### F. No. 21-136/2015-IA-III Government of India Ministry of Environment, Forest and Climate Change Impact Assessment Division

Indira Paryavaran Bhawan, Jor Bagh Road, Ali Ganj New Delhi - 110 003

Dated: 20th September, 2018

То

The Vice President - Operations TATA STEEL Special Economic Zone Limited Fortune Towers, 2<sup>nd</sup> Floor, Chandrashekharpur, Bhubneshwar - 751 023 (Odisha)

## Sub: Development of Multi-product SEZ/Industrial Park at Gopalpur, Ganjam, Odisha by M/s Tata Steel Limited – Environmental and CRZ Clearance regarding.

Sir,

This has reference to your online Proposal No. IA/OR/NCP/**29391**/2015 dated 8<sup>th</sup> February, 2017 and subsequent letter dated 7<sup>th</sup> September, 2017, submitting the above proposal to this Ministry for grant of Environmental and CRZ Clearance in term of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 and Coastal Regulation Zone (CRZ) Notification, 2011 under the Environment (Protection) Act, 1986.

2. The proposal for 'Development of Multi-product SEZ/Industrial Park' at Gopalpur, Ganjam, Odisha by M/s Tata Steel Limited, was considered by the Expert Appraisal Committee (EAC) for Industrial Estate/Area, SEZ and Highways projects, in its 169<sup>th</sup> meetings held on 6-7 April, 2017 and 177<sup>th</sup> meeting on 16<sup>th</sup> October, 2017.

3. The details of the project, as per the documents submitted by the project proponent along with the EIA Consultant M/s Ramky Enviro Engineers Limited, Hyderabad and also as informed during the above said EAC meetings, are reported to be as under:

- (i) The proposal involves Multi-Product SEZ/Industrial Park at Gopalpur Village, Ganjam District in Odisha promoted by M/s TATA Steel Special Economic Zone Limited.
- (ii) The project is located at 19° 19' 35" N Latitude and 84° 55' 10" E longitude. The proposed project covers an area of 1009 ha.
- (iii) The project activity is scheduled in 7 (c), Category A of EIA Notification, 2006 as amended from time to time.

- (iv) During construction phase, total water requirement is expected about 15 KLD which will be met by rainwater harvesting, tankers. During the construction phase, soak pits and septic tanks will be provided for disposal of waste water. Temporary sanitary toilets will be provided during peak labour force.
- (v) During operational phase, total water demand of the project is expected to be 33.5 MLD and the same will be met from (Source: Desalination plant - 15 MLD, other sources (rain water harvesting, ground & surface water) - 7 MLD & recycled water-11.5 MLD (22 MLD fresh water + 11.5 MLD treated water). Wastewater generated (15 MLD) will be treated in CETP & STP. 14.5 MLD of treated waste water will be recycled (11.5 MLD for Industrial use/flushing, 7 MLD for landscape/Greenbelt and excess treated water shall be discharged to the sea along with brine.
- (vi) About 14.6 TPD solid wastes will be generated in the project. The biodegradable waste (7.8 TPD) will be processed in Organic Waste Converters into manure and the non-biodegradable waste generated (6.8 TPD) will be handed over to authorized local recyclers/re-processors.
- (vii) The total power requirement during construction phase is 255 MW and will be met from state grid. In Phase-I, 55 MVA & Phase-II 200 MVA power supply is proposed to be tapped from the existing Narendrapur 220kV substation.
- (viii) Rooftop rainwater of buildings, roads & greenbelt will be collected in Rain water harvesting tanks and the collected waterwill be utilized after filtration. A Storm water retention pond/reservoir (6 lakh cu.m. capacity) is proposed.
- Utilities, rail & road corridors, Heavy vehicle parking etc. are proposed in 283 acres of industrial park.
- Energy saving measures would be adopted and solar lighting is proposed for street lights & common areas etc.
- (xi) There is no court case pending against the project.
- (xii) It is not located within 10 km of any Eco Sensitive areas.
- (xiii) Diversion of forest land: Stage-I approval for diversion of forest land (3.792 ha) has been obtained from MoEF&CC, Eastern Regional Office, Bhubaneswar (Letter no: 5-ORB295/2016-BHU dated 19<sup>th</sup> December, 2016.
- (xiv) Investment/Cost of the project is estimated to be Rs.1920 crores.
- (xv) Employment Potential: Around 15000 direct and indirect job opportunities will be generated by the proposed project development by 2027. Preference would be given to the local people for engagement opportunities and the govt. guidelines would be followed in this regard.

## (xvi) Benefits of the project:

a. SEZ/Industrial parks support start ups, new enterprise incubation, development of knowledge – based business, and offers an environment where local and international firms can interact with centers of knowledge creation.

- b. They act as innovation club, promoting interactive learning and the commercialization of research outputs and can exploit local entrepreneurial skills
- c. Able to attract new business by providing an integrated infrastructure at single location and will attract the International & national markets with Exports & Imports
- d. Improvement in communication, transport, education, community development and medical facilities.
- e. Overall change in employment and income opportunity.
- f. The State Government will also benefit directly from the proposed SEZ/Industrial Park through increased revenue from royalties, excise duty and stowing duty.
- g. Additional housing demand for rental/Permanent accommodation will increase.
- (xvii) **ToR details**: ToR was granted vide letter No.21-136/2015-IA.III dated 12<sup>th</sup> November, 2015.
- (xviii) **Public Hearing:** The Public Hearing was conducted on 02.12.2016 at Berhampur University playground under Konisi Tehsil, District Ganjam (Odisha). Major issues raised during public hearing are as under:

lssues raised by the public	Comments by the Proponent
Pollution control measures	It was assured that the unit would take all pollution control measures as proposed in the EIA/EMP report.
Employment to the local people	It was assured to provide employment to local people in phase wise manner.
Plantation	It was assured that they will grow plantation over 33% of total area of the project in addition to development of Greenbelt in peripheral areas.
bill of the set of the	It was informed that they are in the process of inviting less polluting with higher employment potential and less water consuming industries for the SEZ/Industrial park.

- (xix) If project is in CRZ Area: As the project is going to utilise desalinated water to meet its water requirement from Bay of Bengal – 2.2 km (SE). Tata Steel has been granted CRZ Clearance from OCZMA and MoEF on 16<sup>th</sup> June 2012 and 18<sup>th</sup> March 2013 respectively for 1.2 MGD (5.5 MLD) desalination plant in phase –I. (F.No.: 11-63/2012-IA.III:18<sup>th</sup> March, 2013). This clearance is for the intake volume of 568 m<sup>3</sup>/hr (initial Phase), 28406 m<sup>3</sup>/hr (Final Phase) and brine discharge of 341 m<sup>3</sup>/hr (Initial Phase), 20831 m<sup>3</sup>/hr (Final Phase).
- (xx) The Odisha Coastal Zone Management Authority (OCZMA) has recommended the marine facilities for the sea water intake and outfall of 15 MLD Desalination



plant by M/s Tata Steel Special Economic Zone Limited for grant of CRZ clearance from MoEF&CC under CRZ notification 2011 in its meeting held on 29.07.2017.

- (xxi) Marine EIA study for seawater intake and brine reject discharge for setting up 15 MLD desalination plant at Gopalpur, Ganjam district, Odisha has been carried out by M/s. Indomer Coastal Hydraulics (P) Ltd, Chennai.
- The desalination plant will receive 37.5 MLD of sea water from Bay of Bengal.15 MLD of permeate water through Reverse Osmosis (RO) plant will be used by the (xxii) Industrial Park for various processes and drinking water requirements. 22.5 MLD brine rejected water will be sent back to the sea at the rate of 937m<sup>3</sup>/hr. Desalination Plant will have a pre-treatment plant, filtration plant, reverse osmosis chambers including high pressure pump, energy recovery system and pumps for discharging the outfall.
- (xxiii) The salinity of the brine reject water will be 65ppt which is 30 ppt higher than the ambient average seawater salinity (35 ppt). Total length of intake pipeline is 3750 m and the total length of outfall pipeline from outfall diffuser to desalination plant is 3855 m.
- (xxiv) Biodiversity study was done by SACON and details as hereunder:
  - a. Systematic field surveys were conducted during July 2017 to assess the biodiversity of the proposed Industrial Park. The avifauna along with other taxa such as butterflies, dragon flies, herpetofauna and mammals were recorded.
  - b. The proposed industrial park area is covered by grasslands with several small water bodies (mostly artificial) & few patches of woody vegetation 6 natural water bodies (6 hectares) were found.
  - c. The study area is mostly dominated by grasslands recorded a total over 500 species of flora and fauna from the area
  - d. A creek crosses the land in north-south direction near the eastern boundary of the area.
  - e. Green belt development with native plant species all along the boundaries of natural water bodies and creek within the study area have been proposed for effective conservation of the biodiversity.
  - (xxv) Marine Impact Assessment and mitigation measures proposed.
  - (xxvi) Proponent submitted written commitment on following points as desired by EAC during meeting held on 16th October, 2017.
    - a. Not use of any ground water for proposed multi-product SEZ/Industrial park.
    - b. Enhance skill development activities for the local community which would cater to the future needs of the of Industrial park and increase skill levels of local people.

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4. The EAC, in its 177<sup>th</sup> meeting held on 16<sup>th</sup> October, 2017, has recommended the project for grant of Environmental and CRZ Clearance for 15 MLD desalination plant, subject to compliance of all generic conditions applicable for such projects, and the additional conditions as mentioned below this paragraph. As per recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental and CRZ Clearance to the project 'Development of Multi-product SEZ/Industrial Park' at Gopalpur, Ganjam, Odisha by M/s Tata Steel Limited, under the provisions of the EIA Notification, 2006 and CRZ Notification, 2011 and amendments/circulars issued thereon, and subject to the specific and general conditions as under:

# PART A - SPECIFIC CONDITIONS

## I. <u>Construction Phase</u>

- (i) The project proponent shall ensure that the project is in consonance with the new Coastal Zone Management Plan prepared by the State Government under the provisions of CRZ Notification, 2011.
- (ii) All the recommendations of Odisha Coastal Zone Management Authority (OCZMA) vide letter no. 71/OCZMA dated 31.08.2017 shall be complied in letter and spirit.
- (iii) Screens and trash bars shall be provided to avoid entry of fishes and fish larvae in to the system.
- (iv) There shall be no disturbance to the sand dunes.
- (v) No construction work other than those permitted in CRZ Notification shall be carried out in CRZ area.
- (vi) Though the sumps and pump house are located beyond CRZ area, in view of its proximity to sea necessary prior permission shall be obtained for construction of sumps from the competent authority. Copy of permission shall be submitted to the concerned the concerned Regional Office of the Ministry prior to the commencement of work.
- (vii) No use of ground water for proposed multi –product SEZ/Industrial park.
- (viii) 2% of the project cost shall be apportioned for marine and coastal biodiversity protection and conservation measures, to be spent by the project proponent.
- (ix) 'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (x) The project proponent shall report to the State Pollution Control Board about the compliance of the prescribed standards for all discharges from the Industrial Area into the sea.
- (xi) All the provisions of the CRZ Notification, 2011 shall be strictly complied with, and in case of any change in scope of work, necessary recommendations from the OCZMA shall be obtained for further consideration by the concerned regulatory authority.



- Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste (xii) Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (xiii) Air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.
- Any other This environmental clearance is only for the said Industrial Area. activity within the Industrial Area would require separate environmental clearance, (xiv) as applicable under EIA Notification, 2006 as amended from time to time. For all the individual units, environmental clearances, as applicable, shall be obtained from the respective regulatory authorities.
- To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed (xv)standards and then recycled or reused for the identified uses.
- The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured/recorded to ensure the water balance as projected by the project (xvi) proponent. The record shall be submitted to the concerned Regional Office of the Ministry along with six Monthly Monitoring reports.

(xvii) Special purpose vehicle shall be established for implementation, monitoring and

compliance of the environmental safeguards.

(xviii) Solid wastes shall be collected, treated disposed in accordance with the Solid Waste Management Rules, 2016. No municipal waste shall be disposed off

outside the premises. All the recommendation of the EMP shall be complied with in letter and spirit.

- The member units shall provide storage tanks for storage of effluent for monitoring (xix)
- the characteristics of effluent before taking into the CETP for further treatment.  $(\mathbf{x}\mathbf{x})$ (xxi) Proper meters with recording facilities shall be provided to monitor the effluent
- quality and quantity sent from member industries to CETP and from CETP to the final disposal/re-use on a continuous basis.
- (xxii) Member industries shall treat the effluent to meet the prescribed CETP inlet norms.
- (xxiii) The project proponent shall establish an environmental monitoring cell with all the potential polluting units as members to review the environmental monitoring data and suggest for improvements.
- (xxiv) Internal Road widths within the industrial area shall be minimum 18 m ROW.
- (xxv) Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.
- (xxvi) Any hazardous waste generated during development/ construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

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- (xxvii) The D.G. sets to be used during development/ construction phase shall be low sulphur diesel type and shall conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- (xxviii) Vehicles hired for bringing construction material to the site shall be in good condition and should have a pollution check certificate and shall conform to applicable air and noise emission standards and shall be operated only during non-peak hours.
- (xxix) Ambient noise levels shall conform to the prescribed standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during development/ construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.
- (xxx) Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27<sup>th</sup> August, 2003 and 25<sup>th</sup> January, 2016.
- (xxxi) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xxxii) Water demand during development/construction shall be reduced by use of premixed concrete, curing agents and other best practices referred.
- (xxxiii) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxxiv) Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- (xxxv) Regular supervision of the above and other measures for monitoring shall be in place all through the development/ construction phase, so as to avoid disturbance to the surroundings.
- (xxxvi) The responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
- (xxxvii) Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 1st May, 2018 for various activities therein. The detailed report shall be submitted to this Ministry and its concerned regional office within 3 months.

(xxxviii)Corporate Environment Responsibility:

- a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
- b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/ violation of the environmental or forest norms/ conditions.



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- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
- d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

#### II. Operation Phase

- (i) Periodic monitoring of coastal water shall be carried out at outfall location.
- (ii) No use of ground water for proposed multi –product SEZ/Industrial park.
- (iii) Identify and enhance skill development activities for the local community which would cater to the future needs of the of Industrial park and increase skill levels of local people.
- (iv) Preparation of scheme for implementation of habitat improvement and biodiversity conservation plan and implementation schedule with the help of Salim Ali Centre for Ornithology and Natural History, Coimbatore (SACON), and same to be submitted to MoEF&CC and its Regional Office within six months. Sufficient fund provision to be made to implement the same.
- (v) The tree plantation programme should be made in supervision of experts who can guide from nursery up to the minimum 5 years maintenance period. The species composition should made with local and fruit species and planted suitably in strip or lonely as per the land availability with drip water/irrigation facility. The natural water body and creek should be protected and undisturbed except taking conservation activities.
- (vi) Implementation of Marine Environmental Management Plan in Toto.
- (vii) All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site.
- (viii) Disposal of muck during development/construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (ix) The solid waste generated shall be properly collected and segregated in accordance with the Solid Waste Management Rules, 2016. Wet garbage shall be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- (x) The height of stack of DG sets shall be equal to the height needed for the combined capacity of all proposed DG sets. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- (xi) Noise shall be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

- (xii) The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
- (xiii) Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- (xiv) Rain water harvesting for roof run-off and surface run- off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging shall be kept at least 4 mts above the highest ground water table.
- (xv) The ground water level and its quality shall be monitored regularly in consultation with Central Ground Water Authority.
- (xvi) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading shall be fully internalized and no public space shall be utilized.
- (xvii) Energy conservation measures like installation of LEDs for lighting the areas outside the building shall be integral part of the project design and shall be in place before project commissioning. Used LEDs shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.
- (xviii) The buildings shall have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

### PART - B: GENERAL CONDITIONS

- (i) The responsibility to comply with the EC conditions mentioned in this letter is solely of the project proponent.
- (ii) The environmental safeguards contained in the EIA Report shall be implemented in letter and spirit.
- (iii) Provision shall be made for supply of kerosene or cooking gas and pressure cooker to the labourers during construction phase.
- (iv) Six monthly monitoring reports shall be submitted to the Ministry and concerned Regional Office of the Ministry.
- (v) A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/Tehsildar's office for 30 days.
- (vi) The project proponent shall set up a separate Environmental Management Cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
- (vii) The funds earmarked for Environment Management Plan shall be included in the budget and this shall not be diverted for any other purpose.

5. The above stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

6. Officials from the Regional Office of the Ministry who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF&CC should be forwarded to the CCF, Regional Office of the Ministry.

7. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.

8. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

9. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

10. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at http://www.envfor.nic.in. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the concerned Regional office of this Ministry.

11. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

12. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

13. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry, the respective Zonal Offices of CPCB and the SPCB. The criteria pollutant levels namely;

 $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_2$  (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

15. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry/CPCB/SPCB by e-mail.

16. The Ministry may revoke or suspend the clearance, if implementation of any of the above condition is not satisfactory. The Ministry reserves the right to stipulate additional conditions, if found necessary and project proponent in a time bound manner will implement the stipulated additional conditions.

17. This issues with the approval of the Hon'ble Minister of Environment, Forest and Climate Change, New Delhi.

(Raghu Kumar Kodali) Director/Scientist F

Copy to:

- 1. The Secretary, Department of Science & Technology, Orissa Secretariat, Bhubneshwar-751 001.
- The Chairman, Orissa Coastal Zonal Management Authority & Principal Secretary, Science, Technology & Environment and Forests Wing, Odisha Secretariat, Bhubaneshwar-751001.
- 3. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.
- 4. The Member Secretary, Orissa Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar 751012.
- 5. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandersekharpur, Bhubaneshwar 751023.
- 6. Guard File/Monitoring Cell.

0019 120 K (Raghu Kumar Kodali) **Director/Scientist F**