04	.01		Site Work							
.01	.04	.02		Treatment Plant/Facility							
.01	.04	.03		Storage Facility							
.01	.04	.04		Disposal Facility							
.01	.04	.05		Ordnance & Explosives Removal & Destruction							
.01	.04	.06		Drums / Tanks / Structures & Misc Demolition & Removal							
.01	.04	.07		Air Pollution / Gas Collection or Control							
.01	.04	.08		Surface Water / Sediments Containment, Collection, or Control							
.01	.04	.09		Groundwater Containment, Collection, or Control							
.01	.04	.10		Solids / Soils Containment (e.g., Capping) Collection or Control							
.01	.04	.11		Liquid Waste / Sludge (e.g., UST/AST) Containment, Collection, or Control							
.01	.04	.12		In Situ Biological Treatment							
.01	.04	.13		Ex Situ Biological Treatment							
.01	.04	.14		In Situ Chemical Treatment							
.01	.04	.15		Ex Situ Chemical Treatment							
.01	.04	.16		In Situ Physical Treatment							
.01	.04	.17		Ex Situ Physical Treatment							
.01	.04	.18		In Situ Thermal Treatment							
.01	.04	.19		Ex Situ Thermal Treatment							
.01	.04	.20		In Situ Stabilization / Fixation / Encapsulation							
.01	.04	.21		Ex Situ Stabilization / Fixation / Encapsulation							
.01	.04	.22		Facility Decommissioning & Dismantlement							
.01	.05	.00		Government - Construction Management							
.01	.05	.01		Site Work							
.01	.05	.02		Treatment Plant / Facility							
.01	.05	.03		Storage Facility							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.01	.05	.04		Disposal Facility							
.01	.05	.05		Ordnance & Explosives Removal & Destruction							
.01	.05	.06		Drums / Tanks / Structures & Misc Demolition & Removal							
.01	.05	.07		Air Pollution/Gas Collection or Control							
.01	.05	.08		Surface Water / Sediments Containment, Collection, or Control							
.01	.05	.09		Groundwater Containment, Collection, or Control							
.01	.05	.10		Solids / Soils Containment (e.g., Capping) Collection or Control							
.01	.05	.11		Liquid Waste/Sludge (e.g., UST/AST) Containment, Collection, or Control							
.01	.05	.12		In Situ Biological Treatment							
.01	.05	.13		Ex Situ Biological Treatment							
.01	.05	.14		In Situ Chemical Treatment							
.01	.05	.15		Ex Situ Chemical Treatment							
.01	.05	.16		In Situ Physical Treatment							
.01	.05	.17		Ex Situ Physical Treatment							
.01	.05	.18		In Situ Thermal Treatment							
.01	.05	.19		Ex Situ Thermal Treatment							
.01	.05	.20		In Situ Stabilization/Fixation/Encapsulation							
.01	.05	.21		Ex Situ Stabilization/Fixation/Encapsulation							
.01	.05	.22		Facility Decommissioning & Dismantlement							
.02	.00			PROJECT MANAGEMENT & SUPPORT							
.02	.00			(Operable Unit / Solid Waste Management Unit)							
.02	.01	.00		Project Management / Support / Administration	.02	.00					PROJECT MANAGEMENT / SUPPORT / ADMIN
.02	.01	.01	.00	Project Management	.02	.01	.00				Conduct Project Management
.02	.01	.01	.01	Develop Cost Estimate	.02	.01	.01				Develop Cost Estimate
.02	.01	.01	.02	Cost / Schedule Control System	.02	.01	.02				Cost / Schedule Control System
.02	.01	.01	.03	Value Engineering / Cost Analysis	.02	.01	.03				Value Engineering / Cost Analysis
.02	.01	.01	.04	Engineering Network Analysis	.02	.01	.04				Engineering Network Analysis
.02	.01	.01	.05	Manage, Track and Report Equipment Status	.02	.01	.05				Manage, Track and Report Equipment Status
.02	.01	.01	.06	Attend Scoping Meeting	.02	.01	.07				Attend Scoping Meeting
.02	.01	.01	.07	Conduct Site Visit	.02	.01	.06				Conduct Site Visit
.02	.01	.01	.08	Evaluate Existing Data	.02	.01	.08				Evaluate Existing Data
.02	.01	.01	.09	Attend Public Meetings / Hearing / Meetings with PRP's	.03	.01					Attend Meetings
.02	.01	.01	.10	Prepare Reports / Participate in Reviews	.02	.01	.09				Prepare Reports / Participate in Reviews
.02	.01	.01	.10	Prepare Reports / Participate in Reviews				.17	.05	.05	Status Review
.02	.01	.01	.11	Proposed Plan Support							
.02	.01	.01	.12	Responsiveness Summary Report							
.02	.01	.01	.13	Work Assignment Closeout							
.02	.01	.01	.14	Project Closeout	.02	.01	.10				Project Closeout
.02	.01	.02		Personnel Training				.17	.04	.20	Personnel Training
.02	.01	.03	.00	Support subcontracting Activities	.02	.02	.00				Support Subcontracting Activities
.02	.01	.03	.01	Procurement of Subcontractors	.02	.02	.01				Procurement of Subcontractors
.02	.01	.03	.02	Perform Subcontract Management							
.02	.01	.03	.03	Contractor QA Program	.02	.02	.02				Contractor QA Program
.02	.01	.03	.04	Coordinate with Analytical Laboratory	.02	.02	.03				Coordinate with Analytical Laboratory
.02	.01	.04	.00	Administration / Reporting	.02	.03	.00				Administration / Reporting
.02	.01	.04	.00	Administration / Reporting	.17	.00					POST ASSESSMENT SUPPORT
.02	.01	.04	.01	Meeting Participation/Routine Communications	.17	.01					Attend Public Meetings/Hearings/Meetings with PRP's
.02	.01	.04	.02	Prepare Presentation Materials	.17	.02					Prepare Presentation Materials
.02	.01	.04	.03	Assist in Preparation of Documents	.17	.03	.00				Assist in Preparation of Documents
.02	.01	.04	.03	Assist in Preparation of Documents	.17	.03	.01				Proposed Plan
.02	.01	.04	.03	Assist in Preparation of Documents	.17	.03	.02				Responsiveness Summary
.02	.01	.04	.03	Assist in Preparation of Documents	.17	.03	.03				Decision Document
.02	.01	.04	.04	Compile Documents	.03	.02	.00				Compile Documents
.02	.01	.04	.04	Compile Documents	.03	.02	.01				Prepare Draft Administrative Record Index
.02	.01	.04	.04	Compile Documents	.03	.02	.02				Prepare Administrative Record Index
.02	.01	.04	.04	Compile Documents	.03	.02	.03				Coordinate Duplication of Administrative Record

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.02	.01	.04	.05	Assemble / Update Administrative Record and Index	.03	.03					Assemble / Update Administrative Record and Index
.02	.01	.04	.06	Document Cost and Performance Status	.02	.03	.01				Document Cost and Performance Status
.02	.01	.04	.07	Billings	.02	.03	.02				Billings
.02	.01	.05	.00	Negotiation Support							
.02	.01	.05	.01	Attend Negotiation Sessions & Meetings							
.02	.01	.05	.02	Review of PRP Documents							
.02	.01	.05	.03	Provide Technical Memorandum							
.02	.01	.06	.00	Administration Record	.03	.00					ADMINISTRATIVE RECORD
.02	.01	.06	.01	Coordinate with Administrative Record Coordinator							
.02	.01	.06	.02	Provide Assistance in Document Compilation							
.02	.01	.06	.03	Prepare Draft Administrative Record Index							
.02	.01	.06	.04	Prepare Administrative Record Index							
.02	.01	.06	.05	Coordinate Duplication of Administrative Index							
.02	.01	.06	.06	Assemble Administrative Record & Index							
.02	.02	.00		Community Relations	.04	.00					COMMUNITY RELATIONS
.02	.02	.01		Conduct Community Interviews	.04	.01					Conduct Community Interviews
.02	.02	.02	.00	Provide Support for Community Relations	.04	.02	.00				Provide Support for Community Relations
.02	.02	.02	.01	Prepare Fact Sheets	.04	.02	.01				Prepare Fact Sheets
.02	.02	.02	.02	Participate in Public Meetings / Hearings	.04	.02	.02				Participate in Public Meetings / Hearings
.02	.02	.02	.03	Support Briefings	.04	.02	.03				Support Briefings
.02	.02	.03		Maintain Public Information Repository	.04	.03					Maintain Public Information Repository
.02	.03	.00		Regulatory Interaction	.05	.00					REGULATORY INTERACTION
.02	.03	.01		Support Meetings with Regulators	.05	.01					Support Meetings with Regulators
.02	.03	.02	.00	Coordination of Laws & Regulations	.05	.02	.00				Coordination of Laws & Regulations
.02	.03	.02	.01	Prepare Initial Notification	.05	.02	.01				Prepare Initial Notification
.02	.03	.03	.00	Develop Interagency Agreement	.05	.03	.00				Develop Interagency Agreement
.02	.03	.03	.01	Agency Review Support	.05	.03	.01				Agency Review Support
.02	.03	.03	.02	State & Local Agency Review	.05	.03	.02				State & Local Agency Review
.02	.03	.04		Regulatory Reports/Reviews	.05	.04					Develop Regulatory Reports / Permits / Reviews
.02	.03	.05		Regulatory Permitting (e.g., RCRA Part B Permit)	.05	.04					Develop Regulatory Reports / Permits / Reviews
.02	.03	.05		Regulatory Permitting (e.g., RCRA Part B Permit)				.17	.01	.02	Licensing
.02	.03	.06		Update Regulatory Permits (e.g., RCRA Part B Permit)							
.02	.04	.00		Institutional Controls				.01	.08		Institutional Controls
.02	.04	.01		Alternate Water Supply				.01	.09		Alternate Water Supply
.02	.04	.02		Population Relocation				.01	.10		Population Relocation
.02	.04	.03		Permanent Markers				.20	.02		Permanent Markers
.02	.04	.04		Permanent Features				.20	.03		Permanent Features
.02	.05	.00		Post Design Support	.22	.00					POST DESIGN SUPPORT
.02	.05	.01		Identify Long Lead Items	.19						IDENTIFICATION OF LONG LEAD ITEMS
.02	.05	.02	.00	Perform Prebid (Pre-Solicitation) Activities	.22	.01	.00				Perform Prebid (Pre-Solicitation) Activities
.02	.05	.02	.01	Support Preparation of Solicitation Package	.22	.01	.01				Support Preparation of Solicitation Package
.02	.05	.02	.02	Printing and Distribution of Contract Documents	.22	.01	.02				Printing and Distribution of Contract Documents
.02	.05	.02	.03	Advertising/Soliciting of Bids	.22	.01	.03				Advertising/Soliciting of Bids
.02	.05	.02	.04	Issuing Addenda	.22	.01	.04				Issuing Addenda
.02	.05	.02	.05	Pre-Bid (Pre-Solicitation) Meetings	.22	.01	.05				Prebid(Pre-Solicitation) Meetings
.02	.05	.02	.06	Resolution of Bidder (Offeror) Inquiries	.22	.01	.06				Resolution of Bidder (Offeror) Inquiries
.02	.05	.02	.07	On-site Visits	.22	.01	.07				On-Site Visits
.02	.05	.03	.00	Perform Pre-award Activities	.22	.02	.00				Perform Preaward Activities
.02	.05	.03	.01	Receipt of Bids (Offers)	.22	.02	.01				Receipt of Bids (Offers)
.02	.05	.03	.02	Determination of Responsive, Responsible Bidders	.22	.02	.02				Determination of Responsive, Responsible Bidders
.02	.05	.03	.03	Bid Tabulation	.22	.02	.03				Bid Tabulation
.02	.05	.03	.04	Bid Analysis	.22	.02	.04				Bid Analysis
.02	.05	.03	.05	Receipt of Follow-Up Items From Low. Resp. Bidder	.22	.02	.05				Receipt Of Follow-Up Items From Low. Resp. Bidder
.02	.05	.03	.06	Review of EEO, MBE Requirements, SDB Subcontractor Plans	.22	.02	.06				Review Of Eeo, Mbe Require., Sdb Subcontr. Plans
.02	.05	.03	.07	Reference Checks	.22	.02	.07				Reference Checks
.02	.05	.03	.08	Request for Consent From EPA	.22	.02	.08				Request for Consent from EPA

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.02	.05	.03	.09	Support Preparation of Contract Documents	.22	.02	.09				Support Preparation of Contract Documents
.02	.05	.04		Provide Technical Assistance - Responsiveness Summary							
.02	.05	.05		Provide Technical Assistance - Proposed Plan & ROD							
.02	.05	.06		Prepare Feasibility Addendum							
.02	.06	.00		Procurement - Equipment & Material				.17	.03	.00	Procurement of Equipment and Material
.02	.06	.00		Procurement - Equipment & Material				.17	.03	.01	Site Dismantling Equipment
.02	.06	.00		Procurement - Equipment & Material				.17	.03	.02	Radiation Protection and Health Physics Equipment
.02	.06	.00		Procurement - Equipment & Material				.17	.03	.03	Security and Maintenance Equipment for Long-Term Storage
.02	.06	.00		Procurement - Equipment & Material				.17	.04	.09	Design and Procurement of Special Tools for Dismantling
.02	.07	.00		A/E Support During Remedial Action	.23	.00					A/E SUPPORT DURING REMEDIAL ACTION
.02	.07	.00		A/E Support During Remedial Action				.33	.00		Engineering During Construction (EDC)
.02	.07	.01		Submittal Reviews	.23	.01					Submittal Reviews
.02	.07	.02		Site Inspection	.23	.02					Site Inspection
.02	.07	.03		Document Activities	.23	.03					Document Activities
.02	.07	.04		Participate in Construction Management Meetings	.23	.04					Participate In Construction Management Meetings
.02	.08			Construction Management				.33	.00		Supervision & Administration (S&A) Construction Management
.02	.09			Independent Contractor Verification of Cleanup or Reuse							
.02	.10	.00		Enforcement	.18	.00					ENFORCEMENT SUPPORT
.02	.10	.01		PRP Searches / Field Investigations	.18	.01					PRP Searches / Field Investigations
.02	.10	.02	.00	PRP Negotiation Support	.18	.02	.00				PRP Negotiation Support
.02	.10	.02	.01	Attend Negotiation Sessions and Meetings	.18	.02	.01				Attend Negotiation Sessions and Meetings
.02	.10	.02	.02	Review of PRP Documents	.18	.02	.02				Review of PRP Documents
.02	.10	.02	.03	Document Findings	.18	.02	.03				Document Findings
.03	0			PREPARATION OF PLANS	.01	.00					PREPARATION OF PLANS
.03	.01			Work Plan	.01	.01					Work Plan
.03	.02			Chemical Data Acquisition Plan	.01	.02					Chemical Data Acquisition Plan
.03	.03	.00		Sampling and Analysis Plan	.01	.03	.00				Sampling and Analysis Plan
.03	.03	.01		Quality Assurance Project Plan	.01	.03	.01				Quality Assurance Project Plan
.03	.03	.02		Field Sampling Plan	.01	.03	.02				Field Sampling Plan
.03	.04			Site Health & Safety Plan	.01	.04					Site Health & Safety Plan
.03	.05			Pollution Control and Mitigation Plan	.01	.05					Pollution Control and Mitigation Plan
.03	.06			Data Management Plan	.01	.06					Data Management Plan
.03	.07			Community Relations Plan	.01	.07					Community Relations Plan
.03	.08			Transportation & Disposal Plan (Waste Mgt. Plan)	.01	.08					Transportation & Disposal Plan (Waste Mgt. Plan)
.03	.09			Site Management Plan	.01	.09					Site Management Plan
.03	.10			Risk Assessment Plan	.01	.10					Risk Assessment Plan
.03	.11	.00		Technical Project Goals & Objectives	.01	.11	.00				Develop Technical Project Goals & Objectives
.03	.11	.01		Develop Conceptual Site Model	.01	.11	.01				Develop Conceptual Site Model
.03	.11	.02		ID of Data Needs & DQOs	.01	.11	.02				ID of Data Needs & DQOs
.03	.11	.03		ID of Prelim. RA Objectives & Potential Alternatives	.01	.11	.03				ID of Prelim. RA Objectives & Potential Alternatives
.03	.11	.04		ID of Treatability Studies	.01	.11	.04				ID of Treatability Studies
.03	.11	.05		Preliminary ID of ARARs of STDs	.01	.11	.05				Preliminary ID of ARARs of STDs
.03	.11	.06		ID of NEPA Requirements	.01	.11	.06				ID of NEPA Requirements
.03	.11	.07		ID of Other Regulatory Requirements	.01	.11	.07				ID of Other Regulatory Requirements
.03	.12			Submittals / Implementation Plans				.01	.03		Submittals/Implementation Plans
.03	.12			Submittals / Implementation Plans				.21	.06		Submittals
.03	.13	.00		Emergency Response Plans / Report / Approval	.01	.12	.00				Develop Emergency Response Plans / Report / Approval
.03	.13	.01		Engineering Evaluation & Cost Analyses	.01	.12	.01				Engineering Evaluation & Cost Analyses
.03	.13	.02		Action Memo Preparation	.01	.12	.02				Action Memo Preparation
.03	.13	.03		Removal Action Plans & Specs.	.01	.12	.03				Removal Action Plans & Specs.
.03	.14			Interim Remedial Plans / Reports / Approval	.01	.13					Develop Interim Remedial Plans / Reports / Approval
.03	.15			Decommissioning Plan				.17	.01	.01	Preparation of Decommissioning Plan
.03	.15			Decommissioning Plan				.17	.05	.03	Considerations on Actual and Future Dismantling
.03	.15			Decommissioning Plan				.17	.05	.04	Decontamination Strategies/Techniques
.03	.16			Post RA/D&D Monitoring Plan							
.04	.00			STUDIES/DESIGN & DOCUMENTATION	.12	.00					RISK ASSESSMENT

Environmental Management (Environmental Restoration & Waste Management)				32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	2nd	3rd	4th	2nd	3rd	4th	
.04	.01			Hazardous Ranking System (HRS)	.12	.03				Document Risk (Hrs)
.04	.02	.00		Human Health Risk Assessment	.12	.01	.00			Human Health Risk Assessment
.04	.02	.01		Hazard Identification (Sources)	.12	.01	.01			Hazard Identification (Sources)
.04	.02	.02		Dose-response Assessment	.12	.01	.02			Dose-Response Assessment
.04	.02	.03		Prepare Conceptual Experiment / Pathway Analysis	.12	.01	.03			Prepare Conceptual Exp./Pathway Analysis
.04	.02	.04		Characterization of Site and Potential Receptors	.12	.01	.04			Characterization of Site and Potential Receptors
.04	.02	.05		Exposure Assessment	.12	.01	.05			Exposure Assessment
.04	.02	.06		Risk Characterization	.12	.01	.06			Risk Characterization
.04	.02	.07		Limitations / Uncertainties	.12	.01	.07			Limitations/Uncertainties
.04	.02	.08		Site Conceptual Model	.12	.01	.08			Site Conceptual Model
.04	.03	.00		Ecological Risk Assessment	.12	.02	.00			Ecological Risk Assessment
.04	.03	.01		Hazard Identification (Sources)	.12	.02	.01			Hazard Identification (Sources)
.04	.03	.02		Dose-Response Assessment						
.04	.03	.03		Prepare Conceptual Experiment / Pathway Analysis	.12	.02	.02			Prepare Conceptual Exp./Pathway Analysis
.04	.03	.04		Characterization of Site and Potential Receptors	.12	.02	.03			Characterization of Site and Potential Receptors
.04	.03	.05		Select Chemicals, Indicator Species, & End Points	.12	.02	.04			Select Chemicals, Indicator Species, & End Points
.04	.03	.06		Exposure Assessment	.12	.02	.05			Exposure Assessment
.04	.03	.07		Toxicity Assessment / Ecological Effects Assessment	.12	.02	.06			Toxicity Assessment/Ecological Effects Assessment
.04	.03	.08		Risk Characterization	.12	.02	.07			Risk Characterization
.04	.03	.09		Limitations / Uncertainties	.12	.02	.08			Limitations/Uncertainties
.04	.03	.10		Site Conceptual Model	.12	.02	.09			Site Conceptual Model
.04	.04	.00		Document Remedial Investigation & Risk Assessment	.13	.00				DOCUMENT ASSESSMENT
.04	.04	.01	.00	Compose Draft Remedial Investigation Reports						
.04	.04	.01	.01	Human Health Risk Assessment						
.04	.04	.01	.02	Ecological Risk Assessment						
.04	.04	.02	.00	Compose Draft Remedial Investigation Reports	.13	.01	.00			Compose Draft Report(S)
.04	.04	.02	.01	Perform Data Compilation	.13	.01	.01			Perform Data Compilation
.04	.04	.02	.02	Present Data (Format Tables & Prepare Graphics)	.13	.01	.02			Present Data (Format Tables & Prepare Graphics)
.04	.04	.02	.03	Site Background	.13	.01	.03			Site Background
.04	.04	.02	.04	Investigation	.13	.01	.04			Investigation
.04	.04	.02	.05	Site Characteristics	.13	.01	.05			Site Characteristics
.04	.04	.02	.06	Nature and Extent of Contamination	.13	.01	.06			Nature and Extent of Contamination
.04	.04	.02	.07	Fate and Transport	.13	.01	.07			Fate and Transport
.04	.04	.02	.08	Summary and Conclusions	.13	.01	.08			Summary and Conclusions
.04	.04	.02	.09	Reproduction / Distribution	.13	.01	.09			Reproduction / Distribution
.04	.04	.03		Respond to Comments	.13	.02				Respond to Comments
.04	.04	.04	.00	Finalize Report	.13	.03	.00			Finalize Report
.04	.04	.04	.01	Reproduction / Distribution	.13	.03	.01			Reproduction / Distribution
.04	.05	.00		Perform Remedial Investigation (RI or RCRA RFI)	.13	.00				DOCUMENT ASSESSMENT
.04	.05	.01		Site Background	.13	.01	.03			Site Background
.04	.05	.02	.00	Investigation	.13	.01	.04			Investigation
.04	.05	.02	.01	Field Investigation & Technical Approach						
.04	.05	.02	.02	Chemical Analysis & Analytical Methods						
.04	.05	.02	.03	Field Methodologies						
.04	.05	.03	.00	Site Characteristics	.13	.01	.05			Site Characteristics
.04	.05	.03	.01	Geology						
.04	.05	.03	.02	Hydrology						
.04	.05	.03	.03	Meteorology						
.04	.05	.03	.04	Demographics & Land Use						
.04	.05	.03	.05	Ecological Assessment						
.04	.05	.04	.00	Nature & Extent of Contamination	.13	.01	.06			Nature and Extent of Contamination
.04	.05	.04	.01	Contaminant Sources						
.04	.05	.04	.02	Contaminant Distribution & Trends						
.04	.05	.05	.00	Fate & Transport	.13	.01	.07			Fate and Transport
.04	.05	.05	.01	Contaminant Characteristics						
.04	.05	.05	.02	Transport Process						

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.04	.05	.05	.02	Contaminant Migration Trends							
.04	.05	.06		Summary & Conclusions	.13	.01	.08				Summary and Conclusions
.04	.06	.00		Develop Remedial Alternatives	.14	.01	.00				Develop Remedial Alternatives
.04	.06	.01		Establish Remedial Action Objectives	.14	.01	.01				Establish Remedial Action Objectives
.04	.06	.02		Establish General Response Actions	.14	.01	.02				Establish General Response Actions
.04	.06	.03		ID Preliminary Alternatives	.14	.01	.03				Id Preliminary Alts
.04	.06	.04		Identify & Screen Applicable Remedial Technologies	.14	.01	.04				Identify & Screen Applicable Remedial Technologies
.04	.06	.05		Develop remedial Alternatives in Accordance with NCP							
.04	.06	.06		Identify Treatability Study Requirement	.14	.01	.05				Identify Treatability Study Requirement
.04	.06	.07		Assemble Technologies Into Actions	.14	.01	.06				Assemble Technologies into Actions
.04	.06	.08		Develop Conceptual Site Model	.14	.01	.07				Develop Conceptual Site Model
.04	.07	.00		Screen Remedial Alternatives	.14	.02	.00				Screen Remedial Alternatives
.04	.07	.01		Screen Alternatives Base on Selected Criteria	.14	.02	.01				Screen Alts Based on Selected Criteria
.04	.07	.02		ID / Evaluate Action-Specific ARARs	.14	.02	.06				ID / Evaluate Action-Specific ARARs
.04	.07	.03		Refine List of Alternatives	.14	.02	.07				Refine List of Alternatives
.04	.08	.00		Evaluate Alternatives	.14	.03	.00				Evaluate Alternatives
.04	.08	.01		Overall Protection of Human Health & Environment	.14	.03	.01				Overall Protection of Human Health & Environment
.04	.08	.02		Compliance with ARARs	.14	.03	.02				Compliance With ARARs
.04	.08	.03		Long-Term Effectiveness and Permanence	.14	.03	.03				Long-Term Effectiveness and Permanence
.04	.08	.04		Reduction in Toxicity, Mobility or Volume	.14	.03	.04				Reduction in Toxicity, Mobility or Volume
.04	.08	.05		Short-Term Effectiveness	.14	.03	.05				Short-Term Effectiveness
.04	.08	.06		Implementability - Technical And Administrative	.14	.03	.06				Implementability - Technical and Administrative
.04	.08	.07		Cost	.14	.03	.07				Cost
.04	.08	.08		State Acceptance	.14	.03	.08				State Acceptance
.04	.08	.09		Community Acceptance	.14	.03	.09				Community Acceptance
.04	.09	.00		Refinement of Alternatives	.14	.04	.00				Refinement of Alternatives
.04	.09	.01		Priority Model Scoring	.14	.04	.01				Priority Model Scoring
.04	.09	.02		Selection of Remedy / Documentation	.14	.04	.02				Selection Of Remedy / Documentation
.04	.10	.00		Document Feasibility Study (FS or RCRA - CMS)	.16	.00	.00				DOCUMENT FS (CMS)
.04	.10	.01	.00	Compose Draft FS (CMS) Report	.16	.01	.00				Compose Draft FS (CMS) Report
.04	.10	.01	.01	Perform Data Compilation	.16	.01	.01				Perform Data Compilation
.04	.10	.01	.02	Present Data (Format Tables & Prepare Graphics)	.16	.01	.02				Present Data (Format Tables & Prepare Graphics)
.04	.10	.01	.03	Feasibility Study Objectives	.16	.01	.03				Feasibility Study Objectives
.04	.10	.01	.04	Remedial Objectives	.16	.01	.04				Remedial Objectives
.04	.10	.01	.05	General Response Actions	.16	.01	.05				General Response Actions
.04	.10	.01	.06	ID and Screening of Remedial Technologies	.16	.01	.06				ID and Screening of Remedial Technologies
.04	.10	.01	.07	Remedial Alternatives Description	.16	.01	.07				Remedial Alternatives Description
.04	.10	.01	.08	Detailed Analysis of Remedial Technologies	.16	.01	.08				Detailed Analysis of Remedial Alternatives
.04	.10	.01	.09	Develop Engineering Cost Analysis of Selected Alternative	.16	.01	.09				Develop Engineering Cost Analysis of Selected Alt
.04	.10	.01	.10	Summary and Conclusions	.16	.01	.10				Summary and Conclusions
.04	.10	.01	.11	Reproduction/Distribution	.16	.01	.11				Reproduction / Distribution
.04	.10	.02		Respond to Comments	.16	.02	.00				Respond to Comments
.04	.10	.03	.00	Finalize Report	.16	.03	.00				Finalize Report
.04	.10	.03	.01	Reproduction / Distribution	.16	.03	.01				Reproduction / Distribution
.04	.10	.04		Prepare Feasibility Study Addendum	.17	.04	.00				Prepare Feasibility Study Addendum
.04	.11	.00		Environmental Restoration Project Design	.20	.00	.00				DESIGN PREPARATION (6% Limit)
.04	.11	.01	.00	Preliminary Design	.20	.01	.00				Preliminary Design
.04	.11	.01	.01	Recommend Project Delivery Strategy and Scheduling	.20	.01	.01				Recommend Project Delivery Strategy and Schedule
.04	.11	.01	.02	Prepare Preliminary Construction Schedule	.20	.01	.02				Prepare Preliminary Construction Schedule
.04	.11	.01	.03	Prepare Specifications Outline	.20	.01	.03				Prepare Specifications Outline
.04	.11	.01	.04	Prepare Preliminary Drawings	.20	.01	.04				Prepare Preliminary Drawings
.04	.11	.01	.05	Prepare Basis of Design Report / Design Analysis	.20	.01	.05				Prepare Basis Of Design Report/Design Analysis
.04	.11	.01	.06	Prepare Preliminary Cost Estimate	.20	.01	.06				Prepare Preliminary Cost Estimate
.04	.11	.02	.00	Intermediate Design	.20	.02	.00				Intermediate Design
.04	.11	.02	.01	Update Construction Schedule	.20	.02	.01				Update Construction Schedule
.04	.11	.02	.02	Prepare Preliminary Specifications	.20	.02	.02				Prepare Preliminary Specifications

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.04	.11	.02	.03	Prepare Intermediate Drawings	.20	.02	.03				Prepare Intermediate Drawings
.04	.11	.02	.04	Prepare Basis of Design Report / Design Analysis	.20	.02	.04				Prepare Basis of Design Report/Design Analysis
.04	.11	.02	.05	Prepare Revised Cost Estimate	.20	.02	.05				Prepare Revised Cost Estimate
.04	.11	.02	.06	Participate in Intermediate Design Review / Briefing	.20	.02	.06				Participate in Intermediate Design Review/Briefing
.04	.11	.03	.00	Pre-Final / Final Design	.20	.03	.00				Pre-Final / Final Design
.04	.11	.03	.01	Prepare Pre-Final Design Specifications	.20	.03	.01				Prepare Pre-Final Design Specifications
.04	.11	.03	.02	Prepare Pre-Final Drawings	.20	.03	.02				Prepare Pre-Final Drawings
.04	.11	.03	.03	Prepare Basis of Design Report / Design Analysis	.20	.03	.03				Prepare Basis Of Design Report/Design Analysis
.04	.11	.03	.04	Prepare Revised Cost estimate	.20	.03	.04				Prepare Revised Cost Estimate
.04	.11	.03	.05	Participate in Pre-Final / Final Design Review	.20	.03	.05				Participate In Pre-Final/Final Design Review
.04	.11	.03	.06	Prepare 100% Design Submittal	.20	.03	.06				Prepare 100% Design Submittal
.04	.12	.00		Decontamination/Dismantlement Project Design							
.04	.12	.01	.00	Preliminary Design							
.04	.12	.01	.01	Recommend Project Delivery Strategy and Scheduling							
.04	.12	.01	.02	Prepare Preliminary Construction Schedule							
.04	.12	.01	.03	Prepare Specifications Outline							
.04	.12	.01	.04	Prepare Preliminary Drawings							
.04	.12	.01	.05	Prepare Basis of Design Report / Design Analysis							
.04	.12	.01	.06	Prepare Preliminary Cost Estimate							
.04	.12	.02	.00	Intermediate Design							
.04	.12	.02	.01	Update Construction Schedule							
.04	.12	.02	.02	Prepare Preliminary Specifications							
.04	.12	.02	.03	Prepare Intermediate Drawings							
.04	.12	.02	.04	Prepare Basis of Design Report / Design Analysis							
.04	.12	.02	.05	Prepare Revised Cost Estimate							
.04	.12	.02	.06	Participate in Intermediate Design Review / Briefing							
.04	.12	.03	.00	Pre-Final / Final Design							
.04	.12	.03	.01	Prepare Pre-Final Design Specifications							
.04	.12	.03	.02	Prepare Pre-Final Drawings							
.04	.12	.03	.03	Prepare Basis of Design Report / Design Analysis							
.04	.12	.03	.04	Prepare Revised Cost estimate							
.04	.12	.03	.05	Participate in Pre-Final / Final Design Review							
.04	.12	.03	.06	Prepare 100% Design Submittal							
.04	.13	.00		Facility Design							
.04	.13	.01	.00	Preliminary Design							
.04	.13	.01	.01	Recommend Project Delivery Strategy and Scheduling							
.04	.13	.01	.02	Prepare Preliminary Construction Schedule							
.04	.13	.01	.03	Prepare Specifications Outline							
.04	.13	.01	.04	Prepare Preliminary Drawings							
.04	.13	.01	.05	Prepare Basis of Design Report / Design Analysis							
.04	.13	.01	.06	Prepare Preliminary Cost Estimate							
.04	.13	.02	.00	Intermediate Design							
.04	.13	.02	.01	Update Construction Schedule							
.04	.13	.02	.02	Prepare Preliminary Specifications							
.04	.13	.02	.03	Prepare Intermediate Drawings							
.04	.13	.02	.04	Prepare Basis of Design Report / Design Analysis							
.04	.13	.02	.05	Prepare Revised Cost Estimate							
.04	.13	.02	.06	Participate in Intermediate Design Review / Briefing							
.04	.13	.03	.00	Pre-Final / Final Design							
.04	.13	.03	.01	Prepare Pre-Final Design Specifications							
.04	.13	.03	.02	Prepare Pre-Final Drawings							
.04	.13	.03	.03	Prepare Basis of Design Report / Design Analysis							
.04	.13	.03	.04	Prepare Revised Cost estimate							
.04	.13	.03	.05	Participate in Pre-Final / Final Design Review							
.04	.13	.03	.06	Prepare 100% Design Submittal							
.04	.14	.00		Value Engineering/Special Studies	.21	.00					VALUE ENGINEERING / SPECIAL STUDIES

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.04	.14	.01		Perform VE Screening	.21	.01					Perform VE Screening
.04	.14	.02		Perform Value Engineering Study	.21	.02					Perform Value Engineering Study
.04	.14	.03		Document VE Study Results	.21	.03					Document VE Study Results
.04	.14	.04	.00	Develop Land Acquisition / Easement Requirements	.21	.04	.00				Develop Land Acquisition/Easement Requirements
.04	.14	.04	.01	Provide Technical Support in Land Acquisition	.21	.04	.01				Provide Technical Support in Land Acquisition
.04	.14	.05		Participate in Biddability / Constructability Reviews	.21	.05					Participate in Biddability/Constructability Reviews
.05	.00			SITE WORK	.07	.00					SITE WORK / TEMPORARY FACILITIES
.05	.00			SITE WORK				.03	.00		SITEWORK
.05	.00			SITE WORK				.20	.00		SITE RESTORATION
.05	.01	.00		Mobilization	.06	.02					Perform Mobilization/Demobilization
.05	.01	.00		Mobilization	.07	.01					Perform Mobilization/Demobilization
.05	.01	.01		Mobilization of Construction Equipment & Facilities							
.05	.01	.02		Mobilization of Personnel							
.05	.01	.03		Setup / Construct Temporary Facilities	.07	.12					Provide Cover Structure over Contaminated Area
.05	.01	.03		Setup / Construct Temporary Facilities	.07	.14					Construct Temporary Decontamination Facility
.05	.01	.03		Setup / Construct Temporary Facilities	.07	.16					Construct other Temporary Facilities
.05	.01	.03		Setup / Construct Temporary Facilities	.07	.17					Construct Temporary/Mobile Laboratory
.05	.01	.03		Setup / Construct Temporary Facilities				.02	.13		On-Site Laboratory Facilities
.05	.01	.03		Setup / Construct Temporary Facilities				.02	.14		Off-Site Laboratory Facilities
.05	.01	.03		Setup / Construct Temporary Facilities				.22	.09		Temporary Construction Facilities-Operation
.05	.01	.04		Construct Temporary Utilities							
.05	.01	.05		Construct Plant Erection							
.05	.02			Cleanup / Landscaping / Revegetation	.07	.18					Site Restoration
.05	.02			Cleanup / Landscaping / Revegetation				.20	.04		Revegetation and Planting
.05	.03			Clear & Grub	.07	.02					Clear & Grub
.05	.03			Clear & Grub				.03	.02		Clearing and Grubbing
.05	.04			Demolition				.03	.01		Demolition
.05	.05			Excavation/Earthwork	.07	.03					Perform Earthwork
.05	.05			Excavation/Earthwork				.03	.03		Earthwork
.05	.05			Excavation/Earthwork				.05	.12		Earthwork
.05	.05			Excavation/Earthwork				.20	.01		Earthwork
.05	.06			Load & Haul							
.05	.07			Borrow Pit / Haul Roads	.07	.13					Borrow Pit / Haul Roads
.05	.07			Borrow Pit / Haul Roads				.01	.06		Temporary Relocations/Roads/Structures/Utilities
.05	.07			Borrow Pit / Haul Roads				.03	.13		Development of Borrow Pit/Haul Roads
.05	.07			Borrow Pit / Haul Roads				.05	.14		Development of Borrow Pit/Haul Roads
.05	.07			Borrow Pit / Haul Roads				.06	.09		Development of Borrow Pit/Haul Roads
.05	.07			Borrow Pit / Haul Roads				.08	.07		Development of Borrow Pit/Haul Roads
.05	.07			Borrow Pit / Haul Roads				.09	.08		Development of Borrow Pit/Haul Roads
.05	.08			Access Roads	.07	.04					Build roads/Parking/Curbs/Walks
.05	.08			Access Roads				.01	.06		Temporary Relocations/Roads/Structures/Utilities
.05	.08			Access Roads				.03	.04		Roads/Parking/Curbs/Walks
.05	.09			Arterial Roads / Divided Highways							
.05	.10			Restriping Roadways / Parking Lots							
.05	.11			Resurfacing Roadways / Parking Lots							
.05	.12			Railroad Tracks & Crossings							
.05	.13			Bridges							
.05	.14			Fencing	.07	.05					Install Fencing
.05	.14			Fencing				.03	.05		Fencing
.05	.15			Parking Lots	.07	.04					Build roads/Parking/Curbs/Walks
.05	.15			Parking Lots				.03	.04		Roads/Parking/Curbs/Walks
.05	.16			Retaining Wall							
.05	.17			Sidewalks	.07	.04					Build roads/Parking/Curbs/Walks
.05	.17			Sidewalks				.03	.04		Roads/Parking/Curbs/Walks
.05	.18			Sprinkler System							
.05	.19			Structures / Culverts				.01	.06		Temporary Relocations/Roads/Structures/Utilities

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.05	.20			Gas Distribution	.07	.08					Install/Water/Sewer/Gas Distribution
.05	.20			Gas Distribution			.01	.06			Temporary Relocations/Roads/Structures/Utilities
.05	.20			Gas Distribution			.03	.08			Water/Sewer/Gas Distribution
.05	.21			Install Fuel Line Distribution	.07	.10					Install Fuel Line Distribution
.05	.21			Install Fuel Line Distribution			.03	.10			Fuel Line Distribution
.05	.22			Fuel Storage Tanks			.03	.14			Fuel Storage Tanks (New)
.05	.23			Heating / Cooling Distribution System							
.05	.24			Install Steam and Condensate Distribution	.07	.09					Install Steam and Condensate Distribution
.05	.24			Install Steam and Condensate Distribution			.03	.09			Steam and Condensate Distribution
.05	.25			Treatment Plants / Lift Stations							
.05	.26			Water Distribution	.07	.08					Install/Water/Sewer/Gas Distribution
.05	.26			Water Distribution			.01	.06			Temporary Relocations/Roads/Structures/Utilities
.05	.26			Water Distribution			.03	.08			Water/Sewer/Gas Distribution
.05	.27			Water Storage Tanks							
.05	.28			Storm Sewer	.07	.11					Install Storm Drainage/Subdrainage
.05	.28			Storm Sewer			.03	.08			Water/Sewer/Gas Distribution
.05	.28			Storm Sewer			.03	.11			Storm Drainage/Subdrainage
.05	.29			Communications	.07	.07					Install Telephone/Communication Distribution
.05	.29			Communications			.01	.06			Temporary Relocations/Roads/Structures/Utilities
.05	.29			Communications			.03	.07			Telephone/Communication Distribution
.05	.30			Lighting							
.05	.31			Overhead Electrical Distribution	.07	.06					Install Electrical Distribution
.05	.31			Overhead Electrical Distribution			.03	.06			Electrical Distribution
.05	.33			Sanitary Sewer	.07	.08					Install/Water/Sewer/Gas Distribution
.05	.34			Restoration of Buildings after D&D							
.05	.35			Constructed wetlands							
.05	.36	.00		Demobilization							
.05	.36	.01		Removal of Temporary Facilities			.20	.05			Removal of Barriers
.05	.36	.02		Removal of Temporary Utilities							
.05	.36	.03		Final Decontamination							
.05	.36	.04		Demobilization Construction Equipment and Facilities							
.05	.36	.05		Demobilization of Personnel							
.05	.36	.06		Construction Plant Takedown							
.06	.00			PRE-REMEDIAL SURVEILLANCE & MAINTENANCE							
.06	.01	.00		Facility Transition							
.06	.01	.01		Develop End Point Criteria							
.06	.01	.02		End Point Criteria Verification							
.06	.02	.00		Outdoor Surveillance & Maintenance							
.06	.02	.01		Surveillance and Inspections							
.06	.02	.02		Routine Radiological Surveys	.06	.08	.10				Radiological Investigations
.06	.02	.03		Maintenance and Revegetation							
.06	.02	.04		Corrective Actions							
.06	.02	.05		Herbicide & Pesticide Applications							
.06	.03	.00		Indoor Surveillance & Maintenance							
.06	.03	.01		Surveillance & Inspections							
.06	.03	.02		Facility/Building Maintenance							
.06	.03	.03		Facility Risk Assessment							
.06	.03	.04		Major Facility Repairs							
.06	.03	.05		Facility System Replacement							
.06	.03	.06		ACM Encapsulation							
.07	.00			INVESTIGATIONS & MONITORING/SAMPLE COLLECTION	.06	.00					FIELD INVESTIGATION
.07	.00			INVESTIGATIONS & MONITORING/SAMPLE COLLECTION			.02	.00			MONITORING, SAMPLING, TESTING, AND ANALYSIS
.07	.01	.00		Site Reconnaissance							Site Reconnaissance
.07	.01	.01		Ecological Resources Reconnaissance	.06	.01	.01				Ecological Resources Reconnaissance
.07	.01	.02		Well Inventory	.06	.01	.02				Well Inventory
.07	.01	.03		Residential Well Sampling	.06	.01	.03				Residential Well Sampling

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.07	.01	.04		Land Survey	.06	.01	.04				Land Survey
.07	.01	.05		Topographic Mapping	.06	.01	.05				Topographic Mapping
.07	.01	.06		Field Screening	.06	.01	.06				Field Screening
.07	.02			Meteorological Monitoring				.02	.01		Meteorological Monitoring
.07	.03			Site Contaminant Surveys / Radiation Monitoring				.02	.02		Radiation Monitoring
.07	.03			Site Contaminant Surveys / Radiation Monitoring				.17	.01	.03	Radioactivity Surveys
.07	.03			Site Contaminant Surveys / Radiation Monitoring				.17	.07	.01	Radioactivity Survey
.07	.04	.00		Hydrogeological Investigations - Groundwater							
.07	.04	.01		Hydro Punch	.06	.05	.03				Hydro Punch
.07	.04	.02		Tidal Influence Study	.06	.05	.04				Tidal Influence Study
.07	.04	.03		Hydraulic Tests (Pump Test)	.06	.05	.05				Hydraulic Tests (Pump Test)
.07	.04	.04		Groundwater Elevation Measurement	.06	.05	.06				Groundwater Elevation Measurement
.07	.05	.00		Hydrogeological Investigations - Surface Water	.06	.06	.00				Conduct Hydrogeological Investigations - Surface Water
.07	.05	.01		Tidal Influence Study	.06	.06	.02				Tidal Influence Study
.07	.05	.02		Surface Water Elevation Measurement	.06	.06	.03				Surface Water Elevation Measurement
.07	.06	.00		Geophysical / Geotechnical Investigation	.06	.08	.00				Conduct Geophysical Investigations
.07	.06	.01		Geological Investigations (Soils / Sediments)	.06	.08	.01				Surface Geophysical Activity
.07	.06	.02		Surface Geophysical Activity	.06	.08	.02				Magnetometer
.07	.06	.02		Surface Geophysical Activity				.02	.11		Geotechnical Testing
.07	.06	.02		Surface Geophysical Activity				.02	.12		Geotechnical Instrumentation
.07	.06	.03		Magnetometer	.06	.08	.03				Electromagnetics
.07	.06	.04		Electromagnetics	.06	.08	.04				Ground Penetration Radar
.07	.06	.05		Ground Penetration Radar	.06	.08	.05				Seismic Refraction
.07	.06	.06		Seismic Refraction	.06	.08	.06				Resistivity
.07	.06	.07		Resistivity	.06	.08	.07				Site Meteorology
.07	.06	.08		Site Meteorology	.06	.08	.08				Cone Penetrometer Survey
.07	.06	.09		Cone Penetrometer Survey	.06	.08	.09				Remote Sensor Survey
.07	.06	.10		Remote Sensor Survey							
.07	.07	.00		Ecological Investigation	.06	.09	.00				Conduct Ecological Investigation
.07	.07	.01		Wetland and Habitat Delineation	.06	.09	.01				Wetland and Habitat Delineation
.07	.07	.02		Wildlife Observations	.06	.09	.02				Wildlife Observations
.07	.07	.03		Community Characterization	.06	.09	.03				Community Characterization
.07	.07	.04		Identification of Endangered Species	.06	.09	.04				Identification of Endangered Species
.07	.07	.04		Identification of Endangered Species	.06	.09	.05				Biota Sampling / Population Studies
.07	.08	.00		Air Sampling	.06	.04	.00				Conduct Air Sampling
.07	.08	.00		Air Sampling				.02	.03		Air Monitoring and Sampling
.07	.08	.01		Sample Collection	.06	.04	.01				Sample Collection
.07	.08	.02		Air Monitoring Station	.06	.04	.02				Air Monitoring Station
.07	.09	.00		Groundwater Sampling / Monitoring	.06	.05	.00				Conduct Hydrogeological Investigations - Groundwater
.07	.09	.01	.00	Monitoring Well Systems	.06	.05	.01				Well System Installation
.07	.09	.01	.00	Monitoring Well Systems				.02	.04		Monitoring Wells
.07	.09	.01	.01	Accomplish Mobilization							
.07	.09	.01	.02	Perform Well Development							
.07	.09	.01	.03	Conduct Down Hole Geophysics							
.07	.09	.01	.04	Install Monitoring Wells							
.07	.09	.01	.05	Install Test Wells							
.07	.09	.01	.06	Install Gas Wells							
.07	.09	.02		Sample Collection - Groundwater	.06	.05	.02				Sample Collection
.07	.09	.02		Sample Collection - Groundwater				.02	.05	.02	Ground Water
.07	.09	.02		Sample Collection - Groundwater				.02	.08	.02	Ground Water
.07	.09	.03		Well Refurbishment							
.07	.10			Surface Water Sampling	.06	.06	.00				Conduct Hydrogeological Investigations - Surface Water
.07	.10			Surface Water Sampling	.06	.06	.01				Sample Collection
.07	.10			Surface Water Sampling				.02	.05	.00	Sampling Surface Water/Ground Water/Liquid Waste
.07	.10			Surface Water Sampling				.02	.05	.01	Surface Water
.07	.10			Surface Water Sampling				.02	.08	.01	Surface Water

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.07	.11	.00		Soil / Sediment Sampling	.06	.03	.00				Conduct Geological Investigations (Soils/sediments)
.07	.11	.00		Soil / Sediment Sampling				.02	.06	.00	Sampling Soil and Sediment
.07	.11	.01		Surface Soil Sample Collection	.06	.03	.01				Surface Soil Sample Collection
.07	.11	.01		Surface Soil Sample Collection				.02	.06	.01	Surface Soil
.07	.11	.01		Surface Soil Sample Collection				.02	.08	.04	Surface Soil
.07	.11	.02		Subsurface Soil Sample Collection	.06	.03	.02				Subsurface Soil Sample Collection
.07	.11	.02		Subsurface Soil Sample Collection				.02	.06	.02	Sub-surface Soil
.07	.11	.02		Subsurface Soil Sample Collection				.02	.08	.05	Sub-Surface Soil
.07	.11	.03		Soil Boring / Permeability Sampling	.06	.03	.03				Soil Boring / Permeability Sampling
.07	.11	.04		Sediments Sample Collection	.06	.03	.04				Sediments Sample Collection
.07	.11	.04		Sediments Sample Collection				.02	.06	.03	Sediment/Sludge
.07	.11	.04		Sediments Sample Collection				.02	.08	.06	Sediment/Sludge
.07	.11	.05		Soil Gas Survey	.06	.03	.05				Soil Gas Survey
.07	.11	.06		Test Pit	.06	.03	.06				Test Pit
.07	.12	.00		Ecological Sampling							
.07	.12	.01		Biota Sampling / Population Studies							
.07	.13	.00		Waste Sampling	.06	.07	.00				Conduct Waste Investigations
.07	.13	.01		Sample Collection - Gas	.06	.07	.01				Sample Collection - (Gas, Liquid, Solid)
.07	.13	.02		Sample Collection - Liquid	.06	.07	.01				Sample Collection - (Gas, Liquid, Solid)
.07	.13	.02		Sample Collection - Liquid				.02	.05	.03	Liquid Waste
.07	.13	.02		Sample Collection - Liquid				.02	.08	.03	Liquid Waste
.07	.13	.03		Sample Collection - Solid	.06	.07	.01				Sample Collection - (Gas, Liquid, Solid)
.07	.13	.03		Sample Collection - Solid				.02	.07		Sampling Asbestos
.07	.14			Contaminated Building / Structures Samples	.06	.10					Contaminated Building / Structures Samples
.07	.14			Contaminated Building / Structures Samples				.17	.04	.17	Radioactive Waste Characterization
.07	.14			Contaminated Building / Structures Samples				.17	.04	.18	Radioactive Waste Characterization for Recycling
.07	.14			Contaminated Building / Structures Samples				.17	.04	.19	Radioactive Waste Characterization for Final Disposal
.08	.00			SAMPLE ANALYSIS	.08	.00					OFF-SITE LABORATORY SAMPLE ANALYSIS
.08	.00			SAMPLE ANALYSIS	.09	.00					ON-SITE LABORATORY SAMPLE ANALYSIS
.08	.00			SAMPLE ANALYSIS				.02	.00		MONITORING, SAMPLING, TESTING, AND ANALYSIS
.08	.00			SAMPLE ANALYSIS				.02	.09	.00	Laboratory Chemical Analysis
.08	.00			SAMPLE ANALYSIS				.02	.09	.03	Priority Pollutant Analysis (all media)
.08	.00			SAMPLE ANALYSIS				.02	.09	.05	Hazardous Waste (RCRA) Analysis
.08	.00			SAMPLE ANALYSIS				.02	.09	.06	Miscellaneous Waste Analysis
.08	.01	.00		Air / Gas Sample Analysis	.08	.01	.00				Analyze Air / Gas Sample Analysis
.08	.01	.00		Air / Gas Sample Analysis	.09	.01	.00				Analyze Air / Gas Sample Analysis
.08	.01	.00		Air / Gas Sample Analysis				.02	.09	.01	Air/Industrial Hygiene Analysis
.08	.01	.00		Air / Gas Sample Analysis				.02	.10	.02	Rad Analytical Air
.08	.01	.01		Organic	.08	.01	.01				Organic
.08	.01	.01		Organic	.09	.01	.01				Organic
.08	.01	.02		Inorganic	.08	.01	.02				Inorganic
.08	.01	.02		Inorganic	.09	.01	.02				Inorganic
.08	.01	.03		Radiochemistry	.08	.01	.03				Radiochemistry
.08	.01	.03		Radiochemistry	.09	.01	.03				Radiochemistry
.08	.02	.00		Groundwater Sample Analysis	.08	.02	.00				Analyze Groundwater Sample Analysis
.08	.02	.00		Groundwater Sample Analysis	.09	.02	.00				Analyze Groundwater Sample Analysis
.08	.02	.01		Organic	.08	.02	.01				Organic
.08	.02	.01		Organic	.09	.02	.01				Organic
.08	.02	.02		Inorganic	.08	.02	.02				Inorganic
.08	.02	.02		Inorganic	.09	.02	.02				Inorganic
.08	.02	.03		Radiochemistry	.08	.02	.03				Radiochemistry
.08	.02	.03		Radiochemistry	.09	.02	.03				Radiochemistry
.08	.03	.00		Surface Water Sample Analysis	.08	.03	.00				Analyze Surface Water Sample Analysis
.08	.03	.00		Surface Water Sample Analysis	.09	.03	.00				Analyze Surface Water Sample Analysis
.08	.03	.01		Organic	.08	.03	.01				Organic
.08	.03	.01		Organic	.09	.03	.01				Organic

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.08	.03	.02		Inorganic	.08	.03	.02				Inorganic
.08	.03	.02		Inorganic	.09	.03	.02				Inorganic
.08	.03	.03		Radiochemistry	.08	.03	.03				Radiochemistry
.08	.03	.03		Radiochemistry	.09	.03	.03				Radiochemistry
.08	.04	.00		Soil / Sediment Sample Analysis	.08	.04	.00				Analyze Soil / Sediment Sample Analysis
.08	.04	.00		Soil / Sediment Sample Analysis	.09	.04	.00				Analyze Soil / Sediment Sample Analysis
.08	.04	.00		Soil / Sediment Sample Analysis				.02	.09	.07	Soil and Sediment Analysis
.08	.04	.01		Organic	.08	.04	.01				Organic
.08	.04	.01		Organic	.09	.04	.01				Organic
.08	.04	.02		Inorganic	.08	.04	.02				Inorganic
.08	.04	.02		Inorganic	.09	.04	.02				Inorganic
.08	.04	.03		Radiochemistry	.08	.04	.03				Radiochemistry
.08	.04	.03		Radiochemistry	.09	.04	.03				Radiochemistry
.08	.05	.00		Gas Waste Sample Analysis	.08	.05	.00				Analyze Waste (Gas) Samples
.08	.05	.00		Gas Waste Sample Analysis	.09	.05	.00				Analyze Waste (Gas) Samples
.08	.05	.01		Organic	.08	.05	.01				Organic
.08	.05	.01		Organic	.09	.05	.01				Organic
.08	.05	.02		Inorganic	.08	.05	.02				Inorganic
.08	.05	.02		Inorganic	.09	.05	.02				Inorganic
.08	.05	.03		Radiochemistry	.08	.05	.03				Radiochemistry
.08	.05	.03		Radiochemistry	.09	.05	.03				Radiochemistry
.08	.06	.00		Liquid Waste Sample Analysis	.08	.06	.00				Analyze Waste (Liquid) Samples
.08	.06	.00		Liquid Waste Sample Analysis	.09	.06	.00				Analyze Waste (Liquid) Samples
.08	.06	.00		Liquid Waste Sample Analysis				.02	.09	.02	General Water Quality and Wastewater Analysis
.08	.06	.00		Liquid Waste Sample Analysis				.02	.10	.03	Rad Analytical Liquid
.08	.06	.01		Organic	.08	.06	.01				Organic
.08	.06	.01		Organic	.09	.06	.01				Organic
.08	.06	.02		Inorganic	.08	.06	.02				Inorganic
.08	.06	.02		Inorganic	.09	.06	.02				Inorganic
.08	.06	.03		Radiochemistry	.08	.06	.03				Radiochemistry
.08	.06	.03		Radiochemistry	.09	.06	.03				Radiochemistry
.08	.07	.00		Solid Waste Sample Analysis	.08	.07	.00				Analyze Waste (Solid) Samples
.08	.07	.00		Solid Waste Sample Analysis	.09	.07	.00				Analyze Waste (Solid) Samples
.08	.07	.01		Organic	.08	.07	.01				Organic
.08	.07	.01		Organic	.09	.07	.01				Organic
.08	.07	.02		Inorganic	.08	.07	.02				Inorganic
.08	.07	.02		Inorganic	.09	.07	.02				Inorganic
.08	.07	.03		Radiochemistry	.08	.07	.03				Radiochemistry
.08	.07	.03		Radiochemistry	.09	.07	.03				Radiochemistry
.08	.08	.00		Biota Sample Analysis	.08	.08	.00				Analyze Biota Samples
.08	.08	.00		Biota Sample Analysis	.09	.08	.00				Analyze Biota Samples
.08	.08	.00		Biota Sample Analysis				.02	.10	.05	Rad Analytical Vegetation/Sediment/Soil
.08	.08	.01		Organic	.08	.08	.01				Organic
.08	.08	.01		Organic	.09	.08	.01				Organic
.08	.08	.02		Inorganic	.08	.08	.02				Inorganic
.08	.08	.02		Inorganic	.09	.08	.02				Inorganic
.08	.08	.03		Radiochemistry	.08	.08	.03				Radiochemistry
.08	.08	.03		Radiochemistry	.09	.08	.03				Radiochemistry
.08	.09			Bioassay Sample Analysis	.08	.09					Analyze Bioassay Sample Analysis
.08	.09			Bioassay Sample Analysis	.09	.09					Analyze Bioassay Sample Analysis
.08	.09			Bioassay Sample Analysis	.09	.11	.09				Bioassay Sample Analysis
.08	.09			Bioassay Sample Analysis				.02	.09	.04	Biomonitoring and Bioassay Analysis
.08	.09			Bioassay Sample Analysis				.02	.10	.01	Rad Analytical Animal Tissue/Bone
.08	.09			Bioassay Sample Analysis				.02	.10	.04	Rad Analytical Urine/Feces
.08	.10			Bioaccumulation Studies	.08	.10					Perform Bioaccumulation Studies
.08	.10			Bioaccumulation Studies	.09	.10					Perform Bioaccumulation Studies

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.08	.10			Bioaccumulation Studies	.09	.11	.10				Bioaccumulation Studies
.08	.11			Mobile - Air / Gas Sample Analysis	.09	.11	.01				Air / Gas Sample Analysis
.08	.12			Mobile - Groundwater Sample Analysis	.09	.11	.02				Mobile - Groundwater Sample Analysis
.08	.13			Mobile - Surface Water Sample Analysis	.09	.11	.03				Surface Water Sample Analysis
.08	.14			Mobile - Soil / Sediment Sample Analysis	.09	.11	.04				Soil / Sediment Sample Analysis
.08	.15			Mobile - Gas Waste Sample Analysis	.09	.11	.05				Gas Waste Sample Analysis
.08	.16			Mobile - Liquid Waste Sample Analysis	.09	.11	.06				Liquid Waste Sample Analysis
.08	.17			Mobile - Solid Waste Sample Analysis	.09	.11	.07				Solid Waste Sample Analysis
.08	.18			Mobile - Biota Sample Analysis	.09	.11	.08				Biota Sample Analysis
.08	.19			Real Time - Air / Gas Sample Analysis							
.08	.20			Real Time - Groundwater Sample Analysis							
.08	.21			Real Time - Surface Water Sample Analysis							
.08	.22			Real Time - Soil / Sediment Sample Analysis							
.08	.23			Real Time - Gas Waste Sample Analysis							
.08	.24			Real Time - Liquid Waste Sample Analysis							
.08	.25			Real Time - Solid Waste Sample Analysis							
.08	.9x			Other Sample Analysis				.02	.10	.06	Rad Analytical Miscellaneous
.09	.00			SAMPLE MANAGEMENT/DATA VALIDATION/DATA EVALUATION	.10	.00					ANALYTICAL SUPPORT/SAMPLE MGMT/DATA VALIDATION
.09	.01	.00		Prepare and Ship Environmental Samples	.10	.01	.00				Prepare And Ship Environmental Samples
.09	.01	.00		Prepare and Ship Environmental Samples				.02	.05	.05	Sample Shipping and Handling
.09	.01	.00		Prepare and Ship Environmental Samples				.02	.06	.04	Sample Shipping and Handling
.09	.01	.00		Prepare and Ship Environmental Samples				.02	.08	.08	Sample Shipping and Handling
.09	.01	.01		Groundwater Samples	.10	.01	.01				Groundwater Samples
.09	.01	.02		Surface and Subsurface Soil Samples	.10	.01	.02				Surface and Subsurface Soil Samples
.09	.01	.03		Surface Water & Sediment Samples	.10	.01	.03				Surface Water & Sediment Samples
.09	.01	.04		Air Samples	.10	.01	.04				Air Samples
.09	.01	.05		Biota Samples	.10	.01	.05				Biota Samples
.09	.01	.06		Other Types of Media Sampling and Screening							
.09	.02			Coordinate with Sample MGT Personnel / Regulators	.10	.02					Coordinate With Sample Mgt Personnel/Regulators
.09	.03			Implement EPA-Approved Laboratory QA Program	.10	.03					Implement EPA-Approved Laboratory QA Program
.09	.04	.00		Provide Sample Management	.10	.04	.00				Provide Sample Management
.09	.04	.01		Chain of Custody	.10	.04	.01				Chain of Custody
.09	.04	.02		Sample Retention	.10	.04	.02				Sample Retention
.09	.04	.03		Data Storage	.10	.04	.03				Data Storage
.09	.05			Derived Waste Disposal (Gas, Liquid, Solid)	.06	.07	.02				Derived Waste Disposal - (Gas, Liquid, Solid)
.09	.05			Derived Waste Disposal (Gas, Liquid, Solid)				.02	.05	.04	Treatment Process Effluents
.09	.06	.00		Perform Data Validation	.10	.05	.00				Perform Data Validation
.09	.06	.01		Review Analysis Results to Validation Criteria	.10	.05	.01				Review Analysis Results to Validation Criteria
.09	.06	.02		Provide Written Documentation of Validation Efforts	.10	.05	.02				Provide Written Documentation of Validation Efforts
.09	.07			Data Usability Evaluation / Field QA / QC	.11	.00					DATA EVALUATION
.09	.07			Data Usability Evaluation / Field QA / QC	.11	.01					Data Useability Evaluation/Field QA/QC
.09	.08	.00		Data Reduction, Tabulation and evaluation	.11	.02	.00				Data Reduction, Tabulation and Evaluation
.09	.08	.01		Evaluate Geological Data (Soils / Sediments)	.11	.02	.01				Evaluate Geological Data (Soils/Sediments)
.09	.08	.02		Evaluate Air Data	.11	.02	.02				Evaluate Air Data
.09	.08	.03		Devaluate Hydrogeological Data -Groundwater	.11	.02	.03				Evaluate Hydrogeological Data - Groundwater
.09	.08	.04		Evaluate Hydrogeological Data - Surface Water	.11	.02	.04				Evaluate Hydrogeological Data - Surface Water
.09	.08	.05		Evaluate Waste Data	.11	.02	.05				Evaluate Waste Data
.09	.08	.06		Evaluate Geophysical Data	.11	.02	.06				Evaluate Geophysical Data
.09	.08	.07		Evaluate Ecological Data	.11	.02	.07				Evaluate Ecological Data
.09	.09	.00		Modeling							
.09	.09	.01		Contaminant Fate and transport Modeling	.11	.03					Contaminant Fate And Transport Modeling
.09	.09	.02		Water Quality							
.09	.09	.03		Groundwater							
.09	.09	.04		Air							
.09	.09	.05		Other Modeling	.11	.04					Other Modeling
.09	.10			Document Data Evaluation	.11	.05					Document Data Evaluation

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.10	.00			TREATABILITY/RESEARCH & DEVELOPMENT	.15	.00					TREATABILITY STUDIES
.10	.01			Literature Search	.15	.01					Literature Search
.10	.01			Literature Search				.17	.05	.01	Literature Review
.10	.02			Data Collection				.17	.05	.02	Data Collection
.10	.03			Develop Treatability Work Plan	.15	.02					Develop Treatability Work Plan
.10	.04			Design / Procure New Procedures / Equipment				.17	.05	.06	Development of New Dismantling Equipment
.10	.04			Design / Procure New Procedures / Equipment				.17	.05	.07	Development or Use of New Decontamination Techniques
.10	.04			Design / Procure New Procedures / Equipment				.17	.05	.08	Dev of Adapted Measurement Devices and Calc Techniques
.10	.04			Design / Procure New Procedures / Equipment				.17	.05	.09	Development of Adapted Waste Treatment and Disposal Tech
.10	.04			Design / Procure New Procedures / Equipment				.17	.05	.10	Research and Development on Remotely Operated Systems
.10	.04			Design / Procure New Procedures / Equipment				.17	.05	.12	Robotics and Manipulators (R&D)
.10	.05	.00		Bench Test	.15	.03	.00				Bench Test
.10	.05	.01		Provide Test Facility and Equipment	.15	.03	.01				Provide Test Facility and Equipment
.10	.05	.02		Provide Vendor & Analytical Service	.15	.03	.02				Provide Vendor & Analytical Service
.10	.05	.03		Test and Operate Equipment	.15	.03	.03				Test and Operate Equipment
.10	.05	.04		Retrieve Sample for Testing	.15	.03	.04				Retrieve Sample for Testing
.10	.05	.05		Laboratory Analysis	.15	.03	.05				Laboratory Analysis
.10	.05	.06		Characterize and Dispose of Residuals	.15	.03	.06				Characterize and Dispose Of Residuals
.10	.06	.00		Pilot Scale Test	.15	.04	.00				Pilot Scale Test
.10	.06	.01		Provide Test Facility and Equipment	.15	.04	.01				Provide Test Facility and Equipment
.10	.06	.02		Provide Vendor & Analytical Service	.15	.04	.02				Provide Vendor & Analytical Service
.10	.06	.03		Test and Operate Equipment	.15	.04	.03				Test and Operate Equipment
.10	.06	.04		Retrieve Sample for Testing	.15	.04	.04				Retrieve Sample for Testing
.10	.06	.05		Laboratory Analysis	.15	.04	.05				Laboratory Analysis
.10	.06	.06		Characterize and Dispose of Residuals	.15	.04	.06				Characterize and Dispose Of Residuals
.10	.07	.00		Field Test	.15	.05	.00				Field Test
.10	.07	.01		Provide Test Facility and Equipment	.15	.05	.01				Provide Test Facility and Equipment
.10	.07	.02		Provide Vendor & Analytical Service	.15	.05	.02				Provide Vendor & Analytical Service
.10	.07	.03		Test and Operate Equipment	.15	.05	.03				Test and Operate Equipment
.10	.07	.04		Retrieved Sample For Testing	.15	.05	.04				Retrieve Sample for Testing
.10	.07	.05		Laboratory Analysis	.15	.05	.05				Laboratory Analysis
.10	.07	.06		Characterize and Dispose of Residuals	.15	.05	.06				Characterize and Dispose Of Residuals
.10	.08			Test Special Tools / Equipment							
.10	.09			Design, Procure, Test New Procedures							
.10	.10			Simulation / Modeling				.17	.05	.11	Simulation of Complicated Work on Model
.10	.11	.00		Document Treatability Study	.15	.06	.00				Document Treatability Study
.10	.11	.01		Compose Draft Report	.15	.06	.01				Compose Draft Report
.10	.11	.02		Respond to Comments / Finalize Report	.15	.06	.02				Respond To Comments / Finalize Report
.10	.11	.03		Reproduction / Distribution	.15	.06	.03				Reproduction / Distribution
.11	.00			TREATMENT PLANT/FACILITY							
.11	.00			(Construction / Operations are exclusive of Treatment Specific Elements included with the							
.11	.01	.00		Mobilization				.01	.00		MOBILIZATION AND PREPARATORY WORK
.11	.01	.01		Mobilization of Construction Equipment & Facilities				.01	.01		Mobilization of Construction Equipment and Facilities
.11	.01	.02		Mobilization of Personnel				.01	.02		Mobilization of Personnel
.11	.01	.03		Setup / Construct Temporary Facilities				.01	.04		Setup/Construct Temporary Facilities
.11	.01	.04		Construct Temporary Utilities				.01	.05		Construct Temporary Utilities
.11	.01	.05		Construct Plant Erection				.01	.07		Construction Plant Erection
.11	.02			Sheds & Other Supporting Facilities							
.11	.03			Simple Remedial Treatment Facilities (e.g., Equipment Slabs, Utilities)							
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.11	.50		Construction of Permanent Plant Facility
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.12	.50		Construction of Permanent Plant Facility
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.13	.50		Construction of Permanent Plant Facility
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.14	.50		Construction of Permanent Plant Facility
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.15	.50		Construction of Permanent Plant
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.18	.21		Transportation to Storage/Disposal Facility
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.11	.04			Treatment Train Facility Construction (e.g., Rain Covers, Foundation, Utilities)				.03	.12		Permanent Cover Structure Over Contaminated Area
.11	.05			Treatment Train - Operations							
.11	.06			Full Scale Waste Management Plant/Facility - Construction							
.11	.07	.00		Waste Management Low/Moderate Hazard Treatment Front-End Construction/Operations							
.11	.07	.01		Receiving & Inspection							
.11	.07	.02		Assay							
.11	.07	.03		Container Handling							
.11	.07	.04		Waste Stream Sort/Separation - Contact Handled							
.11	.07	.05		Separation/Handling Special Materials/Wastes							
.11	.08	.00		Waste Management High Hazard/Remote Treatment Front-End Construction/Operations							
.11	.08	.01		Receiving & Inspection							
.11	.08	.02		Assay							
.11	.08	.03		Waste Stream Sort/Separation - Remote Handled							
.11	.08	.04		Remote - Container Handling							
.11	.08	.05		Separation/Handling Special Materials/Wastes							
.11	.09			Waste Management Low Hazard Functional Area							
.11	.09			(e.g., Hazardous/Toxic)							
.11	.10			Waste Management Moderate Hazard Functional Area							
.11	.10			(e.g., Hazardous/Toxic, LLW & MLLW)							
.11	.11			Waste Management High Hazard Functional Area							
.11	.11			(e.g., ALLW, MALLW, TRU, Spent Fuel, & CWM)							
.11	.12			Waste Management Remote Functional Area							
.11	.12			(e.g., ALLW, MALLW, TRU, Spent Fuel, & CWM)							
.11	.13	.00		Demobilization				.21	.00		
.11	.13	.01		Removal of Temporary Facilities				.21	.01		
.11	.13	.02		Removal of Temporary Utilities				.21	.02		
.11	.13	.03		Final Decontamination				.21	.03		
.11	.13	.04		Demobilization Construction Equipment and Facilities				.21	.04		
.11	.13	.05		Demobilization of Personnel				.21	.05		
.11	.13	.06		Construction Plant Takedown				.21	.06		
.12	.00			STORAGE FACILITY							
.12	.01	.00		Mobilization							
.12	.01	.01		Mobilization of Construction Equipment & Facilities							
.12	.01	.02		Mobilization of Personnel							
.12	.01	.03		Setup / Construct Temporary Facilities							
.12	.01	.04		Construct Temporary Utilities							
.12	.01	.05		Construct Plant Erection							
.12	.02	.00		Conventional Storage/Warehouses				.22	.03		
.12	.02	.01		Waste Storage Area (Pads & Cribs)				.18	.08		
.12	.02	.02		Waste Storage Structure/Building	.07	.15					
.12	.02	.02		Waste Storage Structure/Building				.18	.07		
.12	.03	.00		Storage Facility Front-End - Low / Moderate Hazard							
.12	.03	.01		Receiving & Inspection							
.12	.03	.02		Assay							
.12	.03	.03		Container Handling							
.12	.03	.04		Waste Stream Sort/Separation - Contact Handled							
.12	.03	.05		Separation/Handling Special Materials/Wastes							
.12	.04	.00		Storage Facility Front-End - High / Remote Hazard							
.12	.04	.01		Receiving & Inspection							
.12	.04	.02		Assay							
.12	.04	.03		Waste Stream Sort/Separation - Remote Handled							
.12	.04	.04		Remote - Container Handling							
.12	.04	.05		Separation/Handling Special Materials/Wastes							
.12	.05	.00		Contact Handled Storage							
.12	.05	.01		Low Hazardous Storage							
.12	.05	.02		Vault Storage							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.12	.05	.03		Silo Storage							
.12	.05	.04		Intermediate Fuel Storage				.17	.06	.02	Intermediate Fuel Storage
.12	.06	.00		Remote Handled Storage							
.12	.06	.01		Vault Storage							
.12	.06	.02		Silo Storage							
.12	.06	.03		Pool Storage							
.12	.07			Mixed Waste Storage Fees & Taxes				.18	.23		Mixed Waste Storage Fees and Taxes
.12	.08	.00		Demobilization							
.12	.08	.01		Removal of Temporary Facilities							
.12	.08	.02		Removal of Temporary Utilities							
.12	.08	.03		Final Decontamination							
.12	.08	.04		Demobilization Construction Equipment and Facilities							
.12	.08	.05		Demobilization of Personnel							
.12	.08	.06		Construction Plant Takedown							
.13	.00			DISPOSAL FACILITY				.18	.00		DISPOSAL (OTHER THAN COMMERCIAL)
.13	.01	.00		Mobilization							
.13	.01	.01		Mobilization of Construction Equipment & Facilities							
.13	.01	.02		Mobilization of Personnel							
.13	.01	.03		Setup / Construct Temporary Facilities							
.13	.01	.04		Construct Temporary Utilities							
.13	.01	.05		Construct Plant Erection							
.13	.02	.00		Disposal Facility Front-End - Low / Moderate Hazard							
.13	.02	.01		Receiving & Inspection							
.13	.02	.02		Assay							
.13	.02	.03		Container Handling				.18	.20		Container Handling
.13	.02	.04		Waste Stream Sort/Separation - Contact Handled							
.13	.02	.05		Separation/Handling Special Materials/Wastes							
.13	.03	.00		Disposal Facility Front-End - High / Remote Hazard							
.13	.03	.01		Receiving & Inspection							
.13	.03	.02		Assay							
.13	.03	.03		Waste Stream Sort/Separation - Remote Handled							
.13	.03	.04		Remote - Container Handling							
.13	.03	.05		Separation/Handling Special Materials/Wastes							
.13	.04			Landfill / Burial Ground / Trench / Pits				.18	.01		Landfill/Burial Ground/Trench/Pits
.13	.05			Above Ground Vault				.18	.02		Above-Ground Vault
.13	.06			Underground Vault				.18	.03		Underground Vault
.13	.07			Underground Mine / Shaft				.18	.04		Underground Mine/Shaft
.13	.08			Tanks				.18	.05		Tanks
.13	.09			Pads (Tumulus / Retrievable Storage / Other)				.18	.06		Pads (Tumulus/Retrievable Storage/Other)
.13	.10			Confined Disposal Facilities (CDFs)							
.13	.11			Engineered Disposal				.18	.11		Construction of Permanent Disposal Facility
.13	.12			Intermediate Depth Disposal							
.13	.13			Geologic Disposal							
.13	.14			Shallow Land Disposal							
.13	.15			Deep Well Injection				.18	.09		Deep Well Injection
.13	.16			Silo Disposal							
.13	.17			Bore-Hole Disposal							
.13	.18			Disposal Fees and Taxes				.17	.02	.05	Disposal of System Fluids (water, oils,...)
.13	.18			Disposal Fees and Taxes				.17	.02	.06	Disposal of Special System Fluids (D20, sodium,...)
.13	.18			Disposal Fees and Taxes				.17	.02	.08	Disposal of Wastes from Decontamination
.13	.18			Disposal Fees and Taxes				.17	.02	.09	Disposal of Combustible Material
.13	.18			Disposal Fees and Taxes				.17	.02	.10	Disposal of Spent Resins
.13	.18			Disposal Fees and Taxes				.17	.02	.11	Disposal of Other Wastes from Reactor Operations
.13	.18			Disposal Fees and Taxes				.18	.22		Disposal Fees and Taxes
.13	.19			Internal Combustion Engine (not including Halogenated VOCs)				.12	.14		Vapor Recovery/Reuse (Internal Combustion Engine)
.13	.20	.00		Demobilization							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.13	.20	.01		Removal of Temporary Facilities							
.13	.20	.02		Removal of Temporary Utilities							
.13	.20	.03		Final Decontamination							
.13	.20	.04		Demobilization Construction Equipment and Facilities							
.13	.20	.05		Demobilization of Personnel							
.13	.20	.06		Construction Plant Takedown							
.14	.00			ORDNANCE & EXPLOSIVES REMOVAL & DESTRUCTION				.04	.01	.00	Ordnance Removal and Destruction
.14	.00			(CWM is included in Waste Management WBS .11 & Technologies WBS .20-.30)							
.14	.01			Demolition for OE Removal				.04	.01	.01	Demolition for OE Removal
.14	.02			Brush Clearing with OE				.04	.01	.02	Brush Clearing with OE
.14	.03			Blast Mats				.04	.01	.03	Blast Mats
.14	.04			Blast Shields				.04	.01	.04	Blast Shields
.14	.05			Surface Sweep (Visual)				.04	.01	.05	Surface Sweep (Visual)
.14	.06			Surface Sweep (Magnetometer)				.04	.01	.06	Surface Sweep (Magnetometer)
.14	.07			Surface Sweep (Mag & Flag)				.04	.01	.07	Surface Sweep (Mag & Flag)
.14	.08			Excavate by Hand 0' - 2' Depth				.04	.01	.08	Excavate by Hand 0' - 2' Depth
.14	.09			Excavate with Heavy Equipment > 2' Depth				.04	.01	.09	Excavate with Heavy Equipment > 2' Depth
.14	.10			Sifting				.04	.01	.10	Sifting
.14	.11			Removal of Chemical Warfare Material (CWM)				.04	.01	.11	Removal of Chemical Warfare Material (CWM)
.14	.12			OE On-Site Destruction				.04	.01	.12	OE On-Site Destruction
.14	.13			Bunkers (Temporary)				.04	.01	.14	Bunkers (Temporary)
.15	.00			DRUMS/TANKS/STRUCTURES/MISC DEMOLITION & REMOVAL				.10	.00		DRUMS/TANKS/STRUCTURES/MISCELLANEOUS DEMOLITION AND REMOVAL
.15	.01			Drum Removal				.10	.01		Drum Removal
.15	.02			Tank Removal				.10	.02		Tank Removal
.15	.03			Structure Removal				.10	.03		Structure Removal
.15	.04			Asbestos Abatement				.10	.04		Asbestos Abatement
.15	.05			Piping & Pipeline Removal				.10	.05		Piping and Pipeline Removal
.15	.06			Well Abandonment							
.16	.00			AIR POLLUTION/GAS COLLECTION & CONTROL				.07	.00		AIR POLLUTION/GAS COLLECTION AND CONTROL
.16	.01			Gas / Vapor Collection Trench System,				.07	.01		Gas/Vapor Collection Trench System
.16	.02			Gas / Vapor Collection Well System				.07	.02		Gas/Vapor Collection Well System
.16	.03			Gas Collection at Lagoon Cover				.07	.03		Gas/Vapor Collection at Lagoon Cover
.16	.04			Fugitive Dust / Vapor / Gas Emission Control				.07	.04		Fugitive Dust/Vapor/Gas Emissions Control
.17	.00			SURFACE WATER/SEDIMENTS CONTAINMENT, COLLECTION, OR CONTROL				.05	.00		SURFACE WATER COLLECTION AND CONTROL
.17	.00			SURFACE WATER/SEDIMENTS CONTAINMENT, COLLECTION, OR CONTROL				.09	.00		LIQUIDS/SEDIMENTS/SLUDGES COLLECTION AND CONTAINMENT
.17	.01			Dredging / Excavating				.09	.01		Dredging/Excavating
.17	.02			Berms				.05	.01		Berms/Dikes
.17	.03			Floodwalls				.05	.02		Floodwalls
.17	.04			Levees / Dams / Dikes				.05	.03		Levees
.17	.05			Terraces and Benches				.05	.04		Terraces and Benches
.17	.06			Channels / Waterways / Ditches				.05	.05		Channels/Waterways (Soil/Rock)
.17	.07			Chutes or Flumes				.05	.06		Chutes or Flumes
.17	.08			Sediments Barriers				.05	.07		Sediment Barriers
.17	.09			Storm Drainage				.05	.08		Storm Drainage
.17	.10			Lagoons / Basins / Tanks				.05	.09		Lagoons/Basins/Tanks/Dikes/Pump System
.17	.11			Pumping / Draining / Collection				.05	.10		Pumping/Draining/Collection
.17	.12			Erosion Control				.05	.13		Erosion Control
.18	.00			GROUNDWATER CONTAINMENT, COLLECTION, OR CONTROL				.06	.00		GROUNDWATER COLLECTION AND CONTROL
.18	.01			Extraction Wells				.06	.01		Extraction and Injection Wells
.18	.02			Injection Wells							
.18	.03			Subsurface Drainage / Collection				.06	.02		Subsurface Drainage/Collection
.18	.04			Slurry Walls				.06	.03		Slurry Walls
.18	.05			Grout Curtain				.06	.04		Grout Curtain
.18	.06			Sheet Piling				.06	.05		Sheet Piling
.19	.00			SOLIDS/SOILS CONTAINMENT (e.g., CAPPING) COLLECTION, OR CONTROL				.08	.00		SOLIDS COLLECTION AND CONTAINMENT
.19	.01			Contaminated Soil Collection				.08	.01		Contaminated Soil Collection

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.19	.01			Contaminated Soil Collection				.10	.06		Radioactive Specific Waste Containment (Furnish/Fill)
.19	.02			Waste Containment, Portable (Furnish / Fill)				.08	.02		Waste Containment, Portable (Furnish/Fill)
.19	.02			Waste Containment, Portable (Furnish / Fill)				.08	.04		Radioactive Specific Waste Containment (Furnish/Fill)
.19	.03			Soil / Clay Cap				.08	.05		Capping of Contaminated Area/Waste Pile (Soil/Asphalt Cap)
.19	.04			Asphalt / Concrete Caps				.08	.05		Capping of Contaminated Area/Waste Pile (Soil/Asphalt Cap)
.19	.04			Asphalt / Concrete Caps				.15	.05		Asphalt-Based Encapsulation
.19	.05			RCRA C-Cap							
.19	.06			Arid Climate Engineered Cap							
.19	.07			Bottom Barriers							
.19	.9X			Other				.10	.07		Miscellaneous Items
.20	.00			LIQUID WASTE/SLUDGE (e.g., UST/AST) CONTAINMENT, COLLECTION, OR CONTROL				.09	.00		LIQUIDS/SEDIMENTS/SLUDGES COLLECTION AND CONTAINMENT
.20	.01			Industrial Vacuuming				.09	.02		Industrial Vacuuming
.20	.02			Waste Containment - Portable				.09	.03		Waste Containment, Portable (Furnish/Fill)
.20	.02			Waste Containment - Portable				.09	.05		Radioactive Specific Waste Containment (Furnish/Fill)
.20	.03			Pumping / Draining / Collection				.06	.06		Lagoons/Basins/Tanks/Dikes/Pump System
.20	.03			Pumping / Draining / Collection				.06	.07		Pumping/Collection
.20	.03			Pumping / Draining / Collection				.09	.06		Pumping/Draining/Collection
.20	.03			Pumping / Draining / Collection				.09	.07		Lagoons/Basins/Tanks/Dikes/Pump System
.21	0			IN SITU BIOLOGICAL TREATMENT				.11	.00		BIOLOGICAL TREATMENT
.21	.01			Biological Barrier							
.21	.02			Bioslurping				.11	.13		Bioslurping
.21	.03			Bioventing/Biosparging				.11	.12		Bioventing
.21	.04			Cometabolic Biotreatment							
.21	.05			Constructed Wetlands				.11	.06		Biological Lagoons
.21	.06			Enhanced Bioremediation							
.21	.07			Land Treatment							
.21	.08			Natural attenuation				.11	.04		In-Situ Biodegradation/Bioreclamation
.21	.09			Phytoremediation							
.22	.00			EX SITU BIOLOGICAL TREATMENT				.11	.00		BIOLOGICAL TREATMENT
.22	.01			Activated Sludge				.11	.01		Activated Sludge (Seq Batch Reactors)
.22	.02			Biofilter							
.22	.03			Biopile				.11	.14		Biopile (Heap Pile Remediation)
.22	.04			Cometabolic Biotreatment							
.22	.05			Genetically Engineered Organisms (White Rot Fungus)				.11	.10		Genetically Engineered Organisms (White Rot Fungus)
.22	.06			Land Farming / Composting				.11	.03		Land Treatment/Farming (Solid Phase Biodegradation)
.22	.06			Land Farming / Composting				.11	.07		Composting
.22	.07			Rotating Biological Contactors				.11	.02		Rotating Biological Contractors
.22	.08			Slurry Biodegradation				.11	.11		Slurry Biodegradation
.22	.09			Trickling Filter				.11	.05		Trickling Filters
.23	.00			IN SITU CHEMICAL TREATMENT				.12	.00		CHEMICAL TREATMENT
.23	.01			Chemical Barriers							
.23	.02			Chemical Extraction							
.23	.03			Oxygen Release Compounds							
.23	.04			Neutralization				.12	.06		Neutralization
.23	.05			Soil Flushing (Surfactant / Solvent)				.13	.10		Soil Flushing (Surfactant/Solvent)
.24	.00			EX SITU CHEMICAL TREATMENT							
.24	.01			Alkali Metal / Polyethylene Glycol				.12	.10		Alkali Metal Dechlorination
.24	.01			Alkali Metal / Polyethylene Glycol				.12	.11		Alkali Metal/Polyethylene Glycol (A/PEG)
.24	.02			Base-Catalyzed Decomposition Process				.12	.12		Base-Catalyzed Decomposition Process
.24	.03			Chemical Hydrolysis				.12	.07		Chemical Hydrolysis
.24	.04			Chlorination				.12	.03		Chlorination
.24	.05			Dehalogenation				.12	.09		Dehalogenation (Catalytic Dechlorination)
.24	.06			Hydrogen reduction							
.24	.07			Ion Exchange				.12	.05		Ion Exchange
.24	.08			Neutralization							
.24	.09			Oxidation / Reduction				.12	.01		Oxidation/Reduction

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.24	.10			Oxygen Release Compounds							
.24	.11			Ozonation				.12	.04		Ozonation
.24	.12			Solvent Extraction				.13	.17		Solvent Extraction
.24	.12			Solvent Extraction				.12	.02		Solvent Extraction
.24	.13			Ultraviolet Photolysis				.12	.08		Ultraviolet Photolysis
.25	.00			IN SITU PHYSICAL TREATMENT				.13	.00		PHYSICAL TREATMENT
.25	.01			Coatings							
.25	.02			Circulating Wells / In-Well Air Stripping							
.25	.03			Air Sparging				.13	.32		Air Sparging
.25	.04			Condensation							
.25	.05			Cryogenics							
.25	.06			Fracturing (Hydrofracturing)							
.25	.07			Lasagna Process							
.25	.08			Laser Cutting							
.25	.09			Laser Decontamination							
.25	.10			Passive Treatment Wall/Reactive Barriers							
.25	.11			Skimming							
.25	.12			Soil Flushing							
.25	.13			Solids Dewatering / Drying				.13	.11		Solids Dewatering
.25	.14			Steam Extraction							
.25	.15			Vacuuming/Blasting							
.26	.00			EX SITU PHYSICAL TREATMENT				.13	.00		PHYSICAL TREATMENT
.26	.01			Aeration				.13	.25		Aeration
.26	.02			Advanced Electrical Reactor				.13	.26		Advanced Electrical Reactor
.26	.03			Agglomeration				.13	.28		Agglomeration
.26	.04			Air Stripping				.13	.07		Air Stripping
.26	.05			Chelation				.13	.16		Chelation
.26	.06			Coagulation / Flocculation / Precipitation				.13	.04		Coagulation/Flocculation/Precipitation
.26	.07			Compaction / Volume Reduction				.08	.06		Nuclear Waste Densification (Dynamic Compaction)
.26	.07			Compaction / Volume Reduction				.13	.27		Low Level Waste (LLW) Compaction
.26	.08			Condensation							
.26	.09			Decant / Phase Separation							
.26	.10			Dissolved Air Floatation				.13	.13		Dissolved Air Floatation
.26	.11			Distillation				.13	.15		Distillation
.26	.12			E-Beam							
.26	.13			Electrochemical oxidation							
.26	.14			Electrokinetics							
.26	.15			Electrolysis				.12	.13		Electrolysis
.26	.16			Equalization				.13	.05		Equalization
.26	.17			Evaporation				.13	.06		Evaporation
.26	.18			Filter Presses				.13	.30		Filter Presses
.26	.19			Filtration				.13	.01		Filtration/Ultrafiltration
.26	.20			Freeze Crystallization							
.26	.21			Granular Activated Carbon Adsorption-Gases/Vapor				.13	.19		Carbon Adsorption - Gases
.26	.22			Granular Activated Carbon Adsorption-Liquids				.13	.20		Carbon Adsorption - Liquids
.26	.23			Heavy Media Separation				.13	.14		Heavy Media Separation
.26	.24			High Pressure Aqueous Destruction							
.26	.25			Lignin Adsorption / Sorptive Clays				.13	.31		Lignin Adsorption/Sorptive Clays
.26	.26			Magnetic Separation							
.26	.27			Membrane Separation-Electrodialysis				.13	.22		Membrane Separation - Electrodialysis
.26	.28			Membrane Separation-Reverse Osmosis				.13	.21		Membrane Separation - Reverse Osmosis
.26	.29			Oil / Water Separation				.13	.12		Oil/Water Separation
.26	.30			Sedimentation				.13	.02		Sedimentation
.26	.31			Shredding				.13	.24		Shredding
.26	.32			Sieving/Straining				.13	.03		Straining
.26	.33			Skimming							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.26	.34			Soil Vapor Extraction				.13	.23		Soil Vapor Extraction
.26	.35			Soil Washing (Surfactant / Solvent)				.13	.09		Soil Washing (Surfactant/Solvent)
.26	.36			Solids Dewatering/Drying							
.26	.37			Sprinkler Irrigation							
.26	.38			Supercritical Extraction				.13	.18		Supercritical Extraction
.26	.39			Surfactant Enhanced Recovery							
.26	.40			Synthetic Resin Adsorption							
.27	.00			IN SITU THERMAL TREATMENT				.14	.00		THERMAL TREATMENT
.27	.01			Thermal Blanket							
.27	.02			Six Phase Extraction							
.27	.03			In Situ Heating - Vacuum Extraction							
.27	.04			Steam/Hot Water Injection Vacuum Extraction				.13	.29		In-Situ Steam Extraction
.27	.05			High Temperature Thermal Desorption				.14	.07		High Temperature Thermal Desorption
.27	.06			In Situ Vitrification (SVOC Destruction)							
.27	.07			Low Temperature Thermal Desorption							
.28	.00			EX SITU THERMAL TREATMENT				.14	.00		THERMAL TREATMENT
.28	.01			High Temperature Thermal Desorption							
.28	.02			Incineration				.14	.01		Incineration
.28	.02			Incineration				.18	.10		Incinerator
.28	.03			Low Temperature Thermal Desorption				.14	.02		Low Temperature Thermal Desorption
.28	.04			Molten Salt Destruction				.14	.04		Molten Salt Destruction
.28	.05			Open Burning / Open Detonation							
.28	.06			Plasma							
.28	.07			Pyrolysis							
.28	.08			Radio Frequency Heating				.14	.05		Radio Frequency Heating
.28	.09			Solar Detoxification / Evaporation				.14	.06		Solar Detoxification
.28	.10			Steam Stripping / Flushing / Reforming				.13	.08		Steam Stripping
.28	.11			Supercritical Water Oxidation				.14	.03		Supercritical Water Oxidation
.28	.12			Thermally Enhanced Vapor Extraction							
.29	.00			IN SITU STABILIZATION/FIXATION/ENCAPSULATION				.15	.00		STABILIZATION/FIXATION/ENCAPSULATION
.29	.01			Fixation / Grout Injection				.15	.06		Radioactive Waste Solidification (Grouting/Other)
.29	.02			Inorganic / Asphalt-Based Encapsulation							
.29	.03			Pozzolan Process				.15	.03		In-Situ Pozzolan Process (Lime/Portland Cement)
.29	.04			Vitrification				.15	.02		In-Situ Vitrification
.30	.00			EX SITU STABILIZATION/FIXATION/ENCAPSULATION				.15	.00		STABILIZATION/FIXATION/ENCAPSULATION
.30	.01			Calcination							
.30	.02			Inorganic / Asphalt-Base Encapsulation							
.30	.03			Organic based encapsulation							
.30	.04			Pozzolan Process (lime/Portland Cement)				.15	.04		Pozzolan Process (Lime/Portland Cement)
.30	.05			Retort / Amalgamation							
.30	.06			Sludge Stabilization (Aggregate / Rock / Slag)				.11	.08		Sludge Stabilization - Aerobic
.30	.06			Sludge Stabilization (Aggregate / Rock / Slag)				.11	.09		Sludge Stabilization - Anaerobic
.30	.06			Sludge Stabilization (Aggregate / Rock / Slag)				.15	.07		Sludge Stabilization (Aggregate/Rock/Slag)
.30	.07			Vitrification				.15	.01		Molten Glass
.31	.00			FACILITY DEACTIVATION, DECOMMISSIONING, & DISMANTLEMENT				.17	.00		DECONTAMINATION AND DECOMMISSIONING (D&D)
.31	.01	.00		Nuclear Facility Shutdown and Inspection				.17	.02	.00	Facility Shutdown Activities
.31	.01	.01		Plant shutdown and inspection				.17	.02	.01	Plant Shutdown and Inspection
.31	.01	.02		Shutdown of unnecessary equipment							
.31	.01	.03		Compilation/verification of as-built drawings							
.31	.01	.04		General housekeeping							
.31	.01			Nuclear Facility Shutdown and Inspection							
.31	.02	.00		Deactivation							
.31	.02	.01		Defueling and transfer of fuel				.17	.02	.02	Defueling and Transfer of Fuel to Temporary Spent Fuel Storage
.31	.02	.02		Draining and drying or blowdown of all systems not in operation				.17	.02	.03	Drainage and Drying or Blowdown of all Systems not in Operation
.31	.02	.03		Removal of system fluids							
.31	.02	.04		Removal of spent resins							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.31	.02	.05		Modification of access and changing facilities							
.31	.02	.06		Disconnection of power supplies/perform zero energy checks				.17	.02	.13	Decon of Areas and Equip in all Bldgs to Reduce Controlled Area
.31	.02	.07		Installation of viewing devices							
.31	.02	.08		Reduction or elimination of electrical and water supply systems				.17	.02	.12	Isolation of Power Equipment
.31	.02	.09		Installation of continuous air monitoring system							
.31	.02	.10		Removal of nuclear materials							
.31	.02	.11		Removal of emergency response equipment, tools, and supplies							
.31	.02	.12		Asset recovery							
.31	.02	.13		Removal of all unattached hazardous material							
.31	.02	.14		Removal of all unattached ordnance							
.31	.02	.15		Removal of all unattached radiological materials							
.31	.03	.00		Preparation for Dormancy							
.31	.03	.01		Layout of dormancy period control area				.17	.04	.07	Layout of Dormancy Period Control Area
.31	.03	.02		Zoning for long-term storage				.17	.04	.03	Zoning for Long-Term Storage
.31	.03	.03		Removal of inventory not suitable for long-term storage							
.31	.04	.00		Hot Cell Equipment Modification				.17	.07	.05	Cell Equipment Modification
.31	.04	.01		Isolation of process, utility, and instrument air line penetrations							
.31	.04	.02		Isolation of electrical power							
.31	.04	.03		Isolation of fire suppression nozzles and temperature detectors							
.31	.04	.04		Isolation of exhaust ventilation system							
.31	.04	.05		Isolation of gloveports and bagports							
.31	.04	.06		Isolation of criticality drains							
.31	.04	.07		Isolation of all other seals and lines							
.31	.05	.00		Site Reconfiguration, Isolating and Securing Structure							
.31	.05	.01		Isolation of tanks							
.31	.05	.02		Isolation of lines entering and exiting the building							
.31	.05	.03		Isolation of utilities to the building							
.31	.05	.04		Sealing/securing of potential pathways to the environment				.17	.07	.12	Cell Window Replacement/Refurbishment
.31	.05	.05		Securing/isolation of building from both personnel and animals/insects							
.31	.05	.06		Securing of windows and doors							
.31	.05	.07		Repairing of roof							
.31	.05	.08		Isolation of containment structure				.17	.04	.06	Isolation and Sealing of Containment Structure
.31	.05	.09		Removal of obstacles to dismantlement and decommissioning							
.31	.05	.10		Site boundary reconfiguration							
.31	.06	.00		Removal of Fuel Handling Equipment				.17	.04	.08	Removal of Fuel Handling Equipment
.31	.06	.01		Removal of cranes							
.31	.06	.02		Removal of fuel positioning systems							
.31	.07	.00		Radiological Inventory Categorization				.17	.04	.04	Radioactive Inventory Categorization
.31	.07	.01		Samples for radiological inventory categorization				.17	.02	.04	Samples for Radioactivity Inventory Characterization
.31	.07	.02		Calculations to evaluate inventory							
.31	.08	.00		Decontamination of Area and Equipment				.17	.04	.01	Decon of Areas and Equip in all Bldgs to Facilitate Dismantling
.31	.08	.01		Decontamination of systems for dose reduction/reduction of controlled area				.17	.02	.07	Decontamination of Systems for Dose Reduction
.31	.08	.01		Decontamination of systems for dose reduction/reduction of controlled area							
.31	.08	.02		Washing of sump areas to remove excess residual chemicals							
.31	.08	.03		Protective clothing/breathing apparatuses							
.31	.08	.04		Decontamination and release of rad zones				.17	.04	.16	Removal of Contamination from Areas and Structures in all Bldgs
.31	.08	.05		Asbestos treatment/removal				.17	.04	.14	Removal and Disposal of Asbestos
.31	.08	.06		Surface decontamination of floors							
.31	.08	.07		Surface decontamination of walls				.10	.08		Contaminated Paint Removal
.31	.08	.08		Surface decontamination of equipment/dismantled piping							
.31	.08	.09		Surface decontamination of piping and tank internals							
.31	.08	.10		Decontamination of reactor vessel & internals							
.31	.08	.11		Decontamination of primary and auxiliary systems							
.31	.08	.12		Decontamination of biological shield							
.31	.08	.13		Decontamination of linings							
.31	.08	.14		Decontamination of areas and equipment in hot cells				.17	.07	.02	Decon of Areas and Equip in Cell to Facilitate Dismantling

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.31	.08	.14		Decontamination of areas and equipment in hot cells				.17	.07	.03	Decon of Areas and Equip in Cell to Reduce Contam Levels
.31	.08	.14		Decontamination of areas and equipment in hot cells				.17	.07	.04	Decontamination of Equipment for Transfer or Disposal
.31	.08	.14		Decontamination of areas and equipment in hot cells				.17	.07	.11	Cell Window Maintenance and Cleaning
.31	.09	.00		Removal of Contaminated Equipment/Material				.17	.04	.05	Dismantling and Transfer of Contam Equip and Mat to Contain Stor
.31	.09	.01		Cutting, sizing, and removal of equipment							
.31	.09	.02		Cutting, sizing, and removal of instrument tubing							
.31	.09	.03		Cutting, sizing, and removal of piping							
.31	.09	.04		Cutting, sizing, and removal of tanks							
.31	.09	.05		Cutting, sizing, and removal of structures/stacks							
.31	.10	.00		Dismantling Operations on Reactor Vessel & Internals				.17	.04	.10	Dismantling Operations on Reactor Vessels and Internals
.31	.10	.01		Cutting, sizing, and removal of flat stock and pressure vessels							
.31	.10	.02		Cutting, sizing, and removal of internal and attached piping							
.31	.10	.03		Cutting, sizing, and removal of control rods							
.31	.10	.04		Cutting, sizing, and removal of assemblies							
.31	.10	.05		Cutting, sizing, and removal of instrumentation							
.31	.10	.06		Cutting, sizing, and removal of other internals							
.31	.11	.00		Removal of Primary and Auxiliary Systems				.17	.04	.11	Removal of Primary and Auxiliary Systems
.31	.11	.01		Cutting, sizing, and removal of piping							
.31	.11	.02		Removal of pumps							
.31	.11	.03		Cutting, sizing, and removal of containment other than biological shields							
.31	.11	.04		Cutting, sizing, and removal of primary cooling circuits							
.31	.11	.05		Removal of subsurface materials							
.31	.11	.06		Cutting, sizing, and removal of secondary cooling circuits							
.31	.11	.07		Cutting, sizing, and removal of other primary or auxiliary systems							
.31	.12	.00		Removal of Biological Shield				.17	.04	.12	Removal of Biological Shield
.31	.12	.01		Cutting, sizing, and removal of reinforcement materials							
.31	.12	.02		Cutting, sizing, and removal of biological shield/concrete							
.31	.13	.00		Removal of Pool Linings				.17	.04	.02	Drainage of Spent Fuel Pool and Decontamination of Linings
.31	.13	.01		Drainage of spent fuel pool							
.31	.13	.02		Removal of pool linings				.17	.04	.15	Removal of Pool Linings
.31	.14	.00		Dismantling of In-Cell Equipment				.17	.07	.00	Hot Cell Cleanup
.31	.14	.01		Cutting, sizing, and removal of lead glass windows							
.31	.14	.02		Cutting, sizing, and removal of internal remote operated cranes							
.31	.14	.03		Cutting, sizing, and removal of manipulators							
.31	.14	.04		Cutting, sizing, and removal of gloveports and bagports							
.31	.14	.05		Cutting, sizing, and removal of liquid and gas piping							
.31	.14	.06		Cutting, sizing, and removal of ventilation systems							
.31	.14	.07		Cutting, sizing, and removal of lighting and electrical systems							
.31	.14	.08		Cutting, sizing, and removal of fire suppression systems							
.31	.14			Dismantling of In-Cell Equipment				.17	.07	.06	Dismantling of Primary and Auxiliary Services to Cell
.31	.14			Dismantling of In-Cell Equipment				.17	.07	.07	Dismantling of In-Cell Equipment
.31	.15			Removal of Other Material and Equipment from Containment Structure				.17	.04	.13	Removal of Other Mat and Equip from Containment Structure
.31	.16	.00		Facility (Controlled Area) Hardening, Isolation or Entombment							
.31	.16	.01		Zoning for long-term storage							
.31	.16	.02		Mothballing				.17	.02	.14	Mothballing
.31	.16	.03		Entombment				.17	.02	.15	Entombment
.31	.17	.00		Removal of All Other Facilities, or Entire Contaminated Facility							
.31	.17	.01		Demolition using heavy equipment							
.31	.17	.02		Demolition using explosive charges							
.31	.17	.03		Demolition using other tools							
.31	.18	.00		Decontaminating/Dismantling/Disposal of Temporary Fuel Storage Facility				.17	.06	.03	Dismantling/Disposal of Temporary Fuel Storage Facility
.31	.18	.01		Demolition using heavy equipment							
.31	.18	.02		Demolition using explosive charges							
.31	.18	.03		Demolition using other tools							
.31	.19	.00		Decontaminating/Dismantling/Disposal of Intermediate Fuel Storage Facility							
.31	.19	.01		Demolition using heavy equipment							

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
.31	.19	.02		Demolition using explosive charges							
.31	.19	.03		Demolition using other tools							
.31	.20			Reprocessing Costs				.17	.06	.05	Reprocessing Costs
.32	.00			MATERIAL HANDLING/TRANSPORTATION							
.32	.01	.00		Waste Stream Handling / Packaging							
.32	.01	.01		Receiving & Inspection							
.32	.01	.02		Stage & Store				.17	.06	.07	Transfer and Conditioning of Spent Fuel
.32	.01	.02		Stage & Store				.17	.07	.08	Transfer of Material and Equipment to Airlock Services
.32	.01	.02		Stage & Store				.17	.07	.09	Packaging and Preparation of Cell Waste in Airlock
.32	.01	.02		Stage & Store				.17	.07	.10	Transfer of Material from Airlock to Shipping Dock
.32	.01	.03		Waste Conditioning							
.32	.01	.04		Contact Handled Packaging/Overpacking							
.32	.01	.05		Remote Handled Packaging/Overpacking							
.32	.01	.06		Washing							
.32	.02	.00		Transportation Device / Equipment							
.32	.02	.01		Transportation Device/Equipment for On-Site Transfers							
.32	.02	.02		Transportation Device/Equipment for Off-Site Transportation							
.32	.03			OE Off-Site Destruction Transportation to DOD Facility				.04	.01	.13	OE Off-Site Destruction Transportation to DOD Facility
.32	.04	.00		Removed Drums / Tanks & Misc Transportation							
.32	.04	.01		Transport to Treatment Plant							
.32	.04	.02		Transport to Storage Facility							
.32	.04	.03		Transport to Disposal Facility							
.32	.05	.00		Surface Water (Free Product) & Sediments Transportation							
.32	.05	.01		Transport to Treatment Plant				.05	.11		Transport to Treatment Plant
.32	.05	.02		Transport to Storage Facility							
.32	.05	.03		Transport to Disposal Facility							
.32	.06			Groundwater (Free Product) Transportation				.06	.08		Transport to Treatment Plant
.32	.07	.00		Liquid Waste / Sludge (e.g., UST/AST) Transportation							
.32	.07	.01		Transport to Treatment Plant				.09	.04		Transport to Treatment Plant
.32	.07	.02		Transport to Storage Facility							
.32	.07	.03		Transport to Disposal Facility							
.32	.08	.00		Soil / Solid Waste Transportation							
.32	.08	.01		Transport to Treatment Plant				.08	.03		Transport to Treatment Plant
.32	.08	.02		Transport to Storage Facility							
.32	.08	.03		Transport to Disposal Facility							
.32	.09	.00		D&D Facility Contaminated Equipment / Material Transportation							
.32	.09	.01		Transport to Treatment Plant				.17	.06	.04	Transfer Fuel from Intermediate Storage to Reprocessing
.32	.09	.02		Transport to Storage Facility				.17	.06	.01	Transfer of Fuel from Temp Storage to Intermediate Storage
.32	.09	.03		Transport to Disposal Facility				.17	.06	.06	Transfer and Disposal of Wastes from Reprocessing
.32	.09	.03		Transport to Disposal Facility				.17	.06	.08	Transfer and Disposal of Spent Fuel
.32	.10	.00		Certification & Shipping							
.32	.10	.01		Special Permits, Packaging and Transport Requirements							
.32	.10	.02		Load and Haul Prepared Waste							
.32	.10	.03		Load and Haul Prepared Special Materials							
.33	.00			DISPOSAL - COMMERCIAL				.19	.00		DISPOSAL (COMMERCIAL)
.33	.01			Container Handling				.19	.20		Container Handling
.33	.02			Transport Waste to Commercial Disposal Facility				.19	.21		Transportation to Storage/Disposal Facility
.33	.03			Tipping Charges & Taxes				.19	.22		Disposal Fees and Taxes
.33	.03			Tipping Charges & Taxes				.19	.23		Mixed Waste Storage Fees and Taxes
					.09	.11	.00				Perform Temporary/Mobile Laboratory Analysis
					.14	.00					ALTERNATIVE EVALUATION (RA / CM)
								.02	.08	.00	Sampling Radioactive Contaminated Media
								.02	.10	.00	Radioactive Waste Analysis
								.04	.00		ORDNANCE & EXPLOSIVE - CHEMICAL WARFARE MATERIAL (OE-CWM) REMOVA
								.16	.00		RESERVED FOR FUTURE USE
								.17	.01	.00	Pre-Decommissioning Operations

2nd Lvl	3rd Lvl	4th Lvl	5th Lvl	Environmental Management (Environmental Restoration & Waste Management)	32			33 & 34			STUDIES & DESIGN WORK BREAKDOWN STRUCTURE
					2nd	3rd	4th	2nd	3rd	4th	
								.17	.04	.00	Dismantling Activities
								.17	.05	.00	Spent Fuel Handling
								.17	.06	.00	Hot Cell Cleanup