

CENTRAL COALFIELDS LIMITED

ANNUAL MINES SAFETY WEEK 2013

MINING MARKSHEET FOR OPENCAST MINES(GROUP A / B)

Group A : More than 2 Million cubic meter Composite production (OB&COAL)

Group B : Less than 2 Million cubic meter Composite production (OB&COAL)

GENERAL INFORMATION

1. Name of the Mine :

2. Name of the Agent :

3. Name of the Manager :

4. Name of the Section visited. :i)
:ii)

5. Date of Inspection :

6. Name of the Convener :

7. Names of the Team Members :1 Signature
:2
:3
:4

8. Name of the DGMS Observer. :

9. Name of the ISO Observer. :

10. Average monthly production : i) CoalTonnes
during the previous year ii) OBRCum.

11.To be filled by Manager : Number(2013) Cause & Place
A. Fatality
B. Serious Injury
C. Reportable Injury

12. Order/ Notices under Sec.22
of Mines Act., 1952

A. Order under Sec 22 A(1)
B. Order under Sec22 A (2)
C. Order under Sec 22 (3)

Instruction for inspection team

- Maximum deduction : i) 50 marks for each fatality
- ii) 15 marks for each serious injury
- iii) 5 marks for each reportable injury
- iv) 20 marks for each order/ notice under sec 22A (2),
sec22(3)
- v) 10 marks for each order / notice under sec 22 A(1)
- VI) 20 Marks- Not timely compliance of Violations

Check List : In order to avoid delay and for effective inspection a check list of records , reports , registers etc. which are to be checked as per mark sheet shall be provided to the inspecting team at the beginning of the inspection

SUMMARY OF MARKS:

S. No.	Item	MARKS	
		Max.	Obt.
1	Standard of working	400	
2	Storage, Transport & use of Explosives.	100	
3	Dust suppression and fire control	100	
	SUB TOTAL	600	
4	Lighting	100	
5	Survey & Planning	50	
6	A - Provision of safety equipment	50	
	B - Training	50	
7	House Keeping, Publicity and Propaganda	50	
	SUB TOTAL	300	
8	Safety Management with respect to contractual works	100	
	GRAND TOTAL	1,000	

Marks to be given by the ISO Observer

50

NOTE : 1. The performance of the mine should be judged on following criteria.

Adequate : 70 to 75%, Good – 76 to 85%, Very Good – 86 to 95% marking.

: There is always scope for improvement in safety standards of mine, as such if any mine scores more than 95%,

Full justification as a special note should be given and it will be reviewed by concerned DT and DMS.

: 2. Wherever a particular subject / item is not relevant. "NOT APPLICABLE", or "NA" should be written and **Pro- rata marks should be given for that subject sub total.**

3. Where departmental as well as contractors worker is deployed in a mine, the marks will be given according to the ratio of manpower deployed departmentally and contractually in a mine.

Man power of Departmental worker

Man power of contractor worker

Signature of the convenor /

Team member with name and Designation

- 1.
- 2.
- 3.
- 4.

Signature of ISO Membe

Following Points to be considered during Annual Mines Safety Week 2013:

- “Negative Marking” will be done if following activities will not be accomplished during the Safety Week Inspection of a Mine(5 marks for each activity not completed):
 - I. Risk Assessment and its Management
 - II. Permanent Public Address System in working condition
 - III. Proper maintenance of Log Book duly signed by in charge of the section for SDL/LHD in U/G and HEMM in O/C
 - IV. Display of Emergency Plan
 - V. Proper Maintenance of Form “B”, “C”, “D” & “E”
 - VI. Any Accidental Damage of Machine.
- There will be one group for U/G mines and two prizes (first & second) will be there in each category for this group.

For O/C mines, two groups (“A” &”B”) will be there. Mines with coal production more than 8 lakh tones per year will be in Category ”A” and remaining Mines will be in category ”B”.
- Guest House Facility will be provided for the inspecting teams and observers to facilitate lighting inspection during night and inspection team should reach at the mine in time. In case of any difficulty in arrangement of guest house, permission can be obtained from competent authority for arranging accommodation at nearby township by the Area.
- Inspecting Team Members to be released in time.
- Persons to be honored/rewarded for Safe Working, Safety Slogans, Safety songs, Article on Safety, best Safety Talk or for any other innovative idea pertaining to Safety.
- General cleanliness /washing of HEMM like dumpers, Dozers to be ensured
- Scrap yard to be prepared and earmarked at every Mine workshop. House Keeping of Workshop should be done by doing auction of surveyed off down dumpers, unserviceable tyres and burnt oil.
- All the safety instruments to be made in order.

For publishing Souvenir, Articles/safety slogans/experiences related to safety/safety related photographs are to be submitted at the Safety Department, CCL Hq. latest by 10th February 13th

vii)	Road/traffic signs for control of mobile machine. (Note : Award full marks if road /traffic signs are painted with fluorescent/luminous paint & they are of sufficiently conspicuous size).	5	
viii)	System of enforcement to check unauthorised driving (System framed to be specified and provided to the inspection team.).	5	
ix)	RISK ASSESSMENT & PREPRATION OF SAFETY MANAGEMENT PLAN	20	
	ECOLOGICAL BALANCE		
X)	. Afforestation /environmental control. (Note : Award full marks if plantation of one tree for every 10 sq.mtr. Of the land disturbed by mining activity. Award no marks if there is any dump which is more than 1 year old and afforestation not done).	10	
xi)	Slope stability of dump yards	45	
	a) Assessment of the Engineering Geology , Strength properties.	5	
	b) Removal of top soil on the place of dumping.	5	
	c) Removal of rain water stagnation by proper drainage system.	5	
	d) Presence of alternate road at safe distance.	3	
	e) Monitoring of dump slope and dump profile.	3	
	f) No fresh dump on old dump areas.	2	
	g) System of consolidation of dumps and crack develop with proper levelling of bench by dozer.	2	
	h) Road at safe distance from toe of dump (Minimum distance should be equal to height of dump)	3	
	i) Provision of hume pipes /culverts at an interval of 50 m for effective drainage of water.	2	
	j) Regular cleaning of hume pipes to make them effective .	2	
	k) Levelling of roads lower than toe of dump.	3	
	l) No dumps on marshy or water stagnant ground.	5	
xii)	Coal stock pile	10	
xiii)	Working of machines.		
	a) The operator maintains check list.	5	
	b) The machines are employed at a distance greater than 30 mtr from each other.	5	
	c) Code of practice for excavators and drills are framed and implemented.	5	
	d) Proper conveyance is provided for the transport of persons to work places.	5	
xiv)	Noise studies, record and protection.		
	a) Assessment of noise level by measurement at - Dumper cabin – While idling 3 - While being loaded 3 - While tipping 3 - While moving. 3 Drill – Inside cabin 3 Outside cabin all around machine 3	12 6	
	Excavators – Inside cabin 3 During operation & while idling 3	6	
	Dozers – At operators position 3 During operation and while idling 3	6	
	b) Maintenance of records.	10	
	c) Protection against noise – Provision of ear plugs/muffs for workers where noise level exceeds 85 dB(A) Required Provided (Actual Provided to be judged from field observation and proportionate marks to be awarded.)	10	
	SUB TOTAL	400	

2	STORAGE, TRANSPORT & USE OF EXPLOSIVES		100	
	i)	Safe Storage. (20)		
		a. Cleanliness in the magazine.	2	
		b. Proper stacking of explosives.	2	
		c. Lightening conductor / fire fighting equipment.	2	
		d. Searching for contrabands and use of transit slips.	2	
		e. Magazine records.	2	
		f. Fencing.	2	
		g. Watch tower.	2	
	ii)	Posting of sentries and warning systems to prevent thefts. (Note : In case ,magazine capacity < 2 days requirement of mine/ mines give zero marks).	2	
	iii)	SAFE TRANSPORT	4	
		a. Provision of explosive vans & validity of license	2	
		b. Authorization of magazine in-charge ,magazine clerks, shot- firers & explosive carriers	2	
	iv)	Blasting tools, sirens, shelters. (30)		
		a. Blasting tools	5	
		b. Provisions of sirens, posting of sentries and warning system (full marks, if one electric & the other hand operated).	5	
		c. Planning of blasting time and display of notices of blasting signals within danger zone.	5	
		d. Blasting shelters, its location & design.	5	
		e. Fixing of danger zone for blasting by manager and display on site (min.500 m).	5	
		f. Posting of sentries.	5	
	v)	Safe & Economical use of explosives (25)		
		a. Appointment of blasting officer and adequate blasting personnel.	5	
		b. Blasting pattern, sketch of sequencing, knowledge of safe blasting practices among work persons.	5	
		c. Proper enforcement of DGMS restrictions/circulars.	5	
		d. Vibration studies of blasting operations (where applicable) Give proportionate marks on other subject where not applicable.	5	
		e. Maintenance of records pertaining to use in respect of (a) to © above.	5	
		SAFE BLASTING PRACTICES (25)		
		a. Controlled blasting practice wrt nearby villages, surface structures, hot strata (use of pyrometer-record to be checked).	5	
		b. Use of shock tubes	5	
		c. Use of muffle blasting as per the permission	5	
		d. Charge per delay as per the permission.	5	
		e. Ground Vibration study (PPV must be < 10 mm/sec measured at the surface – record to be checked.	5	
		SUB TOTAL	100	
3	DUST SUPPRESSION AND FIRE CONTROL		100	
	i)	Use of dust extractors/wet drilling for power drills	10	
	iii)	Effective dust suppression/wetting (20)		
		a. Haul Roads	5	
		b. Working benches	5	
		c. Dumper roads	5	
		d. Dumping places/loading places other than benches, unloading places.	5	
	iii)	a. Air borne dust survey and records	5	

	b.	Establishment of lab and training, of persons.	5	
	iv).	Effective dust suppression in coal handling plants.	10	
	v)	Provision of adequate water tankers and water supply. Note : Award full marks for providing 1 K.ltr capacity per km road Otherwise award proportionate marks. Consider all kinds of roads while giving marks.	10	
	vi)	Formulation of scheme for air borne survey	5	
		FIRE CONTROL (35)		
	a.	Use of automatic/Semi Automatic fire detectors in HEMM.	5	
	b.	Availability of Fire Tender	5	
	c.	Implementation of Fire Fighting scheme.	5	
	d.	Provision of Fire Extinguisher.	10	
	e.	Use of special method to detect and control fire.	10	
		SUB TOTAL	100	
4	LIGHTING -		100	
	i)	Adequate lighting arrangement at -		
	a.	Haul roads	10	
	b.	Faces	10	
	c.	Loading points other than faces	10	
	d.	Dumping places	10	
	e.	Siding	10	
	f.	Coal stock yard	10	
	g.	CHP	10	
	h.	Workshop	5	
	i.	Sub Stations.	5	
	ii)	Lighting survey and record – frequency as per circular (Note : Availability of light survey equipment to be checked).	10	
	iii)	Provision of signal/warning lights to dumpmen/tripmen/spotters etc. and use of luminant paints for all these signals during day and night.	5	
	iv)	Traffic lights	5	
		SUB TOTAL	100	
5	SURVEY & PLANNING -		50	
	i)	Furnishing and maintenance of survey room. (10)		
	a	Flat storage and storage of other plans	3	
	b	Adequate lighting.	2	
	c	Cleanliness of survey room.	3	
	d	Adequacy of working place.	2	
	ii)	Preparation and maintenance of statutory plans.	5	
	iii)	Maintenance of survey records.	5	
	iv)	Proper storage and maintenance of plans and sections.	5	
	v)	Provision of survey equipment maintenance and training of surveyors on new survey equipments.	5	
	vi)	General updating of plans as per regulations or requirements.	5	
	vii)	Preparation and monthly updating of slice/section plans at 30 m interval.	5	

6	viii)	Planning of mine with respect to proper drainage and safeguards against danger of inundation maintenance of drainage and water danger plans.	5		
	ix)	Provision of marking of fault plane in coal seams as well as on the top of the benches on plan.	5		
		SUB TOTAL	50		
6	A - PROVISION OF SAFETY EQUIPMENTS -		100		
	i)	Walkie talkie sets – Adequacy to connect all important points of operation.	5		
	ii)	a.	Fire fighting plan & equipments provided at each place as per statute and 8 th Conf. On safety in Mines and on all HEMM All officers all Foremen, all Overmen in the shift must be well connected to workshop and other important places.	5	
		b.	Provision of fire fighting arrangements.	5	
		c.	Provision of automatic fire fighting arrangements on all HEMM	5	
	iii)	Dust masks for all the persons employed at the dusty places.	5		
	iv)	Audio visual alarms parking brake, emergency steering, brake testing arrangements etc., for dumpers and tippers. Note : Proportionate marks in the ratio of actual in working order and requirement.	10		
	v)	Other protective equipment such as gloves, goggles, safety belts, etc., to required category of workmen.	5		
	vi)	Use of helmets and shoes (to be judged by actual observation during inspection).	5		
	vii)	Provision of noise meters.	5		
		SUB TOTAL	50		
	B - TRAINING (Departmental & Contractor workers)			50	
	i)	Initial Training	5		
	ii)	Refresher Training	5		
	iii)	No. of HEMM Operators trained and evaluated by a board as per the recommendations of 8 th Conference on Safety in Mines – Award proportionate marks.	5		
	iv)	Specialised training and upgrading skills of -			
		a	Operators	5	
		b	Mechanics.	5	
		c	Electricians.	5	
		d	Others.	5	
		e	Supervisors	5	
		Note : Award proportionate marks in the ratio of trained to the total in each category.			
	v)	Special training classes to injured persons.	5		
	vi)	Orientation training to persons on change of jobs.	5		
		SUB TOTAL	50		
7	HOUSE KEEPING, PUBLICITY& PROPAGANDA (100)				
	i)	Provision and proper running of canteen.	3		
	ii)	Adequacy of latrines and urinals.	2		
	iii)	Regular exhibition of safety films (Award full marks for showing atleast on film per month.)	5		
	iv)	Provision of rest shelters including for contractors workers.	5		
	v)	Drinking water and arrangement for its cooling (Award full marks if drinking water is arranged near the working shovels or individual water bottles).	5		
	vi)	Proper stacking of materials in stores and general cleanliness on surface.	3		
	vii)	First aid boxes and equipment and carrying of first aid outfits by officials.	2		
	viii)	a	Making of video cassette for safety propaganda	3	
		b	Linking with cable operator for regular safety education through TV.	2	
	ix)	Periodical medical examination : Target----- Achievement----- % Achieved.	3		

	x)	Seminar on any safety subjects (Minutes of seminar be produced to the inspection team).		2		
	xi)	Formulation and active operation of quality circles for safety improvement.		5		
	xii)	Ecological balance (Mined out area)				
	a	Planning of land reclamation and plantation		5		
	b	Plantation survival.		5		
<p>Note: a) Give full marks if land reclaimed is equal to the land excavated in a year or deduct proportionately. b) Full if 2500 trees per hectare of dump area cumulatively survived or area planted = area used for mining in last year c) No old dump (one year old or more) should be without forestation, if so , give zero marks</p>				SUB TOTAL	50	
8	SAFETY MANAGEMENT WITH RESPECT TO CONTRACTUAL WORKS.				100	
	i)	Master list of contractors workers.				
	a	Contractwise.		3		
	b	Contractorwise.		2		
	ii)	Maintenance of records in B-Form., Issue of identity cards with photographs, Maintenance of attendance of contractors workers as per Mines Rules (Form-C,D & E).		10		
	iii)	VTC Training of contractor workers.		5		
		Name of the contractor	No. of workers	Workers' trained		
	1					
	2					
	3					
		Note : Award proportionate mark for achievement.				
	iv)	Statutory supervision (Departmental) of contractual operation.		5		
	v)	IME of Contractors workers.		10		
	vi)	Personal protective equipments (shoes, helmets, dust mask etc.)		5		
	vii)	Provision of separate rest shelter, drinking water to contractors workers.		5		
	viii)	Provision of adequate lighting at loading/unloading points and work sites.		5		
	ix)	Working hours and rest day (3 shift working with fixed rest day – 100 % marks else zero)		10		
	x)	Separate road for contractors workers vehicles.		5		
	xi)	Joint inspection of all contractors equipments		5		
	xii)	Provision of identification of contractor workers, staff after day light hours.		5		
	xiii)	Framing of code of practice for operation of contractor's work.		5		
	xiv)	General safety standards in contractor's workshop.		5		
	xv)	Provision of safety equipments (AVA, rear view mirror, back light/reverse light, identification of vehicle).		5		
	xvi)	System of checking of unauthorized riding, unauthorized vehicle in contractor's work site.		5		
	xvii)	General safety Awareness among contractors workers.		5		
				SUB TOTAL	100	

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ENGINEERING MARKSHEET FOR OPENCAST MINES(GROUP A / B)

Group A : More than 2 Million cubic meter Composite production (OB&COAL)

Group B : Less than 2 Million cubic meter Composite production (OB&COAL)

1. Name of the Mine :
2. Name of the Agent :
3. Name of the Manager :
4. Name of the Colliery Engineer :
5. Name of the Safety Officer :
6. Date of Inspection :
7. Name of the Convener :
8. Names of the Team Members :1
:2
:3
:4
9. Name of the DGMS Observer. :
10. Name of the ISO Observer. :

S. No.	Item	MARKS	
		Max.	Obt.
1A	Power supply to excavation equipment	100	
1B	Surface sub-station and OH Lines	100	
	SUB TOTAL	200	
2A	Shovel (Electrical)	80	
2B	Hydraulic Excavators	80	
2C	Drills	80	
2D	Dumpers	80	
2E	Dozer	80	
	SUB TOTAL	400	
3.	Excavation Workshop	100	
4.	CHP	200	
	GRAND TOTAL	900	

NOTE : : 1. The performance of the mine should be judged on following criteria.

Adequate : 70 to 75%, Good – 76 to 85%, Very Good – 86 to 95% marking.

: There is always scope for improvement in safety standards of mine, as such if any mine scores more than 95%, full justification as a special note should be given and it will be reviewed by concerned DT and DMS.

Signature of the convener /

Team member with name and Designation

- 1.
- 2.
- 3.

Signature of ISO Member

Following Points to be considered during Annual Mines Safety Week 2013:

- “Negative Marking” will be done if following activities will not be accomplished during the Safety Week Inspection of a Mine(5 marks for each activity not completed):

- VII. Risk Assessment and its Management
- VIII. Permanent Public Address System in working condition
- IX. Proper maintenance of Log Book duly signed by in charge of the section for SDL/LHD in U/G and HEMM in O/C
- X. Display of Emergency Plan
- XI. Proper Maintenance of Form “B”, “C”, “D” & “E”
- XII. Any Accidental Damage of Machine.

- There will be one group for U/G mines and two prizes (first & second) will be there in each category for this group.

For O/C mines, two groups (“A” &”B”) will be there. Mines with coal production more than 8 lakh tones per year will be in Category ”A” and remaining Mines will be in category ”B”.

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- Persons to be honored/rewarded for Safe Working, Safety Slogans, Safety songs, Article on Safety, best Safety Talk or for any other innovative idea pertaining to Safety.
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S No	Item		Max Marks	Marks Obt.
1A	POWER SUPPLY TO EXCAVATION EQUIPMENTS		100	
	a)	Suitability and condition of transformer feeding –Shovel/Drill		
		i) Proper oil level condition of radiator, oil and winding temperature indicator.	10	
		ii) Provision of Buchholtz Relays and warning system Conservator, breather and silica gel.	10	
		iii) Provision of lighting arresters, conductors & earthing Equipment body earthing from 2 separate source. Separate earthing for transformer's neutral, lightning arrester & body.	15	
	b)	Condition of HEMM transformer and of primary and secondary controlling switches, OC,EL relay & schematic diagram of the power supply arrangement of the quarry.	10	
	c)	Condition of OH lines and / or power cable feeding power to shovel/drill		
		i) Proper layout of cables, terminal connections and insulation tests.	5	
		ii) Spacing of the conductors, Sag of the OH Line.	5	
		iii) Earthing of poles, Ground clearance of conductors and horizontal clearance from buildings, structures etc. Cradling /earth continuity.	10	
	d)	Condition of HT field switch.		
		i) Locking arrangement of door /rubber gasket out side painting.	5	
		ii) Connection of power cable with field switches and earthing.	5	
		iii) Condition of relays, PTs, CTs, Ammeter, Volt meter.	5	
		iv) Provision of plug & socket connections with trailing cables and condition.	5	
	e)	Condition of trailing cable.		
		i) Connection and earthing with fields switch / shovel/drill	5	
		ii) Provision of hand gloves & gum boots to cableman.	5	
		iii) Condition of outer sheath, joints, insulation test record of cable.	5	
	SUB TOTAL		100	
1B	SURFACE SUB STATIONS AND OVERHEAD LINES		100	
	a)	Sub Station		
		i) Proper fencing with gates to prevent unauthorized entry. Layout of sub station and electrical single line diagram displayed at suitable places Stone ballasting of switch yard and no vegetation in the sub station premises.	5	
		ii) Condition of main transformer oil level, temp indicator, cable connection, ventilation, winding temperature indicator, buchholtz relay, conservator, breather compounding etc.	5	
		iii) Identification of all control switch gears and equipment feeders and cable. Suitability of the primary and secondary controlling switchgears, rating and protective features and relays. Cable layout size, type, laying and connection to the switches.	5	

	iv)	Proper drainage and soak pits at transformer foundations	5	
	v)	Earthing arrangement (transformer and other switches and cables).	5	
	vi)	Fire fighting equipment, danger board and cleanliness	5	
	vii)	DGMS approval of HT installation and compliance of DGMS violations.	5	
	viii)	Provision of authorized sub station attendant. Maintenance of daily electrical log book. Maintenance of records of insulation tests of cables and electrical equipment. Maintenance of records of earth resistance test of earthing system. Maintenance of records of di-electric strength of transformer oil.	10	
	ix)	Display of first-aid charts and training with particular emphasis on treatment for electrical shocks. Availability of "men at work" boards, protective and working tools like rubber gloves, insulated pliers, bamboo ladders, safety belts, discharging rods, relay testing kit, transformer oil testing m/c etc., the records of regular use of above, their present condition and their suitability for use.	5	
	b)	Earthing		
	i)	Whether all metal supports, all other metallic fitting attached thereto have been efficiently earthed by. a) Direct connection to earthing electrodes. b) By connection to continuous earthing wire. OR Earthing electrodes at the first and the last pole and 5 places per mile in between. Note : No marks shall be given if either (a) or (b) has not been complied with.	10	
	ii)	Earthing of stay wires and provision of stay insulators. Separate earthing for equipment body, transformers neutral earthing, lightning arrestor's earthing.	5	
	c)	Overhead Lines.		
	i)	Condition of OH lines supports, material strength whether the supports are in keeping with the span used and danger sign board. Conductor of different voltage on same supports whether necessary precautions have been taken by way of provisions of earthed cradle guards in between.	5	
	ii)	Implementation of proper shut-down permit.	5	
	iii)	Condition of the conductors with respect to the size, sag and joints. Whether the size of the conductor is adequate for the load to be supplied and span is excessive slack, sag and joints in the conductor.	5	
	iv)	Clearance above ground of the lowest conductor of the OH line. Whether stipulated clearance have been maintained . Clearance from ground to lowest conductor of OH line crossing road should not be less than 12 mtr. Whether adequate clearance from buildings/roof have been maintained.	5	
	v)	Provision of adequate safety & protective devices for overhead lines. Protection against lightning. Provision of anti climbing devices on supports. Provision of danger boards on support/poles.	10	
	vi)	Whether adequate earthed cradle guards have been provided (at every road/rail, at every span drawn along the road, at every crossing/working/inhabited areas, another OH line for power or telecommunication).	5	
		SUB TOTAL	100	

2A	SHOVELS (Electricals)			
	i)	Fire Extinguishers – Validity & training for use.	5	
	ii)	General cleanliness and up keep condition of cabin & cabin glass.	5	
	iii)	Proper working of brakes (swing, hoist, crowd). Maintenance of Hy. Steering System. Functioning of crowds limit switch and records of check list.	10	
	iv)	Proper lighting system including cabin light. Emergency tripping system. Rubber sheet near OCB & all control panel	10	
	v)	Proper functioning of switches, meters, gauges, and lubrication system.	5	
	vi)	Condition of bucket, bucket pins & bushes, Boom foot Pin, Guards & covers. Air vessel Testing certificate of compressor .	10	
	vii)	Provision of Buzzer for cable man	5	
	viii)	Proper connection of trailing cables and clamping with machines and conditions of cables. Provision of plug & socket, connection to trailing cables at field switch end. Insulation resistance of trailing cable.	10	
	ix)	Proper functioning of Motor protection relay. Condition of electrical connection and earthing of various motors, panels inside the shovel.	10	
	x)	Framing of code of practice for various jobs and implementation. Safety knowledge of the operator, Scheduled maintenance, inspection system and their records.	10	
		SUB TOTAL	80	
2B	Hydraulic Excavator			
	i)	Fire Extinguishers – Validity & training for use..	10	
	ii)	General cleanliness and up keep condition of cabin & cabin glass.	5	
	iii)	Proper working of brakes (swing, hoist, crowd).Provision of Swing Safety Lock.	10	
	iv)	Proper lighting system including cabin light.	5	
	v)	Proper functioning of switches, gauges & meters. Functioning of horn	5	
	vi)	Framing of code of practice for various jobs and implementation. Safety knowledge of the operator.	10	
	vii)	Condition of Hy. Cylinders (Arm, bucket & boom), Guards & Covers.	10	
	viii)	Condition of bucket, bucket pins & bushes.	10	
	ix)	Schedule maintenance, inspection system & their records.	10	
	X)	Provision of baffle plate between Hydraulic hoses and exhaust manifold.	5	
		SUB TOTAL	80	

2C	DRILLS			
		i) Fire Extinguishers – Validity & training for use.	10	
		ii) General cleanliness and up keep. Condition of cabin glass & condition of rod catches of drills. Condition of guards and covers.	10	
		iii) Proper lighting system including cabin light. Functioning of horn.	5	
		iv) Proper working of brakes. Provision and functioning of pendant switch for propelling. Emergency tripping system.	10	
		v) Proper functioning of switches & gauges. Rubber sheets near all control panels.	5	
		vi) Safety valves of compressor, Loading and un-loading devices of compressors. Maintenance of all protective relays, their proper settings, etc Air vessel Testing certificate for compressor.	10	
		vii) Code of practice for various jobs & implementation. Safety knowledge of the operator.	5	
		viii) Leakage in air, hydraulic and other systems. Condition of guider and guide hoses of rotation motor.	10	
		ix) Condition of trailing cable and their terminal with plug and socket field switch and provision of hand gloves and rubber sole shoes to cablemen. Scheduled maintenance, inspection system and their records.	10	
		x) Dust extractor or wet drilling.	5	
		SUB TOTAL	80	
2D	DUMPER & WATER TANKERS			
		i) General cleanliness and up keep. Condition of Operator cabin(seat/seat belt/helmet) Cabin glass, cabin doors, ladder condition, cabin light, door glass.	10	
		ii) Fire Extinguishers – Validity & training for use..	10	
		iii) Condition of brakes/parking brake/dump brake slippery valve (Testing records to be checked) Condition of Ladder and Fender.	10	
		iv) Condition of steering / emergency steering. Condition of tipping arrangement.	10	
		v) Proper functioning of gauge and controls, rear view mirror, dash board lights, wipers, Left and right turn indicator, Audio Visual Alarms (Test Certificate to be checked) Lighting system – head light, back light, stop light indicators.	10	
		vi) Proper securing of battery terminals, battery box cover & clamping	5	
		vii) Condition of tyres and proper inflation	5	
		viii) Leakage in air, hydr. Exhaust and other systems.	5	
		ix) Safety knowledge of operator, traffic and dump yard rules. Maintenance of records.	10	
		x) Schedule maintenance, inspection systems and records.	5	
		SUB TOTAL	80	
<p>Note : Atleast 2 dumpers and 1 water tanker should be inspected before awarding marks. One of lowest capacity and one of highest capacity where possible. Atleast two drivers should be called and tested.</p>				

2E	DOZER			
	i)	General cleanliness and up keep of Dozer, condition of operator seat. Provision of ROP (Roll over Protection).	10	
	ii)	Fire Extinguishers – Validity & training for use.	10	
	iii)	Proper working of brakes & steering.	10	
	iv)	Condition of headlights and backlight, Provision of Meter & Gauge, Provision of hour meter. Provision of AVA	10	
	v)	Proper securing of battery terminals battery box cover & clamping ,.	5	
	vi)	Condition of lift & tilt Cyl., Condition of Blade & Hoist, leakage in hydraulic system.	10	
	vii)	Condition of U/C, Condition of Guards & Covers.	10	
	viii)	Scheduled maintenance, inspection system and their records.	5	
	ix)	Knowledge of traffic and safety of the Operator.	5	
	x)	Framing of code of practice for various jobs and implementation.	5	
		SUB TOTAL	80	
3.	EXCAVATION WORKSHOP			
	i)	Layout ,General cleanliness and up keep/Washing arrangement.	10	
	ii)	Condition of Fire Extinguishers – automatic /semi automatic type, proper type & training in their use.	10	
	iii)	Illumination, Parking arrangement & Lubricating facilities, flash back arrestor and other safety features for Gas welding.	10	
	iv)	Tyre inflating facility, fixed place for safe inflation and provision of suitable guards.	10	

3	EXCAVATION WORKSHOP	Continue.....	100	
	v)	Condition of tyre inflation Air vessel testing certifiacate of compressor /safety valve/gadgets. Record of Pressure testing of air receivers Tyre Cage	10	
	vi)	Ventilation of battery room, provision of exhaust fans and two exits.	10	
	vii)	Provision of separate entry gate for HEMM and Light Vehicle	10	
	viii)	Maintenance of all safety appliances in good working condition and ensure their use at the time of work. Safety knowledge of workers.	10	
	ix)	Analysis of risk assessment of various jobs and framing of code of practice for those jobs and their implementation.	10	
	x)	Maintenance of record (Inspection & maintenance.)	10	
		SUB TOTAL	100	
4	C.H.P.			
	i)	Provision of sufficient bracing and structural members in the structures.	10	
	ii)	Condition of rollers, idlers, self aligning rollers, drive head, drums, lagging. Condition of motors, starters and protective devices.	30	
	iii)	All the structural joints should be cleaned from dust/muck. Condition of welding, joints (whether any visible cracks etc). Condition of structural members, whether corroded etc.	20	
	iv)	Tightening of foundation bolts. Tightening of nuts and bolts in super structure. Abnormal vibration observed in any of the structural members of CHP visually when CHP is in running condition.	20	
	v)	Pipe line for washing arrangements of all the structural members of CHP.	10	
	vi)	Cleaning of pavement below coal bunker and near civil foundation of structures. Floor of the CHP line walkway, roofing, etc., of the structure should be cleaned for the coal dust, muck etc.	10	
	vii)	Condition of loop take up arrangements and tensioning.	5	
	viii)	Implementation of code of practice for running and repair/maintenance of conveyors, welding jobs etc.	10	
	ix)	Checking of walk way platform/staircases stiffness and structural members for deflection / buckled/twist and should be within the permissible limits.	10	
	x)	Signalling, telephone communication, lighting arrangement, lighting transformer. Fire fighting arrangement, proper type & training for their use.	15	
	xi)	Provision of limit switch in tail end guard to trip the belt drive when the guard is opened (inter locking).	5	
	xii)	General condition of fencing at feeder breaker/crusher/hoppers and bunkers.	5	
	xiii)	Maintenance of records and inspection reports.	5	
	xiv)	Dust suppression arrangement centrally for CHP as well as adjoining roads.	5	
	xv)	Action taken to eliminate accidents at CHP, weigh bridge, railway siding and transport road as per the guidelines issued by CGM(S&R).	10	
	xvi)	Condition of painting of entire CHP.	5	
	xvii)	Checking of the alignment of the conveyors and the equipment.	10	
	xviii)	Provision of barrier/fencing around all the running components of CHP and at walkway.	5	
	xix)	Proper working of anti roll back device for Conveyor Belt. Provision of Pull cord system, Pre Start Alarm and sequence Control.	5	
	xx)	Telephone communication	5	
		SUB TOTAL	200	

