

2018 EM D&D Project Critical Decision Assessment Tool (CDAT)

Critical Decision Assessment Tool - D&D Projects accomplished under DOE or NRC Regulations

		Weighting Designation	Weighting Factor	D&D Studies, Characterization and Preliminary Analysis (CD-0 / ~1)		D&D Detail Investigation, Alternative Analysis, Selection and Plan (CD-1/2)		D&D Design and Remedial Action (CD-2/3)		
				Maturity Value	Target Score	Maturity Value	Target Score	Maturity Value	Target Score	
A. COST										
A1	Cost Estimate	H	7.5	1	7.5	2	15	5	37.5	
A2	Cost Risk/Contingency Analysis	P	3	1	3	2	6	5	15	
A3	Funding Requirements/Profile	H	7.5	1	7.5	2	15	5	37.5	
A4	Independent Cost/Schedule Review	P	3	N/A	0	2	6	5	15	
A5	Life Cycle Cost	P	3	1	3	2	6	5	15	
A6	Forecast Cost at Completion	P	3	N/A	0	3	9	5	15	
A7	Cost Estimate for Next Phase Work Scope	P	3	5	15	5	15	5	15	
Subtotal Cost Element						36		72		150
B. SCHEDULE										
B1	Project Schedule	H	7.5	1	7.5	2	15	5	37.5	
B2	Major Milestones	P	3	1	3	2	6	5	15	
B3	Resource Loading	P	3	1	3	1	3	5	15	
B4	Critical Path Management	H	7.5	1	7.5	1	7.5	5	37.5	
B5	Schedule Risk/Contingency Analysis	P	3	1	3	1	3	5	15	
B6	Forecast of Schedule at Completion	P	3	1	3	3	9	5	15	
B7	Schedule for Next Phase Work Scope	P	3	5	15	5	15	5	15	
Subtotal Schedule Element						42		59		150
C. SCOPE/TECHNICAL										
C1	Alternative Analysis/End State	H	4.4	3	13.1	5	21.9	5	21.9	
C2	End Point Criteria and Closure Plan/Permit Modification	H	4.4	2	8.8	4	17.5	5	21.9	
C3	Functional and Performance Requirements	P	2.7	1	2.7	3	8.1	5	13.5	
C4	Technology Needs Identified	P	2.7	3	8.1	5	13.5	5	13.5	
C5	Technology Needs Demonstrated	P	2.7	2	5.4	4	10.8	5	13.5	
C6	NEPA Documentation	H	4.4	2	8.8	4	17.5	5	21.9	
C7	Plot Plan	P	2.7	2	5.4	4	10.8	5	13.5	
C8	Site Characterization (Including Surveys and Soil Tests and radioactive inventory)	P	2.7	3	8.1	3	8.1	5	13.5	

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C9	Waste Acceptance Criteria (WAC)	P	2.7	1	2.7	3	8.1	5	13.5
C10	Waste Characterization and Disposition	H	4.4	1	4.4	3	13.1	5	21.9
C11	Pollution Prevention & Waste Minimization	P	2.7	2	5.4	3	8.1	5	13.5
C12	Waste Storage, Packaging and Transportation	H	4.4	2	8.8	3	13.1	5	21.9
C13	Equipment Needs	P	2.7	N/A	0.0	2	5.4	5	13.5
C14	Work Plans and Work Package Completion	H	4.4	N/A	0.0	1	4.4	5	21.9
C15	Interface Planning and Control	P	2.7	1	2.7	3	8.1	5	13.5
C16	Training Requirements	P	2.7	N/A	0.0	1	2.7	5	13.5
C17	Long Term Surveillance and Monitoring Plan/Post Disposition Monitoring Plan	P	2.7	N/A	0.0	2	5.4	5	13.5
C18	Permits, Licenses, and Regulatory Approvals	H	4.4	N/A	0.0	3	13.1	5	21.9
C19	Detailed D&D Design, Plans and Procedures	H	4.4	N/A	0.0	N/A	0.0	5	21.9
C20	D&D Design/Plans, Technical, and related Safety Reviews for this phase	P	2.7	N/A	0.0	5	13.5	5	13.5
C21	Natural Phenomena	P	2.7	2	5.4	3	8.1	5	13.5
Subtotal Scope/Technical Element					90		211		350
D. MANAGEMENT PLANNING AND CONTROL									
D1	Mission Need Statement	H	2.2	5	11.1	5	11.1	5	11.1
D2	Acquisition Strategy and Plan	H	2.2	3	6.7	5	11.1	5	11.1
D3	Key Project Assumptions	P	1.8	3	5.5	4	7.3	5	9.1
D4	Project Execution Plan (PEP)	H	2.2	1	2.2	3	6.7	5	11.1
D5	Integrated Project Team (IPT) and Charter	P	1.8	2	3.6	3	5.5	5	9.1
D6	Decommissioning Plan (For NRC work or DOE equiv.)	H	2.2	1	2.2	3	6.7	5	11.1
D7	Baseline Change Control	H	2.2	1	2.2	4	8.9	5	11.1

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D8	Project Control	P	1.8	N/A	0.0	3	5.5	5	9.1	
D9	Project Work Breakdown Structure (WBS)	P	1.8	1	1.8	4	7.3	5	9.1	
D10	Resources Required (People/Material) for Next Phase	P	1.8	5	9.1	5	9.1	5	9.1	
D11	Configuration Management	H	2.2	1	2.2	3	6.7	5	11.1	
D12	Project Risk Management Plan/Assessment	H	2.2	2	4.4	3	6.7	5	11.1	
D13	Quality Assurance Program	H	2.2	1	2.2	4	8.9	5	11.1	
D14	Value Engineering, Trade-Off, and Optimization Studies	P	1.8	1	1.8	3	5.5	5	9.1	
D15	Procurement Packages	P	1.8	N/A	0.0	1	1.8	5	9.1	
D16	Project Acquisition Process	P	1.8	5	9.1	5	9.1	5	9.1	
D17	Funds Management	P	1.8	5	9.1	5	9.1	5	9.1	
D18	Project Reviews/Assessments	P	1.8	5	9.1	5	9.1	5	9.1	
D19	Stakeholder Program	H	2.2	2	4.4	4	8.9	5	11.1	
D20	Inter-Site and On-Site Coordination	P	1.8	2	3.6	3	5.5	5	9.1	
Subtotal Management Planning and Control Element						91		150		200
E. SAFETY										
E1	Hazard Analysis/Safety Documentation	P	5	2	10	4	20	5	25	
E2	Integrated Safeguards and Security Planning	P	5	1	5	4	20	5	25	
E3	ES&H Management Planning (Including ISM)	H	15	2	30	4	60	5	75	
E4	Emergency Preparedness	P	5	1	5	2	10	5	25	
Subtotal Safety Element						50		110		150
TOTAL						308		602		1000