

Sr. No.	TOR	Compliance status
1.	Executive summary of the project	Executive summary of the project is enclosed
2.	Photographs of the proposed area	Photographs of the plant area is given in chapter 1 Section 1.3
3.	A line diagram/flow sheet for the process and EMP	Shown in Chapter 2 & 10 Section 2.5 & 2.5.2.3
4.	Coal linkage document	Not Applicable
5.	A copy of the mutual agreement for land acquisition signed with land oustees.	Land acquisition through KIADB Government order is Enclosed
6.	A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,000/1:25,000 scale on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. A photograph of the site should also be included.	Detailed in chapter 3 Section 3.4.1
7.	Present land use should be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same should be used for land used/land-cover mapping of the area.	Chapter 4 Section 4.9
8.	Topography of the area should be given clearly indicating whether the site requires any filling. If so, details of filling, quantity of fill material required, its source, transportation etc. should be given.	Contour plan is enclosed
9.	Location of national parks / wildlife sanctuary / reserve forests within 10 km. radius should specifically be mentioned. A map showing land use/land cover, reserved forests, wildlife sanctuaries, national parks, tiger reserve	Chapter 4 Section 4.9

	etc in 10 km of the project site.	
10.	Revised project area and layout plan shall be submitted after exclusion of the project area on one side of the nalah/drainage passing through the project site and maintaining 33% of green belt.	Revised project area is enclosed as Annexure----- Green Belt plan is enclosed as Annexure-----
11.	Project site layout plan to scale using AutoCAD showing raw materials, fly ash and other storage plans, bore well or water storage, aquifers (within 1 km.) dumping, waste disposal, green areas, water bodies, rivers/drainage passing through the project site should be included.	Layout plan is enclosed as Annexure-----
12.	Co-ordinates of the plant site as well as ash pond with topo sheet co-ordinates of the plant as well as ash pond with topo sheet should also be included.	Given in chapter 1 section 1.1
13.	Details and classification of total land (identified and acquired) should be included.	Land allotment through KIADB is enclosed as Annexure XXI (Karnataka Gazette Notification)
14.	Rehabilitation & Resettlement (R & R) should be as per policy of the State Govt. and a detailed action plan should be included	Not Applicable
15.	Permission from the tribals, if tribal land has also to be acquired along with details of the compensation plan.	Not Applicable
16.	Permission and approval for the use of forest land, if any, and recommendations of the State Forest Department.	Nil
17.	A list of industries containing name and type in 25kms radius should be incorporated.	Given in Chapter 1 Table 1.5
18.	Residential colony should be located in upwind direction	Will be followed
19.	List of raw material required, analysis of all the raw materials and source along with mode of transportation should be included. All the trucks for	Given in Chapter 2 Table 2.2 & 2.3

	raw material and finished product transportation must be “Environmentally Compliant”.	
20.	If the rocks ores, raw material has trace elements their petrography, ore microscopy, XRD, elemental mapping EPMA, XRF is required to quantify the amount present in it and hence future risk involved while using it and management plan.	It is not applicable as there is no trace element present report indicating the same
21.	Action plan for excavation and muck disposal during construction phase.	<p>The excavated muck will be utilized in backfilling of low lying areas (Contour plan is enclosed as Drawing 1). Excavation will be only for foundations as all the structures coming above ground level. The details are given in the Plant layout.</p> <p>Utilization plan for excavated soil in gardening and plantation with plinth leveling</p>
22.	Studies for fly ash, muck, slurry, sludge material disposal and solid waste generated, if the raw materials used has trace elements and a management plan should also be included.	There are no trace elements in the raw material. The STP sludge will be used as manure during plantation. Solid waste will be disposed scientifically as detailed in EMP.
23.	Manufacturing process details for all the plants should be included.	Explained in Chapter 2 section 2.5
24.	Mass balance for the raw material and products should be included.	Given in Table 2.5 & Table 2.7
25.	Energy balance data for all the components of steel plant including proposed power plant should be incorporated.	Given in Table 2.8

26.	Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be collected.	Detailed in section 3.4.3 of Chapter 3 and Annexure I to XI
27.	Data generated in the last three years i.e. air, water, raw material properties and analysis (major, trace and heavy metals), ground water table, seismic history, flood hazard history etc.	Green field project
28.	One season site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall and AAQ data (except monsoon) should be collected. Committee has considered the proposal of collection of baseline data after the date of TOR presentation made on 3 <sup>rd</sup> Dec 2012 (Winter 2012-13). The monitoring stations should take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.	Detailed in Chapter 3 Baseline Environmental Description
29.	Ambient air quality at 8 locations within the study area of 10 km., aerial coverage from project site with one AAQMS in downwind direction should be carried out.	Followed
30.	The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH),	Found BDL
31.	Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features.	New Project
32.	Air quality modeling for steel plant for specific pollutants needs to be done.	Followed and e sincere enough to meet the expenses.

33.	Action plan to follow National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 should be included.	Regular environmental monitoring will be carried out for corrective and preventive actions if required.
34.	<p>Ambient air quality monitoring modeling along with cumulative impact should be included for the day (24 hrs) for maximum GLC along with following :</p> <p>Emissions (g/second) with and without the air pollution control measures</p> <ul style="list-style-type: none"> <li>i) Meteorological inputs (wind speed, m/s), wind direction, ambient air temperature, cloud cover, relative humidity &amp; mixing height) on hourly basis</li> <li>ii) Model input options for terrain, plume rise, deposition etc.</li> <li>iii) Print-out of model input and output on hourly and daily average basis</li> <li>iv) A graph of daily averaged concentration (MGLC scenario) with downwind distance at every 500 m interval covering the exact location of GLC.</li> <li>v) Details of air pollution control methods used with percentage efficiency that are used for emission rate estimation with respect to each pollutant</li> <li>vi) Applicable air quality standards as per LULC covered in the study area and % contribution of the proposed plant to the applicable Air quality standard. In case of expansion project, the contribution should be inclusive of both existing and expanded capacity.</li> <li>vii) No. I-VII are to be repeated for fugitive emissions and any other source type relevant and used for industry</li> <li>viii) Graphs of monthly average daily concentration with down-wind distance</li> <li>ix) Specify when and where the ambient air quality standards</li> </ul>	Given in detail in Chapter 4 section 4.4.1

	<p>are exceeded either due to the proposed plant alone or when the plant contribution is added to the background air quality.</p> <p>x) Fugitive dust protection or dust reduction technology for workers within 30 m of the plant active areas.</p>	
35.	A plan for the utilization of waste/fuel gases in the WHRB for generating power have to be set out.	Not applicable
36.	Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided. The alternate method of raw material and end product transportation should also be studied and details included.	Has been considered through traffic density survey due to re and overburden and deploying RDS instrument for estimation pollution load to atmosphere.
37.	One season data for gaseous emissions other than monsoon season is necessary.	WINTER 2012-13 has been considered for baseline data
38.	An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30 <sup>th</sup> May, 2008	Detailed EMP chapter 4
39.	Presence of aquifer(s) within 1 km of the project boundaries and management plan for recharging the aquifer should be included.	Nil and as project site situated at an elevated terrain,
40.	Source of surface/ground water level, site (GPS), cation, anion (Ion Chromatograph), metal trace element (as above) chemical analysis for water to be used. If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included. Information regarding surface hydrology and water regime should be included.	Detailed in Base line data is enclosed
41.	Ground water analysis with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.	Given as an Annexure 3

42.	Ground water modeling showing the pathways of the pollutants should be included	Not applicable as there is not proposal for withdrawing ground water.
43.	Column leachate study for all types of stockpiles or waste disposal sites at 20°C-50°C should be conducted and included.	
44.	<p>Action plan for rainwater harvesting measures at plant site should be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.</p> <p>Rain water harvesting and groundwater recharge structures may also be constructed outside the plant premises in consultation with local Gram Panchayat and Village Heads to augment the ground water level. Incorporation of water harvesting plan for the project is necessary, if source of water is bore well.</p>	Given in detail in section
45.	Permission for the drawl of water from the State Irrigation Department or concerned authority and water balance data including quantity of effluent generated, recycled and reused and discharged is to be provided. Methods adopted/to be adopted for the water conservation should be included.	Not Applicable
46.	A note on the impact of drawl of water on the nearby River during lean season.	Not Applicable as there is no proposal for withdrawal of ground water for the plant purpose
47.	Surface water quality of nearby River (60 m upstream and downstream) and other surface drains at eight locations must be ascertained.	No surface water exists
48.	If the site is within 10 km radius of any major River, Flood Hazard Zonation Mapping is required at 1:5000 to 1:10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency.	There is not history of natural calamities and occurrence of the same is remote possibility.
49.	A note on treatment of wastewater from different plants, recycle and reuse for different purposes should be included.	Detailed in section 4.7.1.4 of chapter 4

50.	Provision of traps and treatment plants are to be made, if water is getting mixed with oil, grease and cleaning agents.	Not applicable
51.	If the water is mixed with solid particulates, proposal for sediment pond before further transport should be included. The sediment pond capacity should be 100 times the transport capacity.	The tailings will be in the form of cakes and the same will be utilized nearby cement and brick industries. Possibility of setting up of brick unit will be explored.
52.	Wastewater characteristics (heavy metals, anions and cations, trace metals, PAH) from any other source should be included.	Found BDL
53.	The pathways for pollution via seepages, evaporation, residual remains are to be studied for surface water (drainage, rivers, ponds, lakes), sub-surface and ground water with a monitoring and management plans	Zero discharge mechanism will be adopted.
54.	Ground water monitoring minimum at 8 locations and near solid waste dump zone, Geological features and Geo-hydrological status of the study area are essential as also. Ecological status (Terrestrial and Aquatic) is vital.	Detailed in Baseline chapter 3
55.	Action plan for solid/hazardous waste generation, storage, utilization and disposal. Copies of MOU regarding utilization of ash should also be included.	Will be signed once the plant becomes operational
56.	Details of evacuation of ash, details regarding ash pond impermeability and whether it would be lined, if so details of the lining etc. needs to be addressed.	Not applicable
57.	A note on the treatment, storage and disposal of all type of slag should be included. Identification and details of land to be used for SMS slag disposal should be included. Details of secured land fill as per CPCB guidelines should also be included.	Detailed in Environmental Management Plan
58.	End use of solid waste and its composition should be covered. Toxic metal content in the waste material and its composition should also be incorporated particularly of slag.	Not applicable as there is no toxic substance present in the raw material

59.	All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.	There is no tailing pond proposed
60.	Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. giving details of species, width of plantation, planning schedule etc. should be included. The green belt should be around the project boundary and a scheme for greening of the travelling roads should also be incorporated. All rooftops/terraces should have some green cover.	Green belt development plan is enclosed as Drawing no 3.
61.	Detailed description of the flora and fauna (terrestrial and aquatic) should be given with special reference to rare, endemic and endangered species.	Detailed in section 3.4.12 of chapter 3
62.	Disaster Management Plan including risk assessment and damage control needs to be addressed and included.	Detailed in Additional studies section 7.2.2
63.	Occupational health: Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved, Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of abovementioned parameters as per age, sex, duration of exposure and department wise. Annual report of health status of workers with special reference to <a href="#">Occupational Health and Safety</a> . Plan and fund allocation to ensure the occupational health & safety of all contract and sub-contract workers.	Detailed in section 4.8 in Chapter 4

64.	Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.	Detailed in Table 4.2
65.	Impact of the project on local infrastructure of the area such as road network and whether any additional infrastructure needs to be constructed and the agency responsible for the same with time frame.	Detailed in Project benefit chapter 8
66.	Environment Management Plan (EMP) to mitigate the adverse impacts due to the project along with item wise cost of its implementation. Total capital cost and recurring cost/annum for environmental pollution control measures should be included.	EMP is given indetail
67.	At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan should be included. Socio-economic development activities need to be elaborated upon.	Will be followed
68.	Public hearing issues raised and commitments made by the project proponent on the same should be included separately in EIA/EMP Report in the form of tabular chart.	Will be incorporated
69.	Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof should also be included.	NIL