

PROPOSED - TOR SAKTHI FERRO ALLOYS INDIA PRIVATE LIMITED

- 1. Permission for the drawl of ground water from CGWB and water balance data including quantity of effluent generated, recycled and reused and discharged will be provided. Methods adopted/to be adopted for the water conservation would also be included.**
2. 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 will be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
3. Present land use will 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 10Km radius area from the site. The same will be used for land used/land-cover mapping of the area.
4. Location of reserve forests within 10 km. radius would specifically be mentioned. A map showing landuse / landcover, reserved forests, etc in 10 km of the project site.
5. Actual land requirement, classification of land, acquisition status, rehabilitation and resettlement as per the policy of the Govt. of Andra Pradesh will be incorporated.
6. A list of industries containing name and type in 10 km radius will be incorporated.
7. Project site layout plan showing raw materials, solid waste 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 will be provided.
8. List of raw material required and source along with mode of transportation will be given. All the trucks for raw material and finished product transportation must be Environmentally Compliant.
9. Studies for disposal of solid waste generated will also be included, if the raw materials used has trace elements and a management plan.
10. Data on existing ambient air, stack emission, fugitive emissions data; water requirement and water balance cycle; generation, re-utilization and disposal of solid/ hazardous waste for the proposed plant will be incorporated.
11. Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall will be collected.
12. Ambient air quality at 8 locations within the study area of 10 km., aerial coverage from project site with one AAQMS in downwind direction will be carried out

13. The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction. Chemical characterization of RSPM and incorporating of RSPM data.
14. 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.
15. Air quality modeling for specific pollutants will be done.
16. Action plan to follow National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009.
17. Ambient air quality monitoring modelling alongwith cumulative impact will be included for the day (24 hrs) for maximum GLC alongwith following :
 - i) Emissions (g/second) with and without the air pollution control measures
 - ii) Meteorological inputs (wind speed, m/s), wind direction, ambient air temperature, cloud cover, relative humidity & mixing height) on hourly basis
 - iii) Model input options for terrain, plume rise, deposition etc.
 - iv) Print-out of model input and output on hourly and daily average basis
 - v) A graph of daily averaged concentration (MGLC scenario) with downwind distance at every 500 m interval covering the exact location of GLC.
 - vi) Details of air pollution control methods used with percentage efficiency that are used for emission rate estimation with respect to each pollutant
 - vii) Applicable air quality standards as per LULC covered in the study area and % contribution of the proposed plant to the applicable Air quality standard..
18. Fugitive dust protection or dust reduction technology for workers within 30 m of the plant active areas.
19. Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.
20. One season data for gaseous emissions other than monsoon season is necessary.
21. Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included.
22. 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 will be included.

23. Ground water analysis with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.
24. 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. 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.
25. Permission for the drawl of ground water from CGWB and water balance data including quantity of effluent generated, recycled and reused and discharged will be provided. Methods adopted/to be adopted for the water conservation would also be included.
26. Surface water quality of nearby river (60 m upstream and downstream) and other surface drains at eight locations must be ascertained.
27. Ground water monitoring minimum at 8 locations, Geological features and Geo-hydrological status of the study area will be included. Ecological status (Terrestrial and Aquatic) will be done.
28. Disaster Management Plan including risk assessment and damage control needs to be addressed and included.
29. Occupational health of the workers needs elaboration. Health effects of other metals used and health hazard plans based on monthly correlation of these metal related diseases and people affected and mitigation plans..
30. Occupational health of the workers needs elaboration including evaluation of noise, heat, illumination, dust, any other chemicals, metals being suspected in environment and going into body of workers either through inhalation, ingestion or through skin absorption and steps taken to avoid musculo-skeletal disorders (MSD), backache, pain in minor and major joints, fatigue etc. Occupational hazards specific pre-placement and periodical monitoring and periodical monitoring should be carried out. The detailed plan to carry out above mentioned activity should be mentioned. Acton plan for the green belt development plan in 33 % area should be included. The green belt should be around the project boundary and a scheme for greening of the traveling roads should also be incorporated. All rooftops/terraces would have some green cover.
31. Detailed description of the flora and fauna (terrestrial and aquatic) would be given with special reference to rare, endemic and endangered species.
32. Socio-economic development activities will be elaborated .
33. Total capital cost and recurring cost/annum for environmental pollution control measures should also be included.

34. A tabular chart for the issues raised and addressed during public hearing/public consultation should be provided.
35. Any litigation / court case pending against the proposal would also be included.