



# Corporate Environment Policy 2018



## Mahanadi Coalfields Limited

**(A Miniratna Subsidiary company of Coal India Limited)**

**Jagriti Vihar, Burla, Sambalpur-768020, Odisha**

**CIN No:U10102OR1992GOI003038**

## **Environmental Policy Statement:**

*Mahanadi Coalfields Limited(MCL) is committed to promote sustainable development by protecting the environment through integrated project planning & design, prevention / mitigation of pollution, conservation of natural resources, restoration of ecology & biodiversity, recycling/ proper disposal of wastes, addressing climate change and inclusive growth. It also aims to bringing awareness amongst its stakeholders for continual improvement in environmental performances following best practices.*

## **OBJECTIVES:**

### **Mahanadi Coalfields Limited shall endeavor to:**

- 1. Plan & design projects with due consideration to environmental concerns for Sustainable Development.*
- 2. Conduct mining and associated operation in an environmentally responsible manner to comply with applicable laws and other requirements related to environmental aspects.*
- 3. Prevent pollution of surrounding habitation by continuous monitoring and adopting suitable measures for environment protection.*
- 4. Implement Environment Management Plans in all our mines /projects effectively to mitigate pollution, conservation of natural resources and restoration of ecology & biodiversity.*
- 5. Ensure compliance of all applicable Environmental Clearance & Forestry Clearance conditions and other statutory conditions issued by regulatory agencies.*
- 6. Recycling of wastes on the principle of REDUCE, REUSE and RECYCLE.*
- 7. Put special thrusts on efficient energy utilization / renewable energy as a measure to reduce carbon foot-print.*
- 8. Strive for continual improvement in our environmental performances by setting targets, measuring progress and taking corrective action.*
- 9. Taking measures to render productive post mining land use.*
- 10. Implementation of activities applicable to MCL arising out of International Conventions.*
- 11. Create environmental awareness among the employees and the local communities through pro-active communication and training.*

## **STRATEGIES FOR IMPLEMENTATION OF ENVIRONMENTAL POLICY:**

### **Back Ground:**

Coal India Limited subscribes to the view of Sustainable Development. Unless the environment can sustain all the developmental activities, any pursuit of development in isolation can cause irreparable damage to the ecosystem and associated environmental attributes. Keeping this view in mind, Coal India Limited attaches top priority towards sustainable development and approved its 'Corporate Environmental Policy' in December 1995, which was subsequently revised in 2012. However, the present policy is the amendment of the 2012 Policy and is complimentary to the National Environmental Policy, 2006.

This modification in the present policy is the outcome of the experience gained since 2012 keeping in view the modifications / amendments made time to time in environmental policies and additional stipulation notified by MoEF&CC (Ministry of Environment, Forest& Climate Change) and other organisations concerning mine closure, reclamation of degraded land, environmental clearance etc. and also with the objective of revisiting the corporate policy.

This Policy has a vision of Green Mining and mission of 100% compliance of environmental statutes applicable to coal mining industry.

**Strategies:** Mahanadi Coalfields Limited adopts the strategies appended below for effective implementation:

### **1. MINE/ PROJECT PLANNING & DESIGN FOR SUSTAINABLE DEVELOPMENT:**

- a) Coal being a non-renewal energy source, extraction shall be planned prudently to meet national requirement in a planned way. The projects shall be designed on the principle of Sustainable Development with due consideration to environment, mine closure, safety and aspirations of the stakeholders at the planning& design stage itself with due regard to mine closer plan.
- b) While preparing the Mining plan/project reports, the effort shall be to incorporate latest mining technologies and equipment's with optimal capacity, which are more environment friendly.
- c) All Mining Plan/ project reports will be provided with detailed provisions for ensuring environmental compliances.

## **2. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) & ENVIRONMENT MANAGEMENT PLAN (EMP)**

- a. All mine planning and design shall be environmentally acceptable and operation shall be carried out in such a way as to facilitate the compliance of stipulated environmental standards.
- b. EIA& EMP for all projects shall be formulated as per the approved ToR (Terms of Reference) and public consultations for obtaining Environmental Clearance (EC) from MoEF&CC. Similarly, in the existing projects needing enhancement of production capacities with or without increase in land, change of technology, renewal of lease and change in land use etc. fresh EC is required to be sought as per norms. The projects shall be operated after obtaining Consent to Establish (CTE)/Consent to Operate (CTO) from State Pollution Control Boards (SPCB).
- c. Detailed Mine Closure Plans shall be prepared for all existing and new mines as per the MoC (Ministry of Coal) guidelines.

## **3. COMPLIANCE OF THE STATUTORY REQUIREMENTS:**

The implementation of EMP and fulfillment of all other statutory requirements like conditions of EC, FC and consents to establish & operate, including timely submission of returns to statutory bodies and various agencies, are to be ensured at all levels.

## **4. MEASURES TO MITIGATE POLLUTION:**

### **a) Air Pollution:**

- i) Generation of dust is to be controlled at the source to the possible extent with necessary control measures during drilling, blasting, loading, unloading, CHP transfer points etc.
- ii) Deployment of eco-friendly mining technologies.
- iii) Dust generation is to be minimized along coal / waste transportation routes.
- iv) Mechanized transportation of coal to be encouraged.
- v) Green belt is to be created around the source of dust.

### **b) Water pollution:**

- i) The mine water and other effluent shall be treated to ensure the discharge norms as per statute. The treated effluent shall be utilized to the extent possible with a view to achieve maximum water conservation.

- ii) Oil & grease from the effluent shall be removed by Oil & Grease Traps for proper disposal.

**c) Noise / ground vibration:**

- i) All measures to minimize noise pollution will be taken including maintenance of HEMM, equipment and provision of PPE where required.
- ii) Suitable controlled blasting techniques shall be followed to reduce ground vibration as well as noise pollution.

**d) Land reclamation:**

- i) Progressive and concurrent reclamation of mined out areas will be carried out as per approved EIA/EMP and Mine Closure Plan (MCP).
- ii) Slopes of external dumps are the important area to be suitably graded / terraced for effective reclamation and plantation.
- iii) Preservation of top soil is required for future use. Old as well as existing non-active dumps are to be technically and biologically reclaimed.
- iv) Monitoring of reclamation work of all opencast mines will be done through Satellite Surveillance. The outcome shall be put in the websites.

**e) Mine closure plans:**

Mine Closure Plan (MCP) shall be prepared for each mine. MCP are being delineated in two phases viz. progressive and final mine closure. Appropriate funds are set aside and deposited under a special Escrow fund every year as per MoC guidelines, to be utilized for proper and final mine closure.

For mines closed prior to issuance of MoC guidelines (i.e. 27<sup>th</sup> August, 2009) suitable action to be taken as per provisions of Mines Act 1952.

**f) Mine fire**

MCL shall endeavour to reduce occurrence of mine fire and subsidence due to mining activity. Monthly report shall be submitted to top management of the MCL and CIL and Quarterly to company board. Action Plan for mine fire control shall be implemented. Monitoring will be done through Satellite Surveillance/other suitable technology.

**g) Monitoring:**

- I. All receptors in and around the mining projects shall be monitored regularly to assess the efficacy of the pollution control / mitigation measures within stipulated standards.
- II. Effect of mining on the hydrology of the area will be monitored through measurement of water level and its quality of nearby wells and bore holes provided for this purpose. Conservation of water through rainwater

harvesting shall be taken up.

- III. Area and Unit environmental cells shall have regular interaction with the people in and around the coal mines and other allied units on matters related to environment to take necessary and timely corrective actions.
- V. Environmental initiatives and monitoring through self and third party environment audit shall be conducted for generating useful data for taking corrective actions and mitigation measures as per guidelines.

#### **h) Other measures:**

- I. Special emphasis shall be given to undertake R&D related to various facets of coal mine environmental management in collaboration with Central Mine Planning and Design Institute (CMPDI) and other competent institutions.
- II. Besides ensuring statutory compliance, the MCL desires to set high standards and continual improvement.
- III. All mines and establishments of MCL are ISO 9001:2008 ISO 14001:2004 and OHSAS 18001:2007 certified
- IV. CSR and R&R policies of MCL are to be incorporated for better planning and implementation of the socio-economic issues of coal mining areas.
- V. The coal mining environmental issues are complex and require multi-disciplinary approach to address the same. MCL will endeavor to enter into MoUs with expert agencies of repute to assist in environment issues and also help in capacity building of MCL executives.
- VI. MCL conducts periodical medical examination (PME) of its work force on routine basis in compliance of the requirement mining rules and regulation, additional tests will be done as and when required.

#### **5. PRESERVATION OF BIO-DIVERSITY:**

- a) This will start from mine planning including technically and biologically reclamation of mined out areas in collaboration with State Forest Departments, Wild Life Divisions, NGOs etc. working in the fields of bio-diversity conservation.
- b) The selection of species for plantation shall be done in consultation with the local community to include the local species and their preferences, if any.

#### **6. COAL BENEFICIATION / COALWASHERIES:**

- a) For beneficiation of Runoff Mines (ROM) coal, washeries are being set up in a phased manner as per requirement and statutes.
- b) Slurry Management System (SMS) in all washeries shall be organized to



ensure collection of fines, gainful utilization of rejects viz. power generation in Fluidized Bed Combustion (FBC) plants, selling to brick manufacturers or adopting other environmental friendly disposal options as feasible.

- c) The reject dumps and tailings shall be suitably handled to avoid any contamination.
- d) The effluent from washeries including tailings pond shall be suitably treated and reused to minimize water consumption with zero discharge concept.

## **7. CONSERVATION AND CLEAN TECHNOLOGY:**

- a) R&D projects shall be taken up to promote clean coal technology and improve the existing technologies.
- b) Energy saved is energy produced. Voluntary energy audit to be done for corrective action to reduce carbon footprint.
- c) Clean Development Mechanisms will be explored for reducing emission of Green House Gases by exploration, identification, preparation of projects reports for extraction of methane from Coal Bed, Coal Mine, Abandoned Mine, Ventilation Air, UG Coal Gasification, generation and utilization of renewable energy etc.

## **8. AWARENESS PROGRAMME:**

- a) Publicity to generate awareness through exchange & communication of information, newsletters and periodicals on environment, seminars, workshops, celebration of World Environment Day etc. at MCL HQ, Areas & units to be undertaken. Regular training programs to be organized at various levels to inculcate awareness among employees.
- b) Courses on environmental and forestry laws and Environmental Protection Measures and the Corporate Policy to be organized for project executives for improving knowledge.
- c) MCL to give annual awards for achieving excellence in environment related issues and activities. These awards will be in recognition for implementation of EMP, land reclamation and compliance of statutes, proper maintenance of air & water quality and noise level.

## **9. WASTE MANAGEMENT:**

MCL will undertake appropriate action for safe handling, storage and disposal of solid waste and hazardous waste generated from its industrial set up and colonies as per relevant rules. The biomedical waste generated from hospitals

and dispensaries will be collected and disposed in appropriate facilities created as per statutes. E-waste management and handling of various types of e-waste generated in its operations will be done as per rule.

## **10. CORPORATE ENVIRONMENT RESPONSIBILITY:**

Corporate Environment Responsibility (CER) is mandatory for issuing environmental clearance for all the Greenfield and Brownfield projects as per directives of MoEF & CC with effect from 1<sup>st</sup> May, 2018 (O.M.No.22-65/2017-IAIII dt. 19.06.2018). Budgetary provisions should be kept for implementation of provisions of CER for all the projects which will be submitted to MoEF & CC for grant of environmental clearance.

## **11. INCORPORATION OF VIEWS OF STAKEHOLDERS:**

MCL will critically examine and incorporate the viewpoints of various stakeholders like PAPs/PAFs, Parliamentary Committees, Standing Sub-Committees, NGOs etc. The parental company CIL being a listed entity with stock exchange, it will also take into consideration the observations/viewpoints of international investors.

## **12.IMPLEMENTATION OF POLICY:**

- i) Manpower:** MCL shall have environmental divisions at decision making & operational levels in its structure. The environment department shall be set up and strengthened at:
  - i) Corporate HQ at Sambalpur
  - ii) Areas / Units / Collieries / Workshops /Washeries/ Other establishments
- ii) Roles and Responsibilities:** The environmental department, set up at company HQs, Areas and Unit levels with appropriate manpower and resources, shall be responsible for implementation of policy, obtaining EC, FC, consent to establish & operate, statutes' requirements and undertaking mitigation measures besides preparation of action plan every year and also to intimate the status of implementation to the management regularly.
- iii) Annual Environment Budget (Revenue &Capital):** The Annual Environment Budget (revenue & capital) shall be prepared based on the action plan including monitoring of various bench marks and the budget utilization. The year wise funds earmarked for environmental protection measures shall be kept in separate accounts with Environmental cost code.



### **13. FLEXIBILITY TO THE SUBSIDIARY COMPANIES:**

CEP 2018 will be applicable for all subsidiaries of CIL. The subsidiary company Boards have been authorized to approve necessary modifications in CEP 2018 with reference to unique conditions prevailing at the concerned subsidiary.

### **REVIEW OF ENVIRONMENTAL POLICY:**

In view of the present fast changing social, economic and environmental scenario, this Policy shall be reviewed every 5 years to incorporate the changes in the legal, technical, environmental, economic and social inputs prevailing at that time. Whenever, there is change in National Environmental Policy or other National / State relevant policies, Acts etc, this Corporate Environmental Policy would be reviewed and suitably revised.

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