

ANNEXURE - TOR
PROPOSED TERMS OF REFERENCE OF THE EIA STUDIES

The TOR for EIA Study for the project are proposed as follows:-

- (i) All the coordinates of the plant site as well as ash disposal site with toposheet will be provided.
- (ii) The study area will cover an area of 10 km radius around the proposed site.
- (iii) Land use of the study area as well as the project area shall be given.
- (iv) Location of any National Park, Sanctuary, Elephant / Tiger Reserve (existing as well as proposed), migratory routes, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden.
- (v) Topography of the area will be given.
- (vi) Impact on drainage of the area and the surroundings will be discussed.
- (vii) Information regarding surface hydrology and water regime and impact of the same, if any, due to the project will be provided.
- (viii) Field Monitoring data as per the following details will be included in the EIA Report

(a) AAQ data

One season AAQ data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall include RSPM (PM₁₀, PM_{2.5}), SO₂, NO_x, Hg and Ozone (ground level), CO and benzene. The location of the monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors including reserved forests. There will be at least one monitoring station in the upwind direction. There will be at least one monitoring station in the pre dominant downwind direction at a location where maximum ground level concentration is likely to occur.

(b) Micro-meteorology

Micro-meteorological data will be collected at the site during ambient air monitoring work. These data will comprise wind speed, wind direction, air temperature, relative humidity, cloud cover and rainfall.

(c) Water Quality

As a part of water quality measurement, five (5) water samples will be collected and analysed in total during ambient air quality monitoring. Parameters to be analyzed would be as per the recommendation of MoEF / SPCB.

NOTE :-Water quality measurement to be done specifically with respect to surface water, ground water and waste water. Locations to be mentioned.

(d) Soil Quality

Top soil samples will be collected from five (5) different locations in and around the proposed plant and will be analyzed for the following parameters:

Grain size, pH, EC, Na, K, Ca, Mg, Chloride, sulphate, sodium absorption ratio, organic matter, N, P, K, carbonate, water holding capacity, Fe, B, As, Hg, Pb, Ni, Cd, Cr, and Zn.

(e) Noise Level

As a part of air environment, intensity of noise level in decibel (dBA) will be measured at the same locations where AAQ monitoring will be done once a week covering the entire period of ambient air quality monitoring. On each day separate sets of readings will be taken for representing Day Time and Night Time noise levels.

- (ix) Details of flora and fauna duly authenticated will be provided.
- (x) Impact of the project on the AAQ of the area. Details of the model used and the input data used for modelling will also be provided. The air quality contours may be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The wind roses would also be shown on this map.
- (xi) Fuel analysis to be provided. Details of auxiliary fuel, if any including its quantity, quality, storage etc shall also be given.
- (xii) Quantity of fuel required, its source and transportation will be furnished.
- (xiii) Source of water and its availability will be furnished.
- (xiv) Details of rainwater harvesting and how it will be used in the plant will be stated.
- (xv) Examine the feasibility of zero discharge. In case of any proposed discharge, its quantity, quality and point of discharge, users downstream etc. shall be provided.

- (xvi) Optimization of COC for water conservation. Other water conservation measures proposed in the project shall also be given. Quantity of water requirement for the project shall be optimized.
- (xvii) Details of water balance taking into account reuse and re-circulation of effluents will be provided.
- (xviii) Details of greenbelt i.e. land with not less than 1500 trees per ha giving details of species, width of plantation, planning schedule etc.
- (xix) Detailed plan of ash utilization / management.
- (xx) Details of evacuation of ash.
- (xxi) Details regarding infrastructure facilities such as sanitation, fuel, restroom, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
- (xxii) Public hearing points raised and commitment of the project proponent on the same. An action plan to address the issues raised during public hearing and the necessary allocation of funds for the same will be provided.
- (xxiii) Measures of socio economic influence to the local community proposed to be provided by project proponent. As far as possible, quantitative dimension to be given.
- (xxiv) Impact of the project on local infrastructure of the area such as road network and whether any additional infrastructure would need to be constructed and the agency responsible for the same with time frame.
- (xxv) EMP to mitigate the adverse impacts due to the project along with item wise cost of its implementation.
- (xxvi) Risk assessment in quantitative terms will be undertaken. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards will also be provided.
- (xxvii) Any litigation pending against the project and /or any direction /order passed by any Court of Law against the project, if so, details thereof.