

NTPC	LMI	LARA
TITLE	THE CONTROL OF ENVIRONMENTAL POLLUTION	
REF. NO.	LMI 01-R0/ EMG/ OGN/ ENV/ 001	

LARA SUPER THERMAL POWER PROJECT

LOCATION MANAGEMENT INSTRUCTION

LMI 01-R0/ EMG/ OGN/ ENV/ 001

The Control Of Environmental Pollution.



All locations are required to comply with this Directive

Approved for Implementation by.....
HOP(LARA)

Date :.....

Enquiries to : HOD(EMG)

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LMI APPROVAL DOCUMENT

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THE CONTROL OF ENVIRONMENTAL POLLUTION

1.0 SCOPE

This LMI describes NTPC-Lara's approach in managing the release of solid, liquid and gaseous substances from its existing plant to the Environment, and handling wastes and by-products. It explains the regulatory and policy framework and gives guidance on how the control of emissions and discharge shall be affected, monitored and reported within the Operations and describes the way NTPC-Lara will interface with the Enforcing Authorities.

2.0 SUPERSEDED DOCUMENTS: NIL

3.0 LEGAL AND REGULATORY FRAMEWORK (ENVIRONMENT)

3.1 The construction and operation of NTPC Lara power projects is governed by requirements to comply with certain Consent conditions, actual or deemed and statutory provisions for controlling emissions to air and water and for handling and disposing of solid waste.

3.2 For the Operation, NTPC Lara power projects has obtained necessary Consent Order (Air & Water Combined consent), from Chhattisgarh State Pollution Control Board (CSPCB). During project clearance stage, No Objection Certificate (NOC) and Environmental Clearance (EC) were also obtained from Chhattisgarh State and Ministry of Environment & Forest, Govt. of India, respectively.

3.3 During the last decade there have been major changes in the Regulations controlling pollution from Power Stations stemming mainly from various Pollution Control Acts, Rules & Notifications issued thereunder. The main impact on NTPC Lara are:

3.3.1 Combustion processes are subject to The Factory Act 1948, Cess Act 1977, The Forest Conservation Act 1980 (Amended 1988) The Air Act 1981, The Environment Act 1986, The Public Liability Insurance Act, 1991 and various amendments, notifications guideline and rules issued under these Acts.

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3.3.2 No fossil-fired power station can operate except under a Consent Order granted by concerned SPCB and in accordance with the conditions detailed in that Consent Order. NTPC-Lara is operating with a valid Consent Order, granted by CSPCB and in accordance with the conditions detailed in that Consent Order.

3.3.3 Even where not expressly stated as a condition of Consent Order, there is implied in it that the person carrying on the process must use the best available technique:

- For preventing the release of prescribed substance or, where that is not practicable for reducing to a minimum the release of such substances and for rendering harmless any such substances which are so released; and
- For rendering harmless any other substances which might cause harm if released into any environmental medium.

CSPCB renews Consent Order from time to time (generally once in five year) and may specify variations to the Consent Conditions.

3.3.4 The Consent Order includes limits on the release of any substance.

3.3.5 Emissions to atmosphere and discharges to water bodies will be regulated by various conditions laid in the Consent Order. There are certain conditions in this regard in NOC/EC also.

3.3.6 Controls on the transport and disposal of waste solids are also governed under various conditions being laid now in consent orders, especially with regard to disposal, transportation & utilization of ash. There are certain conditions in this regard in NOC/EC also.

Responsibility: HOD (Chem)/ HOD (O)

4.0 NTPC's ENVIRONMENTAL POLICY

NTPC Corporate Environment Policy statement is "To provide cleaner

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energy by committing to highest possible levels of performance in environmental compliance, practices and stewardship".

NTPC Lara aims at running its business taking the duty of environmental care as a guiding principle and the Corporate has developed NTPC's Environment Policy- 2017 and Environmental Management System for implementation.

Responsibility: HOD (EMG)

5.0 IMPLEMENTATION

5.1. The NTPC Lara aims at implementing the following programs:

5.1.1 At the planning stage, by identification of environmental constraints and opportunities and the development of cost effective solutions.

5.1.2 At the project design and construction stage, by identification of sensitive environmental impacts and issues and their reduction to acceptable levels.

5.1.3 At the operational stage, by control of environmental impacts through the cost effective use of technology, operating practice and conservation.

5.2 Within Operations, the O&M in-charge should set up and operate auditable systems to comply with these programs and all statutory requirements to control pollution.

Such as:

5.2.1 Adapt the Company's Environmental Programs, Codes of Practice and Guidelines into site specific targets and practices.

5.2.2 Make staff who work on the site aware of their environmental responsibilities through training and awareness programs.

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- 5.2.3 Maintain a file of environmental obligations and an inventory of emissions, discharges and wastes.
- 5.2.4 Be aware of the environmental impacts of the station.
- 5.2.5 Bring forward, within the site operating and development plan, environmental improvement proposals covering plant performance, compliance assurance training, site conservation, public and community relations initiatives.
- 5.2.6 Operate a quality assured system for monitoring all significant releases and the local environment.
- 5.2.7 Report to Station Head environmental performance against all regulatory public and Company requirements.
- 5.2.8 Set up a local environmental management system identifying staff responsibilities, site standards, limits and management instructions.
- 5.2.9 Identify and manage all environmental risks to minimize liability from environmental incidents.
- 5.2.10 Ensure that all environmental accidents, non-compliance incidents and public complaints are investigated and handled in a manner to minimize loss of the Company's reputation.
- 5.3 Station will also assist NTPC to maintain its position as a Knowledgeable buyer and operator of Plant and encourage suppliers to develop improved technology, diagnostics, control techniques and operational methods.

Responsibility: HOD (O&M)/ HOD (EMG)

6.0 THE ENVIRONMENTAL REVIEW

- 6.1 The over-all responsibility for implementing these requirements and meeting Corporate and Regulatory standards on operational plant/sites

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resides with the Station General Manager. The means of implementation shall be described in an Environmental Plan, and performance recorded in an Environment Report. These should be produced and regularly updated to satisfy Regional Director that they meet the requirements of NTPC Environmental Programs and Specific environmental targets set by him along with action plan for next quarter to bring under control the deviations.

6.2 Plant/report should comprise

- 6.2.1 An update of all environmental obligations, targets and performance indicators affecting the operation of that site.
- 6.2.2 A record of all significant emissions discharge (in excess of permitted emission level), wastes and contaminations, and an assessment of effects. This actual or alleged activities and local community relations. A listing of all local directives, operating instruction or codes or of practice affecting environmental performance in force at that site and demonstration of their effective implementation.
- 6.2.3 An assessment of the success in meeting indicators of performance, targets, limits. This should include all major performance shortfalls and a plan to show how future compliance is to be assured.
- 6.2.4 An update of environmental liabilities and risks and how they are to be managed.
- 6.2.5 A statement of site accountabilities and reporting needs.
- 6.2.6 A site training plan.
- 6.2.7 A quality assurance statement (that all data/information is correct).

Responsibility: HOD (EMG)

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7.0 DETAILED REQUIREMENTS

7.1 Obligations - Definition of Standards and Targets

7.1.1 The Station General Manager must identify all standards, targets, limits or other conditions (e.g. condition of consent, local agreements, if any, law regulatory instruments, (NOC/EC etc.), company policy standards or targets), which regulate environmental performance or be deemed to be a condition of building, operating or commissioning the plant/process, or occupying the site.

7.1.2 An inventory of these obligations should be collated by the Station General Manager updated regularly.

7.2 Emissions Inventory

7.2.1 NTPC LARA STTP should make a continual assessment and record of the nature and quantities of emissions and discharges produced at the Station (by NTPC Lara or other agencies engaged by NTPC Lara) and of waste and by-products imported to, produced at, stored at or dispersed from that Station. The detailed requirements are:

7.2.1.1 Inventories should be compiled and updated on a Quarterly basis.

7.2.1.2 Annual records should be assembled by 30th June.

7.2.1.3 Contents Should include: All Authorized quantities plus:

- a) CO₂ Emissions
- b) SO₂ Emissions
- c) NO_x Emissions
- d) Dust Emissions
- e) Ash Sales and Disposals (Qty.)
- f) Liquid Discharges (Qty, each category wise).
- g) Feedstock Quality, Quantity and Origin

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(Feed stock= coal, gas, furnace oil, secondary fuel, Raw water, any other major generation process input).

- h) Waste Quality, Quantity and Destination (category wise).
- i) Releases of Scheduled or Harmful Substances (Substance wise).
- j) Contamination of land or Site Waters
- k) Environment related Public complaints

Responsibility: HOD(EMG),HOD(AUD)/HOD(CHEM)

7.3 Assessment of Compliance

7.3.1 NTPC Lara STPP must ensure that equipment installed for the control and monitoring of pollution is used, operated and maintained within its design intent.

7.3.2 The Station General Manager is responsible for ensuring and demonstrating to the Regulatory Enforcing Authorities that the operation of his plant complies with authorized standards, targets and limits. He shall give the Enforcing Authority assistance to assess compliance and investigate incidents and complaints.

7.3.3 The Station General Manager or his delegate should seek to agree the appropriate indicators, and remedial procedures with the local Inspector of the appropriate Enforcing Authority. The Levels set should represent values readily achievable by the plant over its full range of authorized feedstock and loading, when maintained in good condition and when being operated in manner appropriate to its design intent, excluding known malfunction.

7.3.4 Local operating instruction should be produced to advise staff of the requirements for meeting agreed targets, limits and to give guidance on the operational, diagnostic and maintenance practices they should adopt. These instructions should also specify mandatory instrumentation, record needs and what actions must be taken when non-compliances with targets/limits occur or instruments fail.

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7.3.5 Operational records should be maintained to demonstrate historic compliance with requirements, to facilitate performance review, and to help resolve complaints.

7.3.6 Ability to meet current/expected limits and prevent recurrence of previous problems on this or similar sites, should be considered when formulating plant maintenance schedules, refurbishment plans or enhancement proposals.

Responsibility: HOP assisted by HOD(EMG)

7.4 Need for plant Improvement

7.4.1 The Station General Manager should consider and initiate proposal for refurbishment of pollution control (or related) plant wherever there is difficulty in sustaining the required level of performances using normal repair/maintenance techniques.

The Station General Manager should consider Plant improvement whenever:

7.4.1.1 There is recent history of pollution problems, incidents, complaints or nuisance.

7.4.1.2 There is difficulty in sustaining Authorized limits, or Company targets between maintenance periods despite the plant being operated in the prescribed manner.

7.4.1.3 Operational or feedstock changes are planned or necessitated which take the existing pollution control plant outside its design range or emissions outside authorized limits.

7.4.1.4 A performances upgrade is commercially justifiable.

7.4.2 The Enforcing Authority may also request or require plant improvements This may be on one of the following grounds:

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7.4.2.1 There has been a change of law.

7.4.2.2 A current limit no longer applies for that plant.

7.4.2.3 An opportunity has arisen which the Officer-in Charge believes will enable plant performance improvement conveniently and economically (e.g. a substantial change in proposal).

Responsibility: HOP assisted by HOD(EMG)

7.5 Improvement Planning

7.5.1 It is NTPC's intention that all major plant improvement activities should be developed and implemented as part of a centrally optimized program which takes account of future plant duties, priorities, resource availability and profitability. Such jobs are therefore dealt with by Corporate Engineering. Stations may direct their suggestions, proposals to Engineering for any major modification plan.

7.6 The interface with the Regulatory Authority

7.6.1 The implementation of NTPC Lara pollution control program involves a continual dialogue with the Enforcing Authority. This shall be structured as follows:

7.6.1.1 The Station General Manager or his delegate will maintain the local interface with the Enforcing Authorities. This shall be concerned with the day to day control of pollution at the site and compliance with its Regulatory requirements.

7.6.1.2 A National interface shall also be maintained with the Enforcing Authority which shall consider future requirements for monitoring, control of plant releases, authorization reviews, and trends in pollution control legislation, technology and operational practices. Corporate Environment Management/Environment Engineering shall co-ordinate this interface.

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Responsibility: CC (ENV)/ CC (ENV ENGG)/HOD(CHEM)

7.7 Reporting

7.7.1 In order to discharge its obligations for evaluating and demonstrating effectiveness of its environmental control and improvement measure and to assist in developing company program, NTPC requires information on all aspects of its environmental performance. A common reporting schedule has been set up & circulated to all stations by Corporate Environment Management Group to ensure that essential Corporate Requirements are met with minimum effort.

7.7.2 The Emissions Inventory (see 7.2) for each station shall be summarized in the monthly operational report; all exceptional items and potential compliance problems should be highlighted.

7.7.3 An Environmental Complaints or Incidents entailing an actual or alleged breach of compliance or nuisance claim, or any other item likely to go public, shall be reported immediately with action plan to Regional Head Quarter and also to Corporate Environment Management Group who in turn will report to other concerned.

Responsibility: HOD (EMG)

8.0 REFERENCE DOCUMENTATION

8.1 Reference documents which define specific requirements for pollution control are:

- Pollution Control Act, Rules & Notifications and Amendments issued thereunder.
- Emissions Regulations, Part III (Dec. 1985), prepared by Central Board for the Prevention and Control of Water Pollution (CBPCWB), New Delhi
- Formats for monthly/ quarterly/ half-yearly/ yearly data reporting
- NTPC's Environment Policy-2017 and Environment Management System, prepared and circulated by corporate EMG.

9.0 REVIEW

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The HOD (EMG) shall be responsible for reviewing of this document once every two years or as necessary.

10.0 Dos & Donts

Dos

SI No	Dos	Responsibility
1	Renewal of CTO from time to time	HOD (EMG)
2	Submit Forest Clearance Compliance Report (time interval 6 monthly)	HOD (EMG)
3	Submit Environment Compliance Report (time interval 6 monthly)	HOD (EMG)
4	Maintain a file of environmental obligations and an inventory of emissions, discharges and wastes.	HOD (EMG)
5	Report to Station Head environmental performance against all regulatory public and Company requirements.	HOD (EMG)

Donts

SI No	Donts	Responsibility
1	Equipments installed for the control and monitoring of pollution should not be used, operated and maintained outside its design intent.	HOD (EMG)
2	Do not delay in investigating all environmental accidents, non-compliance incidents and public complaints. And handle them in a manner to minimize loss of the Company's reputation.	HOD (EMG)

11.0 Responsibility Centre for implementation:

SI No	Activity	Responsibility Centre	Document Reference
1	Obtain Environmental Clearance and renew it from time to time	HOD (EMG)	LMI 01-R0/ EMG/ OGN/ ENV/ 001
2	Obtain Consent to Operate and renew it from time to time.	HOD (EMG)	LMI 01-R0/ EMG/ OGN/ ENV/ 001
3	Submit Forest Clearance Compliance Report (time interval 6 monthly)	HOD (EMG)	LMI 01-R0/ EMG/ OGN/ ENV/ 001
4	Submit Environment Clearance	HOD (EMG)	LMI 01-R0/ EMG/

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		Compliance Report (time interval 6 monthly)			OGN/ ENV/ 001

SI No	Checkpoints	Y/N	Remarks
1	Has Environmental Clearance been obtained.		
2	Has Consent to Operate been obtained.		
3	Has Forest Clearance Compliance report been submitted (6 monthly intervals.)		
4	Has Environment Clearance Compliance report been submitted (6 monthly intervals.)		
5	Is the file of environmental obligations and an inventory of emissions, discharges and wastes being maintained.		

SI No.	Date Of Issue	Issued to
1		GGM (Lara)
2		GM (O&M)
3		GM (C&T)
4		GM (Chem.)
5		NTPC Lara Web Page.

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