

## STAR RATING OF AN OPENCAST COAL MINES - DRAFT EVALUATION TEMPLATE

Sr No.	Evaluation Parameter	Required/target/statutorily specified Value	Actual value	Rating points (1-5) Criteria	Maximum points	Points given	Multiplying factor	Points Scored	Details submitted by the mine	Rationale for points
<b>MODULE 1 - MINE GEOMETRY AND OB DUMPS</b>										
1	Haul Road Gradient	as per permission		% length within permissible limit (1 for >50% and 5 for >90%)	3	4	0.6	2.4		
2	Haul Road width (m)	3 X dumper width + 5 m		% haul road length where width within permissible limit (1 for 60% and 5 for 100%)	3		0.6	0		
3	Slope of final batter	Permitted Slope as per PR or geo-technical study		% increase in angle over permission (1 for 8% or more and 5 for 0% or less)	3		0.6	0		
4	Fencing around OC	As per DGMS provision	Yes/No	% length fenced as per permission (1 for 60% and 5 for 100%)	1		0.2	0		
5	Garland drain around OC	Length as per mine plan	Yes/No	% length made as per permission (1 for 60% and 5 for 100%)	1		0.2	0		
6	OB Removal (M Cu.m)	Target		% achievement (1 for 80% and 5 for 100%)	3		0.6	0		
7	OB Dump height	as per permission from DGMS	Yes/No	% increase in height (1 for 15% or more and 5 for 0% or less)	3		0.6	0		
<b>MODULE 2 - ENVIRONMENT RELATED PARAMETERS</b>										
8	Dust suppression measures as per PR/EMP	No. of water tankers required -	No. of water tankers provided-	% nos provided (1 for 60% and 5 for 100%)	1		0.2	0		
		No. of drills operating -	No. of drills provided with wet drilling arrangements -	% nos provided (1 for 60% and 5 for 100%)	1		0.2	0		
9	Ambient Air Quality	Required frequency of monitoring	Actual monitoring frequency	% achieved (1 for 80% and 5 for 100%)	1		0.2	0		
		Required quality standard to be met	Actual standard observed	% nos within limit (1 for 80% and 5 for 100%)	1		0.2	0		
10	Monitoring of surface water quality	Required frequency of monitoring	Actual monitoring frequency	% achieved (1 for 80% and 5 for 100%)	1		0.2	0		
		Required quality standard to be met	Actual standard observed	% nos within limit (1 for 80% and 5 for 100%)	1		0.2	0		
11	Water conservation	Actions required as per provisions	No. of prescribed actions being taken in actual	% achievement (1 for 60% and 5 for 100%)	1		0.2	0		
12	Mine water utilization	Total discharge	Total Utilized	% utilised (1 for 80% and 5 for 100%)	1		0.2	0		
13	Submission of EMP compliance report	All compliance reports need to be submitted in time	Yes/No	Yes (1 points) No (0 points)	1		1	0		

14	Whether Energy audit was undertaken within 5 years	There should be atleast 1 such audit in 5 years	Yes/No	Yes (1 point) No (0 point)	1		1	0		
15	Implementation of recommendations of Energy Audit	Nos. of recommendations made	Nos. of recommendations implemented	% achievement (1 for 80% and 5 for100%)	2		0.4	0		
16	Compliance of EC and FC related violations			% violations complied (5 for 80% and 0 for100%)	0		-0.2	0		
17	Back-filling of OBR	Target as per plan (M Cu.m)	Actual	% achievement (1 for 60% and 5 for100%)	4		0.8	0		
18	Biological Reclamation of area affected by mining	Target Area (Ha)	Actual	% achievement (1 for 80% and 5 for100%)	2		0.4	0		
		Target Plantation (Nos.)	Actual	% achievement (1 for 80% and 5 for100%)	2		0.4	0		
19	Use of renewable energy resources such as solar, wind etc	Targetted installation (KW)	Actually Installed (KW)	% achievement (1 for 80% and 5 for100%)	2		0.4	0		
19	Top Soil Utilization	Planned stacking (M Cum)	Actual	% achievement (1 for 80% and 5 for100%)	2		0.4	0		
		Planned Utilization (M Cum)	Actual	% achievement (1 for 80% and 5 for100%)	2		0.4	0		
<b>MODULE 3 - ADOPTION OF Technology: Best mining practices</b>										
20	Has the Quality Management System Standard (ISO:9001) been implemented in the mine? Has it been certified?	Name of Certification body, Period of Validity (from...to....):		Certification valid in the period of reporting year (1 points)  There is no valid certificate and submission was also not done in reporting year (0 point)	1		1	0		
21	Has the Environment Management System Standard (ISO:14001) been implemented in the mine? Has it been certified?	Name of Certification body, Period of Validity (from...to....):		Certification valid in the period of reporting year (1 points)  There is no valid certificate and submission was also not done in reporting year (0 point)	1		1	0		
22	Use of State of art technology in communication e.g. walkie talkie	OITDS,		use of advance technology (2 points)  absence of new technology (0 point)	2		1	0		
23	Use of blastfree technologies e.g.surfaceminer etc.	% of production through surface miner/inpit crushing		% achievement (1 for 60% and 5 for100%)	2		0.4	0		
24	use of latest technology & software in planning & surveying e.g. total stations,	Slope stability radar, total station		1 for each technology	2		1	0		

25	use of upgarded technology in conveying of material e.g. use of High angle conveyours,inpitcrusher & conveying sysytem	% of production using conveyors		% achievement (1 for 30% and 5 for60% & above)	2		0.4	0		
<b>MODULE 4 - ECONOMIC PERFORMANCE RELATED PARAMETERS</b>										
26	Achievement of coal production target in reporting year	Target (MT)	Actual Production - % Achievement -	% achieved (1 for 80% and 5 for100%)	3		0.6	0		
27	Achievement of coal despatch target in reporting year	Target (MT)	Actual despatch - % Achievement -	% achieved (1 for 80% and 5 for100%)	3		0.6	0		
28	Capacity utilization	Mine capacity as assessed by CMPDI (M Cu.m)	Actual Capacity achieved - Capacity Utilization % -	% achieved (1 for 80% and 5 for100%)	3		0.6	0		
29	Impact of grade slippage (Realization Percentage)	Expected realization as per the declared grade (Rs./T)	Actual Realization - Realaization % -	% achieved (1 for 90% and 5 for100%)	3		0.6	0		
30	Utilization of budget for capital expenditure	Capital Budget -	Capital Utilization - % Capital Utilization	% achieved (1 for 80% and 5 for100%)	3		0.6	0		
<b>MODULE 5 - REHABILITATION &amp; RESETTLEMENT RELATED PARAMETERS</b>										
31	Survey for identification of Project affected families, families to be displaced, compensation to be paid for houses and other properties, persons losing livelihood etc	Whether a formal survey has been done in line with existing R&R Policy?	Yes/No	Yes (1 point) No (0 point)	1		1	0		
32	Status of Rehabilitation Site	Whether all stipulated facilities have been provided?	Yes/No	% expenditure as per PR (1 for 90% and 5 for100%)	1		0.2	0		
		Whether periodic maintanance of RR site is being done ?	Yes/No	Yes (1 point) No (0 point) N.A.	1		1	0		
33	Whether alternate arrangements for sustainable livelihood have been made	Number of identified families/persons who lost livelihood	No. of such families/persons provided direct employment -	% achieved (1 for 60% and 5 for100%)	1		0.2	0		
			No. of such families/persons provided indirect employment -		1		0.2	0		
			No. of such families/persons provided skill development and vocational training -		1		0.2	0		
34	Whether a public grievance redressal mechanism is in place for dealing R&R and other connected issues	To be provided	Yes/No	Yes (1 point) No (0 point)	1		1	0		

35	Expenditure on CSR Activities	Committed Expenditure	Actual	% expenditure (1 for 80% and 5 for100%)	1		1	0		
<b>MODULE 6 - EMPLOYEE/WORKER RELATED COMPLIANCE PARAMETERS</b>										
36	Expenditure on Welfare Activities	Committed Expenditure	Actual	% expenditure (1 for 60% and 5 for100%)	2		0.4	0		
37	PME conducted as per the requirement of once in 5 years (once in 3 years for 50+ age)	Target	Actual	% achievement (1 for 60% and 5 for100%)	2		0.4	0		
38	Whether sanitation provision has been made according to Mines rules 1955 requirement of toilets etc	List the provisions required to be made in the mine	Actual provided	% achievement (1 for 60% and 5 for100%)	2		0.4	0		
39	Whether 20% of workers were given vocational training in reporting year as per requirement of Mines Vocational Training Rules 1966	Target	Actual	% achievement (1 for 60% and 5 for100%)	2		0.4	0		
<b>MODULE 7 - SAFETY and SECURITY RELATED PARAMETERS</b>										
40	Imposition of Sec-22 in the mine	Nil	Actual nos. of orders notices issued under Section-22	(-3) for each such order/notice	0		1	0		
41	Safety audit	Whether Safety audit was undertaken in reporting year	Yes/No	Yes (1 point) No (0 point)	1		1	0		
42	Pit safety committee meetings	No. of Required meetings	Actual	%meetings conducted (1 for 60% and 5 for100%)	1		0.2	0		
43	No of disasters in recording year (Note: figures of the previous financial year to be considered and not the calender year)	Nil		-10 for every disaster incident	0		1	0		
44	No of fatal accidents in recording year (Note: figures of the previous financial year to be considered and not the calender year)	Nil		(-3) for every casualty	0		1	0		
45	No of serious bodily injuries in recording year (Note: figures of the previous financial year to be considered and not the calender year)	Nil		(-1)for every serious bodily injury	0		1	0		
46	IT initiatives to check pilferage			Yes (1 point) No (0 point)	1		1	0		
47	Utilization of safety budget	Budget	Utilization %	%utilised (1 for 60% and 5 for100%)	4		0.8	0		
48	Strength of statutory personnel	Nos. required	Actual	%deployed (1 for 60% and 5 for100%)	2		0.4	0		
49	Risk assessment based safety management system	There should be one such system in place	Yes/No	Yes (5point) No (0 point)	5		1	0		
50	Assessment in the annual safety week	Maximum marks at which mine was assessed	Actual % obtained	%marks obtained (1 for 80% and 5 for100%)	2		0.4	0		
					16					
	<b>MODULE</b>	<b>SUM OF MAXIMUM POINTS IN APPLICABLE PARAMETERS</b>		<b>SUM OF POINTS SCORED IN APPLICABLE PARAMETERS</b>	<b>PERCENTAGE</b>				<b>CRITERION FOR STAR RATING</b>	
									<b>PERCENTAGE SCORE</b>	<b>STAR RATING</b>

