

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 227 of 2021

IN THE MATTER OF

Battu Satish Reddy
H.No. 5-55, Pittavani Palem, Kalapaka
Pedgantyada, Visakhapatnam District
Andhra Pradesh-530031
Mobile No. 9666391895
Mail id: advsravan@gmail.com

.... Applicant

Versus

1. National Thermal Power Corporation Ltd
Simhadri Plant
Rep by its Plant In-charge
Near Pittavani Palem Village
Simhadri Post 531020
Vishakapatnam, Andhra Pradesh
Mail: ntpccc@ntpc.co.in, Premchand02@ntpc.co.in
& 5 Others

.... Respondents

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1.	Concession Agreement between NHAI & the Concessionaire (DBL) along with copy of Work Order issued on behalf of NHAI to the Applicant regarding transportation of Fly Ash from NTPC Simhadri along with receipt of payments received by the Petitioner for carrying out transportation of fly ash.	R-1	1
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Certified that the documents filed in typed set are true copies of the originals.

Dated at Chennai on this 18th day of April 2022

For KING & PARTRIDGE

 Partner

COUNSEL FOR RESPONDENT NO.1



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
National Highways Authority of India

(सड़क परिवहन और राजमार्ग मंत्रालय)
(MINISTRY OF ROAD TRANSPORT & HIGHWAYS)
परियोजना कार्यान्वयन इकाई (जि क्यू), भा.रा.रा.पा. एन्क्लेव, कि.मी.2/8 रा.रा.5.,
Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16
हनुमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत
Hanumanthavaka, Visakhapatnam - 530 040, A.P., India

0046



भारतमाला
उन्नति के पथ का अवसर
BHARATMALA
ROAD TO PROSPERITY
दूरभाष / Phone : 0891-2707600
2714119
फाक्स / Fax No. : 0891-2714118
ई-मेल / E-mail : vis@nhai.org

NHAI/PIU-VSKP/6-Laning/ADP-AKP/Dillip/2018-19/23458

28/05/2018

To
The Group General Manger,
Simhadri STPP
P.O. NTPC- Simhadri
Visakhapatnam, A.P. 531 020

Urgent
AGM(EMG)
A. Maik
30.05.18.

Sub : NHAI, PIU, Visakhapatnam - Six-laning of Anandapuram – Pendurthi – Anakapalli section of NH-5 (new NH-16) from Km.681.000 (existing Km.681.000) to Km.731.780 (existing Km.742.400) (design length – 50.780) in the State of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity mode – **Use of Fly Ash in Road Construction – Reg.**

Ref: 1) Ministry of Environment, Forest and Climate Change Gazette Notification dated 25.01.2016.
2) Concession Agreement dtd. 13th April-18 between NHAI and the Concessionaire.

Sir,

1. It is to inform that the 6-laning of the stretch from Anandapuram – Anakapalli section of NH-16 from km 681.000 to km 731.780 in the State of Andhra Pradesh under NHDP Phase-V has been awarded to the Concessionaire, M/s.DBL Anandapuram Anakapalli Highways Private Limited and the Concession Agreement signed vide reference 2nd cited
2. As you are aware that as per Ministry of Environment, Forest and Climate Change Gazette Notification S.O.No.254(E) dtd. 25.01.2016, the use of fly ash is mandatory for construction works falling within a radius of 300 Km from any Thermal Power Plant (TPP) and the same has been provisioned in the subject work.
3. The average distance between NTPC Simhadri power plant to project stretch is about 40 Kms. The minimum required quantity for the subject project 35 lakh ton (appx.) and may vary upto any extent as per actual requirement on ground.
4. In this regard, it is requested to kindly confirm this office about the availability of fly ash for use in the above project duly complying the MOEF Guidelines.
5. Your early action in this regard is highly solicited.

Yours faithfully,

(A.Srinivasa Rao),
Project Director.

Copy to Regional Officer, National Highways Authority of India, Gurunanak Nagar Road, Vijayawada, A.P.- 520008 – for favour of his kind information.

Building a Nation, Not Just Roads

निगमित कार्यालय : जी-5, एबं.6, सेक्टर-10, द्वारका, नई दिल्ली-110 075. वेब साइट : <http://www.nhai.org>
Corporate Office : G-5 & 6, Sector-10, Dwaraka, NEW DELHI - 110 075, Website : <http://www.nhai.org>

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भारतीय राष्ट्रीय राजमार्ग प्राधिकरण National Highways Authority of India

(सड़क परिवहन और राजमार्ग मंत्रालय)

(MINISTRY OF ROAD TRANSPORT & HIGHWAYS)

परियोजना कार्यान्वयन इकाई (जि क्यू), भा.रा.पा. एन्क्लेव, कि.मी.2/8 रा.रा.5.,
Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16

हनुमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत
Hanumanthavaka, Visakhapatnam - 530 040, A.P., India



भारतमाला
प्रगति के पथ पर जाते हैं
BHARATMALA
ROAD TO PROSPERITY

0053

दूरभाष / Phone : 0891-2707600
2714119

फाक्स / Fax No. : 0891-2714118
ई-मेल / E-mail : vis@nhai.org

AGM(EMG)
Pl dismuss
06.03.19

Ref.:NHAI/PIU-VSKP/6-Laning/ADP-AKP/Dilip/2018-19/ 26106

14/02/2019

To
The Group General Manger,
Simhadri STPP
P.O. NTPC- Simhadri
Visakhapatnam, A.P. 531 020

Sub : NHAI, PIU, Visakhapatnam - Six-laning of Anandapuram – Pendurthi – Anakapalli section of NH-5 (new NH-16) from Km.681.000 (existing Km.681.000) to Km.731.780 (existing Km.742.400) (design length – 50.780) in the State of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity mode – **Use of Fly Ash in Road Construction – Reg.**

- Ref: 1) Ministry of Environment, Forest and Climate Change Gazette Notification dated 25.01.2016.
2) Concession Agreement dtd. 13th April-18 between NHAI and the Concessionaire.
3) This office letter No. Ref.:NHAI/PIU-VSKP/6-Laning/ADP-AKP/Dilip/2018-19/ Dt.29/09/2018
4) This office email dated 09/01/2019



5/3/19

Sir,

Kind attention is invited to the reference cited on the subject project.

In this regard, it is to inform that the "6-laning of the stretch from Anandapuram – Anakapalli section of NH-16 from km 681.000 to km 731.780 in the State of Andhra Pradesh under NHDP Phase-V" has been awarded to the Concessionaire, M/s.DBL Anandapuram Anakapalli Highways Private Limited and the Concession Agreement signed vide reference 2nd cited

As per Ministry of Environment, Forest and Climate Change Gazette Notification S.O.No.254(E) dtd. 25.01.2016, the use of fly ash is mandatory for construction works falling within a radius of 300 Km from any Thermal Power Plant (TPP) and the same has been provisioned in the subject work.

This office has already informed the average distance between NTPC Simhadri power plant to project stretch is about 43.15 Kms. The concessionaire vide reference 3rd cited informed that they want 1.0 lakh MT of fly ash per month and overall requirement for the project is 20.0 Lakh MT of fly ash.

Jeeva

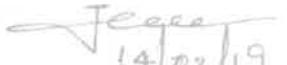
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Building a Nation, Not Just Roads

Further, vide this office email dated 09/01/2019 this office furnished the "Cost Estimate for Transportation of Fly Ash / Pond Ash" .

In this regard, please find enclosed a copy of draft MOU prepared for transportation fly ash in the same lines prepared for the "6-laning of Ranansthalam-Anandapuram" project for which transportation of fly ash is already in progress.

Yours faithfully,


14/02/19
(J.Ch.Venkataratnam),
Project Director.
nshw
B

Encl : As above.

Copy to Regional Officer, National Highways Authority of India, Gurunanak Nagar Road, Vijayawada, A.P. - 520008 – for favour of his kind information.

26

Route Check

OK

R14

WORK ORDER

43000739
470000002



DILIP BUILDCON LIMITED
INFRASTRUCTURE & BEYOND

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322
Date - 01/12/2020
Corporate Identity Number:-U45201MP2006PLC018689

Neelakundilu, Visakhapatnam

To,
M/s. RR Infra
Pittavanipaleni, 5-55, Kalapaka,
Pedagantyada Mandal, Visakhapatnam
Andhra Pradesh, 530031
PAN No: - BXWPB1913M
GST No: - 37BXWPB1913M1Z2
Mob No: - 9666391895

Sub: Work order for the 'Flyash Transportation and Flyash Loading at NTPC Dyke' for the project Anandapuram - Anakapalli Road project NH-5 (New NH-16) Road project in the State of Andhra Pradesh.

Dear Sir,

This is with reference to our discussions and your subsequent agreement on the above subject matter, we Dilip Buildcon Ltd., having site office at our **Anandapuram - Anakapalli Road project, Village: Neelakundilu, PG: Sontayam, PS: Anandapuram, Visakhapatnam District, Andhra Pradesh-531173** (Hereinafter 'DBL') are agreed to award you the work of 'Flyash Transportation and Flyash Loading at NTPC Dyke' at labour rates for the road construction project Anandapuram - Anakapalli as per terms and conditions appearing hereinafter;

Now the agreed terms and conditions between us detailed hereunder:

1. Scope of Work

1.1 Contractor's Obligation

- 1.1.1 All the work shall be executed as per the acceptable standards of 'Ministry of Road Transport and Highway' (MORTH) and in accordance with the requirement of the DBL specified by its authorized representative/ in-charge and/or consultant of the project work.
- 1.1.2 You shall be adhered to the specifications of the standards thereof no deviations shall be acceptable to us. You shall be liable to change/modify the constructional defect/non satisfactory work, if any indicative by Employer/ Principal/ Consultant/ DBL, and no amount/expense shall be paid for the non-satisfactory work/construction defect. DBL reserves the right to impose penalty for the period delay in construction due to the construction defect.

Agreed & accepted on behalf of
M/s. RR Infra

FOR RR INFRA
(Mr. Satish Reddy Battu)
(Authorized Signatory)
Proprietor

Recommended By
Project Head

(Mr. J Nagesh Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.

Mr. Nitish Sharma
(G. M. B&P Corporate office)

Site Camp Office :
Anandapuram - Anakapalli Road Project,
Village Neelakundilu, PG. Sontaym,
PS-Anandapuram, Dist : Visakhapatnam,
Andhra Pradesh - 531 173



Regd. Office :
Plot No. 5, Inside Govind Narayan Singh Gate,
Chuna Bhatti, Kolar Road, Bhopal - 462 015 (M.P.)
Ph : 0755-4029999, Fax : 0755-4029998
E-mail : db@dilipbuildcon.co.in, Website : www.dilipbuildcon.com
CIN No. U45201MP2006PLC018689

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WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

- 1.1.3 All required labour and technical/engineering staff shall be organized by you at your own cost and shall be as per the need and requirement of the work and specification of MORTH.
- 1.1.4 All necessary licenses not limited to Contract Labour Licenses, accommodation facilities with temporary sheds, lighting, water and medical facilities etc for the welfare of the labour/staff shall be provided by you at your own cost and as per approved standards.
- 1.1.5 You shall pay the minimum wages to labour regularly every month according to local prevailing Law and provide us the proof of that every month; accordingly your invoice/bill/Running Bill shall be paid.
- 1.1.6 You shall take disciplinary action if any worker found misbehaving with DBL's staff or damaging the work and shall ensure such act not repeat in future. You shall restrict the entrance of such employee who repeatedly misbehaving and/or hampering the work at site(s).

1.2 Obligation of DBL

- 1.2.1 The construction of Structures work in between Anandapuram - Anakapalli NH-16 in the state of Andhra Pradesh and on location / Direction as may be communicated to him from time to time.
- 1.2.3 **Material:** The material for the Transportation work shall be supplied by DBL as per the site requirement at free of cost to you and in accordance to the specification of "Annexure II" of this Work Order.
- 1.2.4 **Mode of Measurements:** Measurement shall be made by DBL's authorized representative in presence of M/s. RR Infra or his authorized representative, agent and in conformity with "MORTH specification for road & bridge work".
- 1.2.5 You shall ensure the safety and security of the said material and take all necessary steps as a reasonable man of ordinary prudence would take in this regard in respect of his own goods.
- 1.2.6 Keep the said materials properly covered and protected against exposure to sun, rain etc. at your cost and expense.
- 1.2.7 Maintain the place in which the said material are placed and the area surrounding it sufficiently cleaned, lighted and in good condition so as to ensure the smooth operation of the said materials.
- 1.2.8 Notwithstanding anything contained herein, the ownership of the said materials shall at all time vest with DILIP BUILDCON LIMITED. You shall, at any time during day and night,

Agreed & accepted on behalf of

M/s. RR Infra

FCL RR INFRA

(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By

Project Head

(Mr. J Nagendra Kumar)
(General Manager-Project)

Approved by

Dilip Buildcon Ltd.

Mr. Nitesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

allow authorized representatives of DILIP BUILDCON LIMITED to access to the said materials to carry out necessary inspection, replacement, up gradation etc. in respect thereof. DILIP BUILDCON LIMITED shall also have the right to remove the said materials from the site for the aforesaid purposes or for any other purpose whatsoever.

- 1.2.9 You shall ensure that allotted work at site is not hampered due to any reason whatsoever. At the instance, work is stopped at the site you shall ensure that work is resumed within 3 days of such stoppage of work. In case such stoppage of work is beyond 3 days you shall indemnify / reimburse DILIP BUILDCON LIMITED for actual expenses incurred by DILIP BUILDCON LTD for keeping the equipments idle and / or expenses incurred by DILIP BUILDCON LIMITED for the delay, these charges will be mutually decided between both parties. You shall keep DILIP BUILDCON LIMITED indemnified from any defects in structure work.
- 1.2.10 On termination of this Agreement by efflux of time or otherwise you shall immediately return the balance stock of material to DILIP BUILDCON LIMITED.

2. Pricing

DBL shall pay to the contractor for the assignment of work of this engagement:

- 2.1 The details of the assignment related to the jobs and rates for the same are provided in 'Bill of Quantity' ('BOQ') of Annexure-1, inclusive of all types of overheads, general risks, liabilities, profits etc. and this covers the obligations set out or implied in the sub contract work. The rates are final, fixed and effective for the entire period of the work as detailed in the annexure of this work order and no escalation of price or claims will be entertain at any stage of construction. You shall plan the work to utilize your workforce/manpower without keeping idle and no idle charges will be paid for whatsoever reason.
- 2.2 Except for the payments agreed and communicated to be paid under this work order, DBL shall not be liable to make any other payment except unless specifically agreed in writing.
- 2.3 The invoicing shall be done in accordance with the applicable law such as GST, Labour Cess as the case may be and as per its applicability. You shall indemnify us for any loss, demand, or penalty levied by any authority due to the infirmity in the invoice raised by you.
- 2.4 Release of payment shall follow within the next 15 to 30 days, after the verification/satisfaction of the Bill/Invoice/ Running Bill(s) by the Corporate Office of DBL. The Bill/Invoice/ Running Bill(s) should be submitted to us along with the statutory compliance documents/acknowledgement.

Agreed & accepted on behalf of

M/s. RR Infra
For RR INFRA


(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By
Project Head


(Mr. J Nagendra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.


Mr. Nitesh Sharma
(G. M. B&P Corporate office)

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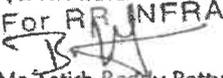
WORK ORDER

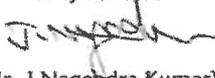
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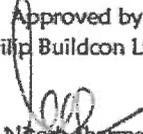
Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

- 2.5 DBL reserves the right to set-off, deduct, and withhold any amounts from out of the payments due and payable by DBL to you under the terms of this work order or any other agreement in respect of which you may be indebted or in default to DBL.
- 2.6 Payment against work done will be made by DBL based on monthly R. A. Bill approved by authorized person at Corporate Office of DBL i.e. quantity of approved R. A. Bill & rate as per annexure I of this deed within 30 days of submission of bills by you.
3. Taxes
- All tax liabilities arising in connection with the transactions pertaining to work order shall be your responsibility. However, nothing contained herein shall prevent DBL from deducting tax at source as required by law from the payments due to you.
4. Term & Termination
- 4.1 This arrangement shall be effective from the date of this work order and shall be valid unless terminated by either of the parties as per the terms hereof.
- 4.2 Time is the essence of this agreement and material obligations for the completion of the assignment.
- 4.3 You may terminate this work order by giving one month's notice in writing to DBL and DBL shall have right to terminate this engagement by giving 7 (Seven)days notice in writing without assigning any reason whatsoever.
- 4.4 Failure of the other party to obtain or maintain any license or the suspension or revocation of any license necessary for the conduct of the business of the other party pursuant to this work order.
- 4.5 In the event the work order is terminated you shall immediately arrange to return all the documents and properties of DBL (if any) or cost thereof.
- 4.6 The expiration or termination of the work order for any reason whatsoever shall not affect your any obligation accrued under this work order prior to the expiration or termination of this engagement and such expiration or termination shall be without prejudice to any liabilities of either party to the other party existing at the date of expiration or termination of the work order.

Agreed & accepted on behalf of
M/s. RR Infra
For RR INFRA

(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By
Project Head

(Mr. J Nagesh Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.

Mr. Nitesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

4.7 DBL reserve all right to cancel the work order/price rate work contract as & when desired and especially if the work does not seems to be progressing as per the schedule (Written or verbal) provided by DBL. You shall not be entitled to any reimbursement of any loss, expense, compensation or damages as a result of the operation of this Clause.

5. Targets and Forecasts

5.1 From time to time, DBL shall set targets to be achieved by you in respect of the construction work. The achievement of these prescribed targets by you is a material obligation under this work order.

5.2 If, in the opinion of DBL at any time that you do not adequately meet the targets as laid out by DBL, then without prejudice to any of its other rights under this arrangement, DBL may, at its option vary this work order, so as to exclude, reduce, modify, suspend the assignments and obligations under this arrangement with you or terminate as per the terms herein.

6. Liability

6.1 You shall be liable with respect to your assigned area to perform the work as per the applicability of the work.

6.2 At any point of time DBL's assignor imposed the financial implication due to inferior workmanship, or poor specifications, or unsatisfactory quality, or any other reason whatsoever, the same shall be indemnify by you to DBL.

7. Insurance

7.1 You shall effect and maintain at your own cost, during the currency Period of the work order as require the Applicable Laws such insurances as may be necessary or prudent in accordance with Good Industry Practice for mitigating the risks that may devolve on DBL as a consequence of any act or omission of you during the Construction Period.

7.2 Insurance for your workman compensation and insurance for you equipment and plant shall be done by you at your cost and the copy of the same should be submitted to DBL.

Agreed & accepted on behalf of
M/s. RR Infra


(Mr. Satish Reddy Battu)
(Authorized Signatory)
Proprietor

Recommended By
Project Head


(Mr. J Nagendra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.


Mr. Nitesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

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Corporate Identity Number:-U45201MP2006PLC018689

8. Safety

The safety norms shall be applicable to you includes your associates/employee/partner as the case may be and you shall be liable for the work and in the manner appearing hereinafter:

- 8.1 You shall comply with the Applicable Laws and Applicable Permits for securing the safety of the Users. You shall implement and administer the safety programme for providing a safe environment on or about the construction area to adhere to comply with the safety norms.
- 8.2 All costs and expenses arising out of or relating to Safety Requirements shall be borne by you to the extent such costs and expenses form part of the works included in the Scope of work.
- 8.3 Care shall be taken to ensure suitable mitigation measures against noise and dust, pollution and damages to the environs whether temporary or permanent and shall be taken as incidental to work.
- 8.4 Adequate precautions shall be taken for safety of personnel, inhabitant, house, road users and existing services, which, during the execution, shall be considered as incidentals to work.
- 8.5 All safety and security measures required for labour, construction, material etc. shall be under your scope.
- 8.6 Making hutment for your labour & staff shall be in your scope.

9. Liquidated Damages/ Limitation of Liability

- 9.1 If you fail due into delivery of the work as per the deployment schedule set forth herein above, DBL shall levy liquidated damages for delayed delivery as per the following:
 - 9.1.1 If the execution is delayed for less than 15 days from the projected date, DBL shall consider granting a grace period without imposition of liquidated damages.
 - 9.1.2 One half of one percent (0.5%) of the delayed portion of work per day of delay or part thereof after consideration of grace period subject to maximum of 10% of amount billed/billable by you.
- 9.2 Record in respect of delays for reasons beyond your control shall be maintained by you and certify by engineers of DBL.

Agreed & accepted on behalf of

M/s. RR Infra

For RR INFRA

(Mr. Jyoti Reddy Bhatta)
(Authorized Signatory)

Recommended By
Project Head

(Mr. J Nagesh Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.

Mr. Nilesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

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Corporate Identity Number:-U45201MP2006PLC018689

10. Quality Standards

You represent and warrant that all work performed pursuant to this work order shall be performed as per the highest workmanship standards, free from any defects in workmanship and in accordance with scope of work as set forth herein above and construction Practice. If DBL determines that any work has not been performed as per the acceptable standard of workmanship or in accordance with the specifications, DBL may reject the work. Before reject any work performed by you, a suitable opportunity shall be afforded to present your side on the issue of workmanship. Any work rejected by DBL pursuant to this Sections shall be promptly repaired or replaced by you at your own cost and expense within 10 Days failing which the work would stand rejected in entirety and no amount would be payable.

You shall ensure all workmen employed have adequate experience to perform quality job with the best industry practices.

11. Relationship

11.1 This arrangement is on a Principal-to-Principal basis and does not create any employee-employer relationship with us. You and your employees, agents and representatives shall provide Services as an independent contractor and nothing contained herein shall be deemed to create any partnership, joint venture between us or a merger of your assets or your fiscal or other liabilities or undertakings or create any employment or relationship of principal and agent between DBL and you and/or your representatives, employees and agents.

11.2 You shall be solely responsible for ensuring that all your liability to comply with the terms of this work order and all applicable laws. At no time any of your employees/representatives is considered to have any privity of contract with DBL.

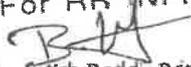
12 Inspection

12.1 DBL reserves the right to inspect all relevant documents data and material relating to the terms of the agreement. DBL or its authorized representative shall have the right to inspect the sites to which and where from the work are extended by you.

12.2 Where the inspection findings indicate material deficiencies, DBL reserves the right to set a timeframe for remedying the same and conducting a verification of such processes on the expiry of such time frame. If the deficiencies continue without being remedied, DBL reserves the right to terminate the work order forthwith without prejudice to other rights under law and contract. For the sake of clarity, any inspection recommendation relating to work shall be binding on you.

Agreed & accepted on behalf of

M/s. RR Infra For RR INFRA


(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By
Project Head


(Mr. J Nagesh Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.


Mr. Nitesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

13 Statutory Compliances

- 13.1 You shall comply with all applicable statutes, including but not limited to the provisions of the Provident Fund and Miscellaneous Provisions Act, Child Labour Act, Employees State Insurance Act 1948, Minimum Wages Act, Payments of Wages Act, 1936, Indian Stamp Act, 1899 etc. DBL shall not be liable in any manner whatsoever for any non-compliance on your part for the applicable laws and in the event of any adverse claim of whatsoever nature arising therefrom, the entire burden shall be strictly borne by you.
- 13.2 You shall maintain all requisite records, registers, account books etc. which are obligatory under any applicable laws to the works and business of DBL and shall provide such information as may be required under any law to any statutory authority.

14 Miscellaneous

- 14.1 You have all the necessary and requisite experience, License, expertise, manpower, mobility and communication modes required to efficiently perform and conduct the construction of Highway/structure work for DBL.
- 14.2 You will provide such cooperation as DBL reasonably requests in order to give full effect to the provisions of this work order.
- 14.3 You will perform your obligations under this work order in compliance with all applicable and enforceable laws, ordinances and regulations and will obtain and maintain in full force and effect, any permits, licenses, consents, approvals and authorizations necessary for the performance of your obligations hereunder.
- 14.4 You will perform the job with requisite care and skill from time to time and as per the best industry standards.
- 14.5 You may assign your rights or transfer the obligations under this work order with prior written consent of DBL. In any event, any assignment or transfer shall not operate to relieve you from any of the obligations herein, nor will any such assignment impose any obligation on DBL except in the case of an express written assumption by the DBL.
- 14.6 Failure to enforce compliance with any term or condition of this work order shall not constitute a waiver of such term or condition of this engagement or the right to subsequently enforce such term or condition in the future.

Agreed & accepted on behalf of
M/s. RR Infra

For RR INFRA


(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By
Project Head


(Mr. J Nagendra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.


Mr. Nitesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

14.7 You shall have no right to add, delete, amend or alter all or any of the terms and conditions of this work order until and unless the same has been approved in writing by the authorized signatory of DBL in Corporate Office.

15 Indemnification

You shall hereby indemnifies, hold harmless and undertakes to defend DBL, its Affiliates and their respective employees, officers and directors against any claim by a third party, including Statutory Authority/s, but not limited to damages, costs, expenses as a result of such claim with regard to:

15.1.1 Taxes/charges/cess/levies (interest or penalties assessed thereon) against DBL that are your obligations pursuant to this work order;

15.1.2 Any damages for bodily injury (including death) and damage to real property and tangible personal property caused by you or your associates, employee, representative, agent.

15.1.3 Any claim or action by or on behalf of your associates, agent, third party, employee, on his or her employment with the you including claims arising under occupational health and safety, worker's compensation, provident fund or other applicable laws or regulations;

15.1.4 Claims by government regulators or agencies for fines, penalties, sanctions or other remedies arising from or in connection with your failure to comply with the regulatory / legal requirements and compliances.

15.1.5 Any claim occurring on account of misconduct, negligence or wrongful acts of omission and commission of your employee, agent, associate, partner as the case may be.

15.1.6 You hereby unequivocally undertake to jointly and severally indemnify, defend and agree to hold harmless DBL including each and all Promoters, Directors, Officers, Employees of DBL against each and all losses, liabilities, punitive measures, penalties, damages, claims, actions, proceedings, cost and expenses, including reasonable attorney's fees and disbursements in connection therewith, asserted against or incurred by DBL which arise out of or result from or payable on account of your failing to comply.

15.1.7 You shall at all times indemnify and keep indemnified DBL against any/ all claims of/ by its employees raised on DBL including but not restricted to the claims under the Workmen Compensation Act, 1923; Payment of Wages Act; Payment of Bonus Act; Employees Provident Fund Act; Payment of Gratuity Act, Minimum Wages Act, Employees State Insurance Act or any other Act(s) or Statutory Modifications thereof or otherwise for or in respect of any claim for damage or compensation payable in consequence of any accident or injury sustained by any working or other personnel of the contractor, or in respect of any

Agreed & accepted on behalf of

M/s. RR Infra

FOR RR INFRA

(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By

Project Head

(Mr. J Nagesdra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.

Mr. Nitesh Sharma
(G. M. B&P Corporate office)

13

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

claim, damage or compensation under Labour Laws or any other Laws or rules made thereunder, by any person whether in your employment or not, who executed or executes the said construction work under this work order.

16. Arbitration

Any dispute, controversy or claim arising out of or relating to or in connection with this Agreement, or the breach, termination or validity hereof shall be finally settled by arbitration in accordance with the Indian Arbitration & Conciliation Act, 1996 or any statutory modification therein. The venue of the arbitration shall be Bhopal and the language used in the arbitral proceedings shall be English. The Arbitration shall be conducted by a sole arbitrator and appointed by the Director of Dilip Buildcon Ltd.

This engagement shall be governed by the laws in India and courts in Bhopal shall have exclusive jurisdiction over matters relating to or arising from this work order.

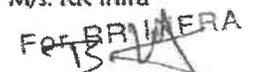
17. Notices

All notices shall be sent, if to contractor, M/s. RR Infra and if to DBL, to the attention of the Legal Cell, Dilip Buildcon Limited, E-5/99, Arera Colony, Bhopal (MP) or as amended by notice from time to time by writing. All notices required or permitted to be given by one Party to the other under this work order shall be in writing and shall be sufficient if made (i) by personal delivery, (including delivery by any commercial delivery service with acknowledgment received); or (ii) by registered or certified mail, postage prepaid, return receipt requested; or (iii) by facsimile transmission ("Fax").

Discrepancy shall be discussed and resolved mutually and the decision of the DBL in this regard shall be final and binding upon you.

Kindly return the duplicate copy of this order, duly signed, as a token of your acceptance.

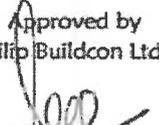
Agreed & accepted on behalf of
M/s. RR Infra


(Mr. Satish Reddy Battu)
(Authorized Signatory)
Proprietor

Recommended By
Project Head


(Mr. J. Nagendra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.


Mr. Nilesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

Annexure I

S No.	Item Description	Unit	Rate	Project	Remark
1	Transportation of Fly ash from NTPC Approved Dyke to Site (Lead as approved by NTPC)	Per MT per km	Rs 4.80/- MT/Km /	Anandapura m- Anakapalli	From Km 700 to Km 730+800 (As per Site)
2.	For the above Transportation Rate, Base price of HSD is considered Rs 76.08/- Litre and Price escalation shall be applicable for every Rs 1.5 increase or decrease in diesel price, rate will increase or decrease at Rs 0.03 per MT-KM .HSD Shall be Provided by DBL at retail market price.				
3.	Average quantity of fly ash transported in a month, it should not exceed the permissible limit of Mortar Act / Trip.				
4.	The details of the assignment related to the jobs and rates for the same are provided above are inclusive of all types of overheads (Tolls taxes, RTO, DTO, etc). general risks, liabilities, profits etc. and this covers the obligations set out or implied in the sub contract work. The rates are final, fixed and effective for the entire period of the work as detailed in the annexure of this work order and no escalation of price or claims will be entertain at any stage of construction. You shall plan the work to utilize your workforce/manpower without keeping idle and no idle charges will be paid for whatsoever reason.				
5.	60,000 MT per 15 days to be transported to project site. The RA bill to be raised after fulfilling the target quantity only.				

Contractor's Obligation:-

1. No of Vehicles shall be deployed as per the requirement/instructions of DBL representative.
2. You are fully responsible for transportation after dispatch from NTPC Dyke and before receiving the material at our Site as mentioned above.
3. Unloading will be responsibility of Contractor.
4. You shall provide your authorized supervisor at site to follow the instructions from DBL representative from time to time.

Agreed & accepted on behalf of
M/s. RR Infra

FOTRR INFRA
(Mr. Satish Reddy Battu)
(Authorized Signatory)
Proprietor

Recommended By
Project Head

J. NAGENDRA KUMAR
(Mr. J Nagendra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.

Mr. Nitish Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322

Date - 01/12/2020

Corporate Identity Number:-U45201MP2006PLC018689

5. You shall take disciplinary action if any worker found misbehaving with M/s DBL's staff or damaging the work and shall ensure such act not repeat in future. You shall restrict the entrance of such employee who repeatedly misbehaving and/or hampering the work at site(s).
6. Site receipt quantity shall be matched with the dispatched quantity from dyke. The received quantity at site is only considered for payment
7. Average quantity of aggregate transported in a month, it should not exceed the permissible limit of Mortar Act / Trip. (Example - Total Quantity transported/Total No. of Trips = should be \leq Mortar Act).
8. GPS tracking system to be provided to each vehicle.
9. The lead will be considered for each structure allowed as per NTPC certified lead only.
10. The weighment slip / dispatch slip shall be provided to each vehicle from the weigh bridge which shall be on the way. The quantity displayed in the weighment slip will only be considered for payment. The cost of weighment charges to be borne by the transporter only.
11. The subcontractor shall adhere to all safety norms of NTPC Authority and shall remain responsible and liable for any incident happen at NTPC premises, roads and contractors premises.
12. Contractor shall observe all applicable norms for transportation of fly ash.
13. The vehicle deployed should have standard tools, first aid kit and stepny in healthy condition.
14. The driver/s deployed shall have valid driving licence. Driver/s employed should not be under influence of liquor or intoxicate during the duty hours.
15. The subcontractor shall be liable and indemnify the contractor, NTPC and their employees for all losses and damages suffered by it due to negligence of, on reasons attributed to, the tenderer/Transporter, its employee or agents.
16. The Subcontractor shall follow the NTPC procedure for issue of Gate pass and taking out ash out of the Power plant as per the prevailing system.

DBL's Obligation:-

1. Loading of material shall be arranged by DBL free of Cost.

Agreed & accepted on behalf of
M/s. RR Infra

For RR INFRA

(Mr. Satish Reddy Battu)
(Authorized Signatory)

Recommended By
Project Head

(Mr. J Nagendra Kumar)
(General Manager-Project)

Approved by
Dilip Buildcon Ltd.

Mr. Nitesh Sharma
(G. M. B&P Corporate office)

WORK ORDER

Ref. No. - DBL/Anandapuram - Anakapalli/WO/2020-21/322
 Date - 01/12/2020
 Corporate Identity Number:-U45201MP2006PLC018689

Annexure II

S No.	Item Description	Unit	Rate	Project	Remark
1.	<u>Flyash Loading at NTPC Dyke</u>	Per MT	Rs 20/- MT	Anandapura m- Anakapalli	
2.	Sufficient excavators to be provided based on the vehicles deployed. No Vehicle should be delayed in loading.				
3.	Proper record as demanded by DBL is to be provided				
4.	All the vehicles deployed / engaged by DBL and its transporter vehicles, the fly ash to be loaded. There should not be delay in loading activities				
5.	No charges to be collected from vehicles by the loading operators / supervisors who so ever				
6.	The weighment done in the DBL weigh bridge only will be considered for payment				
7.	The bill to be raised by the Agencies after every 15 days with all supporting documents				
8.	The allotted area by NTPC demarcated only to be used for loading the fly ash or as directed by DBL site supervisors. Before commencement of loading, the area to be properly understood by the Agency. Observation of NTPC to be attended / used by you in the loading activities				
9.	All the local issues pertaining to the work is to be resolved by you. DBL will omit taking any responsibility				
10.	Loading should be done day and night. No holidays will be permitted. Idle charges for men and machinery will not be paid				

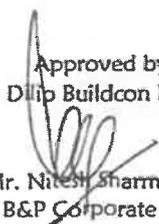
Agreed & accepted on behalf of
M/s. RR Infra


 (Mr. Satish Reddy Battu)
 (Authorized Signatory)
 Proprietor

Recommended By
Project Head


 (Mr. J Nagendra Kumar)
 (General Manager-Project)

Approved by
Dilip Buildcon Ltd.


 Mr. Nitesh Sharma
 (G. M. B&P Corporate office)

Personal Details required for issuance of work-order. (Annex-A)				
Si No	Description	Details	Document (Yes/No)	Remarks
1	Name of Organization in which work order should be issued	RR-INFRA ✓		
2	Name of Proprietor	SATISH REDDY BATTU ✓		Along with Parents / Husband / Wife Name
3	Address	PITTAVANIPALEM		
4	City	PEDAGANTYADA ✓		
5	District	VISAKHA PATNAM ✓		
6	Pin Code	530031 ✓		
7	Contact Number	9666391895 ✓		
8	e-mail Address	rrinfra.satish@gmail.com ✓		
9	PAN Number (For Si.No-1)	BXWPB1913M ✓		
10	Name As Per PAN Card	SATISH REDDY BATTU ✓	Yes	
11	GSTN (For Si.No-1)	37BXWPB1913M122 ✓	Yes	
12	Name As Per Aadhar Card	BATTU SATISH REDDY ✓	Yes	
13	Aadhar Number	204163269702 ✓		
14	Name As Per Bank Account	RR INFRA ✓		
15	Bank Account Number (For Si No-1)	259666391895 ✓		
16	IFSC Code	JNDB0000081 ✓		
17	MIRC Code			
18	Copy of cancelled cheque (For Si.No-1)	991301 ✓	Yes	
19	PF No.			

Undertaking / Self-Declaration of the Sub-Contractor

I / We hereby declare that, the information furnished in Annexures is true to the best of my knowledge and belief. and Management reserves the right to terminate my contract / Work-orders in case the information provided by me in Annexures is found misleading or misconceived.

मैं / हम घोषणा करते हैं कि, हमारे द्वारा दी गई समस्त जानकारी मेरे ज्ञान और विश्वास से पूर्णतः सत्य है। यदि इस जानकारी में किसी भी प्रकार की कोई गलती पाई जाती है तो मेरे साथ किये गये समस्त प्रबंध व कार्यवाही को समाप्त करने का समुचित अधिकार कंपनी को होगा।

Satish Reddy
Proprietor

FOR RR INFRA
Satish Reddy
(Contractor)

[Signature]
Quantity Surveyor

[Signature]
Construction Manager

[Signature]
Project Head

Work Order Check List (Annex-B)				
Si No	Description	Details	Document (Yes/No)	Remarks
1	Nature of Work Interested / Willing to assign	flyash transportation and flyash loading at NTPC		
2	Scope Work willing to assign (Nos and Type of Structure)			
3	No of Manpower / Labour to be Deployed	02 excavators		
3.1	Skilled			
3.2	UnSkilled			
4	Labour Deployment Plan	As per requirement		
5	Quotation from Contractor			
6	Tentative cost of Work to be allotted			
7	Security Cheque	991302	yes	
8	Authorization letter for Contractors representative			
9	Is Associated With Any Other Firm Or Individual (Ramcharan, Singh Construction, Kalicharan)	No	No	
10	Projects Working With Dilip Buildcon (Ex. Yawatmaf, Vijayawada, mahulia etc.)	NO	NO	
10.1	Type of Work doing with DBL in current projects	Supply of flyash		
11	Projects Worked With Dilip Buildcon. (Ex. Lalsot, Guna Biora etc.)	NO	NO	
12	Relation With The Dbl Employee	No		
13	Any Disputes In Other Projects Of Dbl.	No	✓	

Udertaking / Self-Declaration of the Sub-Contractor

I / We hereby declare that, the information furnished in Annexures is true to the best of my knowledge and belief and Management reserves the right to terminate my contract / Work-orders in case the information provided by me in Annexures is found misleading or misconceived.

मैं / हम यहाँ पर कहे गए हैं कि, हमने जो जानकारी दी है वह हमारे ज्ञान और विश्वास के अनुसार सत्य है और हमारे ज्ञान और विश्वास के अनुसार सत्य है। प्रबंधन को यह अधिकार सुरक्षित है कि यदि हमने जो जानकारी दी है वह सत्य नहीं है या भ्रमपूर्ण है तो हमारे कन्ट्रैक्ट / वर्क-ऑर्डर को समाप्त करने का अधिकार सुरक्षित है।

[Handwritten Signature]

[Handwritten Signature]
(Contractor)

For RR INFRA

(B. Satish Reddy)
Proprietor

[Handwritten Signature]

Quantity Surveyor

[Handwritten Signature]

Construction Manager

[Handwritten Signature]

Project Head

Subcontractor Scope, Cost And Labour Deployment Plan							(Annex-C)
SI No	Description	Uom	Qty To Be allotted	Tentative cost		Remarks	
				Skilled	Unskilled		
1	Drain	Rmt					
2	Hume Pipe Culvert	Nos					
3	Box Culverts	Nos					
4	Minor Bridge	Nos					
5	VUP	Nos					
6	PUP	Nos					
7	LVUP	Nos					
8	CUP	Nos					
9	Friction Slab	Rmt					
10	RE Wall Casting	Sqm					
11	RE Panel Transportation	Sqm					
12	RE Wall Erection	Sqm					
13	RE Block Casting & erection	Sqm					
14	Piling Work	Cum					
15	Major Bridge/ROB/Flyover	Nos					
16	Girder Casting	Nos					
17	Girder Erection	Nos					
18	DBM / BC Laying	KM					
19	WMM Laying	MT					
20	PQC & DLC Items	KM					
21	Cement Feeding	Nos					
22	Camp Fabrication Work	KG					
23	Camp Foundation Work	SFT					
24	Toll Plaza	Nos					
25	Transportation Of Aggregates	MTK					
26	Road Furniture	KM					
27	Tree Cutting	Nos					
			Approx. requirement				

For FIR
 (11. 2017)
 Sub-Contractor
 (11. 2017)

Quality supervisor
 Construction Manager
 Project Head

Sl No	Description	Uom	Subcontractor Month Wise Labour Employment Plan (Annex-D)														
			Month-1		Month-2		Month-3		Month-4		Month-5		Month-6		Month-7		
			Sk	Usk	Sk	Usk	Sk	Usk	Sk	Usk	Sk	Usk	Sk	Usk	Sk	Usk	
1	Drain	Rmt															
2	Hume Pipe Culvert	Nos															
3	Box Culverts	Nos															
4	Minor Bridge	Nos															
5	VJP	Nos															
6	PUP	Nos															
7	LVJP	Nos															
8	CUP	Nos															
9	Friction Slab	Rmt															
10	RE Wall Casting	Sqm															
11	RE Panel Transportation	Sqm															
12	RE Wall Erection	Sqm															
13	RE Block Casting & erection	Sqm															
14	Piling Work	Curm															
15	Major Bridge/ROB/Flyover	Nos															
16	Girder Casting	Nos															
17	Girder Erection	Nos															
18	DBM / BC Laying	KM															
19	WMM Laying	MT															
20	PQC & DLC Items	KM															
21	Cement Feeding	Nos															
22	Camp Fabrication Work	KG															
23	Camp Foundation Work	SFT															
24	Toll Plaza	Nos															
25	Transportation Of Aggregates	MTK															
26	Road Furniture	KM															
27	Tree Cutting	Nos															

FO RR INFRA
 (B. Satish Reddy)
 Contractor Proprietor

[Handwritten Signature]

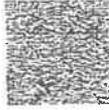
[Handwritten Signature]

[Handwritten Signature]
 Project Lead

As per requirement



బట్టు సతీష్ రెడ్డి
Battu Satish Reddy
పుట్టిన తేదీ/ DOB: 10/03/1990
పురుషుడు / MALE



2041 6326 9702

-సామాన్యమానవుడి హక్కు

MINISTRY OF PENSIONS AND SOCIAL SECURITY, GOVERNMENT OF ANDHRA PRADESH

వీరునామా:
5-55, పట్టణానికాలం, కలపాడ,
పెదగంట్లూరు, విశాఖపట్నం,
ఆంధ్ర ప్రదేశ్ - 530031

Address:
5-55, Pottanipalem, Kalapada,
Peddaganthuru, Visakhapatnam,
Andhra Pradesh - 530031

2041 6326 9702

-Aam Admi ka Adhikar

For RR INFRA

(B. Satish Reddy)
Proprietor

आयकर विभाग
INCOME TAX DEPARTMENT
SATISHREDDY BATTU
APPALAREDDY BATTU
10/03/1990
PAN Card Number
BXWPB1913M
B. Satish Reddy
Signature



For RR INFRA
B. Satish Reddy
(B. Satish Reddy)
Proprietor

UNION BANK OF INDIA Limited
Gajuwaka Branch
1st Floor, Mohan Complex, Mohan Road, Cuttack, Maharashtra-530 028.
PSC-INDIA0000001

Valid For Three Months Only
D D M M Y Y Y Y

Pay order को

Rupees रुपये

Cancel

Or Bearer
या धारक को

A/c No.
खाता क्र

25966681895

₹

Current Account - India Freedom Prepaid
Payable At Par At All Branches

RR/NFRA
Please sign above

991301 5302340021 9001351 29

Indusind Bank

Indusind Bank Limited
Main Branch
100, Market Complex, Main Road, Gurgaon, Haryana 122001
FSU: HUB0000001

Valid For Three Months Only

D	D	M	M	Y	Y	Y	Y

Pay अदा करें

Or Bearer

Rupees रुपये

या धारक को

A/c No.
खाता क्र.

259666391895

Current Account / Indus Freedom Prepaid
PAYABLE AT PER ALL BRANCHES

₹	
---	--

B. W.

RR INFRA
Please see above

⑈991302⑈ 530234002⑈ 900135⑈ 29

*Security cheque received
by account dep
comp
K. Yafey
11/1/2020
valid;*

25

SIGNATURE FORMAT

To
The manager

Date :- 10/12/2020

Subject:- Signature verification as per your official records.

Dear Sir/Madam,

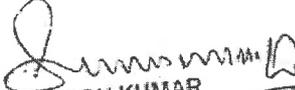
This is to ring to your notice that I/ We am/are presently running a saving / Current /cc/od / account on 259666391895 in the name /style of RR INFRA With your bank since 1 MONTH.. The account is presently operated by me /us in individual/ ~~either or survivor~~ / jointly.

Request you to kindly attest the below signature as your official records. Kindly hand over this letter to bearer whose signature are also attested.

For RR INFRA


(B. Satish Reddy)
Proprietor

Yours Faith fully
Customer's Signature & Name


SANTHOSH KUMAR
Deputy Branch Manager
ECN: 102152

Banker's Signature With name designation, seal & Address.


Indusind Bank Ltd.
Mehini Complex, 1st Floor
Main Road, Gajuwaha
Visakhapatnam - 530 025
Phone : 0891 - 2514133
Email ID : gc@indusind.com

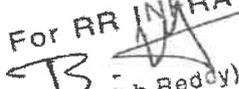
Government of India
Form GS REG-06
(See Section 11)

Registration Certificate

Registration Number : 37BXWPB1913M1Z2

1.	Legal Name	SATISH REDDY BAITU			
2.	Trade Name, if any	RR INFRA			
3.	Constitution of Business	Proprietorship			
4.	Address of Principal Place of Business	PITAVAKKALEM, 5-55, KALAPAKA, PEDAGANTYADA MANDAL, VISAKHAPATNAM, Visakhapatnam, Andhra Pradesh, 531 001			
5.	Date of Liability				
6.	Period of Validity	From	08/06/2020	To	Not Applicable
7.	Type of Registration	Regular			
8.	Particulars of Approving Authority	Centre			
Signature					
Name		Ramamohan Chowdary Pascha			
Designation		Superintendent			
Jurisdictional Office		GAJUWAKA			
9.	Date of issue of Certificate	08/06/2020			
Note: The registration certificate is required to be prominently displayed at all places of business in the State.					

This is a system generated digitally signed Registration Certificate issued based on the approval of application granted on 08/06/2020 by the jurisdictional authority.

For RR INFRA

 (B. Satish Reddy)
 Proprietor



Annexure B

GSTIN 37BXWPB1913M1Z2
Legal Name SATISHREDDY BATTU
Trade Name, if any RR INFRA

Details of Proprietor

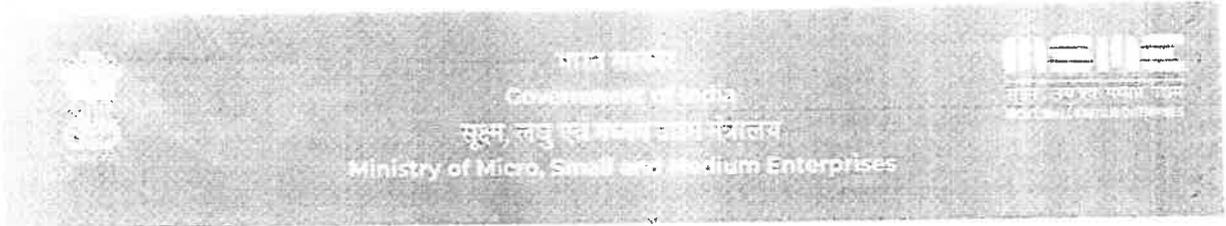
i



Name SATISHREDDY BATTU
Designation/Status Proprietor
Resident of State Andhra Pradesh

For RR INFRA
[Signature]
(B. Satish Reddy)
Proprietor

MSME



UDYAM REGISTRATION CERTIFICATE



TYPE OF ENTERPRISE

MICRO

SERVICES

UDYAM REGISTRATION NUMBER

UDYAM-AP-10-0000494

NAME OF ENTERPRISE

RR INFRA

NAME OF UNITS

OFFICIAL ADDRESS OF ENTERPRISE

Flat/Door/Block No.	8-55 KALAPAKA	Name of Premises/ Building	KALAPAKA
Village/Town	PEDAGANTYADA MANDAL	Block	PEDAGANTYADA
Road/Street/Lane	KALAPAKA	City	VISAKHAPATNAM
State	ANDHRA PRADESH	District	VISAKHAPATNAM, Pin 530031
Mobile	9666391525	Email:	sj.associates84@gmail.com

DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE

13/06/2020

DATE OF COMMENCEMENT OF PRODUCTION/BUSINESS

08/06/2020

NATIONAL INDUSTRY CLASSIFICATION CODE(S)

SNo.	NIC 2 Digit	NIC 3 Digit	NIC 5 Digit	Activity
1	41 - Construction of building	411 - Construction of buildings	41003 - Assembly and erection of prefabricated constructions on the site	Manufacturing
2	42 - Civil Engineering	421 - Other civil engineering projects n.e.c.	42909 - Other civil engineering projects n.e.c.	Manufacturing

DATE OF UDYAM REGISTRATION

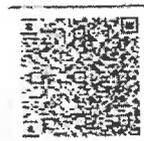
06/08/2020

Disclaimer: This is computer generated document, no signature required.
Printed form www.udyam.gov.in

For any assistance, you may contact:

- 1. DIC VISAKHAPATNAM
- 2. MSME-DI HYDERABAD

Visit www.udyam.gov.in for more information



BE A CHAMPION
with the
Ministry of
MSME

TS
Proprietor

12/22/2020

Dilip Buildcon Limited Mail - Fw: Work Order for Flash Loading in NTPC

**DILIP BUILDCON LIMITED**
INFRASTRUCTURE & BEYOND

Work Order Co <workorder_co@dilipbuildcon.co.in>

Fw: Work Order for Flash Loading in NTPC

2 messages

ATIRAJ RAJAK <atirajajak@dbl.co.in>

Mon, Nov 30, 2020 at 3:53 PM

Reply-To: ATIRAJ RAJAK <atirajajak@dbl.co.in>

To: Work Order Co <workorder_co@dilipbuildcon.co.in>, Dbl Billing <billing_co@dilipbuildcon.co.in>

Cc: Ashish Sharma <ashishsharma@dilipbuildcon.co.in>

Respected Sir,
FYI&R

Best Regards

Atiraj Rajak

QS (Billing & Planning)

Anandapuram-Anakapalli Road Project (NH16)

Dilip Buildcon Limited

Mobile: +91-7420055886,

----- Forwarded Message -----

From: Javvadi Nagendra Kumar <jnagendrakumar@dilipbuildcon.co.in>**To:** Atiraj Rajak <atirajajak@dbl.co.in>**Sent:** Monday, November 30, 2020, 03:40:40 PM GMT+5:30**Subject:** Fwd: Work Order for Flash Loading in NTPC

----- Forwarded message -----

From: Nitesh Kumar Sharma <nitesh@dilipbuildcon.co.in>**Date:** Wed, Nov 25, 2020, 5:04 PM**Subject:** RE: Work Order for Flash Loading in NTPC**To:** Devendra Jain <devendrjain@dilipbuildcon.co.in>**Cc:** Kamlesh Lodhi <kamleshlodhi@dilipbuildcon.co.in>, Javvadi Nagendra Kumar <jnagendrakumar@dilipbuildcon.co.in>

Ok sir , Noted

Regards

Nitesh Sharma

From: Devendra Jain <devendrjain@dilipbuildcon.co.in>**Sent:** 25 November, 2020 5:02 PM**To:** Javvadi Nagendra Kumar <jnagendrakumar@dilipbuildcon.co.in>

31

12/22/2020

Dilip Buildcon Limited Mail - Fw: Work Order for Flash Loading in NTPC

Cc: Kamlesh Lodhi <kamieshlodhi@dilipbuildcon.co.in>; Nitesh Kumar Sharma <nitesh@dilipbuildcon.co.in>
Subject: Re: Work Order for Flyash Loading in NTPC

Ok ! Nitesh release the work order

On Wed, 25 Nov 2020 at 12:13 PM, Javvadi Nagendra Kumar <jnagendrakumar@dilipbuildcon.co.in> wrote:

Dear Sir

We have discussion with the agency to carry out the Flyash loading in NTPC.

As we have deployed 3 excavators in the NTPC Dyke, We can use them in the soil borrow areas and in the Project site.

I am enclosing herewith the Work Order of Ashoka who is doing the work in the NTPC Dyke for ready reference.

We have bargained for Rs 20/MT loading instead of RS 23/MT.

This is for your kind approval sir.

With Regards,

J Nagendra Kumar | General Manager

DILIP BUILDCON LIMITED.

DBL Anandapuram Anakapalli Highways Private Limited.

Village : Sontyam | Po : Sontyam | Anandapuram | Dist: Visakhapatnam | Pin - 531173 | Andhara Pradesh | India

Mob: +91 8128650401

--

With thanks

Devendra Jain

(Director & CEO)

Dilip Buildcon Limited

12/22/2020

Dilip Buildcon Limited Mail - Fw: Work Order for Flash Loading in NTPC

32

The information in this email and any attachments is confidential and may be legally privileged. It is intended solely for the addressee or addressees. If you are not an intended recipient, please delete the message and any attachments and notify the sender of misdelivery. Any use or disclosure of the contents of either is unauthorised and may be unlawful. All liability for viruses is excluded to the fullest extent permitted by law. Any views expressed in this message are those of the individual sender, except where the sender states them, with requisite authority, to be those of the organisation.

ATIRAJ RAJAK <atirajajak@dbl.co.in>

Mon, Dec 14, 2020 at 6:10 PM

Reply-To: ATIRAJ RAJAK <atirajajak@dbl.co.in>

To: Gudabally Revankar Somanath <grsomanath@dilipbuildcon.co.in>

Cc: Dbl Billing <billing_co@dilipbuildcon.co.in>, Ashish Sharma <ashishsharma@dilipbuildcon.co.in>, Work Order Co <workorder_co@dilipbuildcon.co.in>

Respected Sir,

FYR

[Quoted text hidden]

[Quoted text hidden]

HP LaserJet P3015 Printers

Job Storage Status Page

Page 1



Error: Unable to store job at printer

Reason: Disk is not present or is full.

Solution: Add disk (RAM or EIO hard disk) or delete files.

12/22/2020

Dilip Buildcon Limited Mail - Fw: Work Order for Flash Loading in NTPC

The information in this email and any attachments is confidential and may be legally privileged. It is intended solely for the addressee or addressees. If you are not an intended recipient, please delete the message and any attachments and notify the sender of misdelivery. Any use or disclosure of the contents of either is unauthorised and may be unlawful. All liability for viruses is excluded to the fullest extent permitted by law. Any views expressed in this message are those of the individual sender, except where the sender states them, with requisite authority, to be those of the organisation.

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Cc: Dbl Billing <billing_co@dilipbuildcon.co.in>, Ashish Sharma <ashishsharma@dilipbuildcon.co.in>, Work Order Co <workorder_co@dilipbuildcon.co.in>

Respected Sir,

FYR

[Quoted text hidden]

[Quoted text hidden]

RATHA SHIPPING AND LOGISTICS Audited
 #47-10-17, 4TH FLOOR, A-1/1, VARANASI MAJESTIC COMP
 DWARAKANAGAR, 2ND LINE VISAKHAPATNAM

APCO 35

FLY ASH BATTU SATISHREDDY

Ledger Account

1-Apr-2020 to 31-Mar-2021

Page 1

Credit

Date	Particulars	Vch Type	Vch No.	Debit	Credit
1-4-2020	By Opening Balance				5,69,662.00
3-4-2020	To HDFC BANK	Payment	13	2,00,000.00	
21-4-2020	To HDFC BANK	Payment	40	3,21,967.00	
11-5-2020	By PURCHASE	Purchase	1		1,36,896.00
	By PURCHASE	Purchase	1		40,000.00
22-5-2020	To HDFC BANK	Payment	102	1,36,896.00	
27-5-2020	To HDFC BANK	Payment	114	15,000.00	
3-6-2020	To HDFC BANK	Payment	129	25,000.00	
4-6-2020	By PURCHASE	Purchase	2		3,99,113.00
26-6-2020	To HDFC BANK	Payment	191	3,99,113.00	
30-6-2020	By PURCHASE	Purchase			4,79,931.00
1-7-2020	By PURCHASE	Purchase	2		2,69,348.00
7-7-2020	To HDFC BANK	Payment	266	2,00,000.00	
22-7-2020	To HDFC BANK	Payment	299	6,08,148.00	
31-8-2020	By PURCHASE	Purchase	2		4,01,220.00
4-11-2020	To HDFC BANK	Payment	535	1,00,000.00	
17-11-2020	To HDFC BANK	Payment	575	2,90,046.00	
				22,96,170.00	22,96,170.00

APCO

RR Infra -72 Lakhs

2

25000730 - RR INFRA				
PITTAVANIPALEM 5-55 KALABAKA PEDAGA - 530031 GST: 37BXWPB1913M1Z2 PAN: BXWPB1913M State Code: 01				
To DILIP BUILDCON LIMITED (BD - RR/71-22/05) PLOT NO 5, BRIDPALE - 852016 GSTIN (DBL): 17AACDD612NB1Z3 Name of Project: Anandaprasad Peruvurthi-Anandapal Work Order No. and Date: 490004034/10 (4.12.2020) RA Bill No. and Date: RA0060353 14.02.2022 Bill Period: 01.05.2021 to 30.06.2021				
Running Payment Proposal Sheet				
Sr.No.	Description	Total to date	Previous	This Period
1	WORK DONE			
1.1	Gross Value of work done	7,221,369.58	6,917,107.58	311,262.40
1.2	CGST @ 6% of work done	391,586.20	282,910.46	18,675.74
1.3	SGST @ 6% of work done	391,586.20	282,910.46	18,675.74
1.4	IGST @ 0% of work done			
	Gross Value of work done including GST (A)	7,426,542.38	7,477,928.50	348,613.88
2	ADVANCES			
2.1	Gross Advances			
2.2	Income Tax @ 1.0000 %			
	Net Value of Advances (B)			
3	RECOVERIES			
3.1	Retention Money			
3.2	Advances - Recovery			
3.2.1	Gross Advances - Recovery			
3.2.2	Income Tax @ 1.0000 %			
	Net Value of Advances - Recovery			
3.3	Excess Consumption of Concrete			
3.4	Excess Consumption of Steel			
3.5	HSD	3,174,357.36	2,983,908.55	190,448.81
3.6	Material Recoveries with GST Invoice			
3.6.1	Value of Material			
3.6.2	CGST			
3.6.3	SGST			
3.6.4	IGST			
3.7	Withheld for Shortening Material			
3.8	Withheld for Drawings & Reconciliations			
3.9	Any Other Recovery			
3.10	Recovery for Shortening Material - Non-releasable			
3.11	Recovery - Non-releasable (Food Expenses)			
3.12	Recovery for Drawings & Reconciliation - Non-releasable			
3.13	Withheld Against Consumables			
3.14	Labour Cost			
	Total of Recoveries (C)	3,174,357.36	2,983,908.55	190,448.81
4	RELEASED			
4.1	Release of Retention Money			
4.2	Release of Withheld for Shortening Material			
4.3	Release of Withheld for Drawings & Reconciliation			
4.4	Release Against Consumables			
4.5	Any Other Release			
	Total of Released (D)			
5	DEDUCTION			
5.1	Income Tax @ 1.0000 %	62,818.28	59,705.66	3,112.62
5.2	CGST @ 1% (TDS): App after notification			
5.3	SGST @ 1% (TDS): App after notification			
5.4	IGST @ 1% (TDS): App after notification			
	Sub-Total of Deductions (E)	62,818.28	59,705.66	3,112.62
	Net Amount (A+B+C+D-E)	4,289,366.74	4,434,314.29	155,052.45
6.1	Amount withheld (To be released after deposition of GST)	565,820.90	439,373.16	126,447.80
6.2	Release (released after deposition of GST)	496,753.90	299,179.06	197,574.84
	Net Amount Paid	4,526,289.34	4,294,120.25	236,179.09

Approved By: - JAYVADI NAGENDRA KUMAR SURYA

**NTPC Simhadri Super Thermal Power Plant
Awards & Recognitions in Environment area**

Name of award	Year	Issued by	Remarks / Contribution
Apex India Green Leaf -Gold	2020	Apex India Foundation	Environmental excellence
Swarna Sakthi Awards	2019-20	Among NTPC stations	Continuous protection and conservation of Environment
Certificate of Merit	2017	Dist. Collector, Vizag	Exemplary contribution towards afforestation in and around Visakhapatnam
Greentech Environment Award - Gold	2015	Greentech Foundation	Environmental Protection
Greentech Environment Award - Gold	2014	Greentech Foundation	Environmental Protection
Greentech Environment Award - Silver	2014	Greentech Foundation	Environmental Protection
Swarna Sakthi Awards	2013-14	Among NTPC stations	Continuous protection and conservation of Environment
Greentech Environment Award - Silver	2012	Greentech Foundation	Environmental Protection
Green Vishaka	2012	Hon'ble MP Rajya Sabha	For exemplary contribution to "Plant a tree-For your city" drive
Indira Priyadarshini Vrikshamitra	2003	Govt. of India	Contributing consistently towards the protection of Environment since inception and waste land development



APEX INDIA FOUNDATION
RECOGNISING EXCELLENCE* SPREADING AWARENESS

CERTIFICATE

**APEX INDIA GREEN LEAF
AWARD 2020 FOR
ENVIRONMENT EXCELLENCE**

GOLD AWARD

**NTPC Limited
Simhadri Super Thermal Power Station
Thermal Sector**

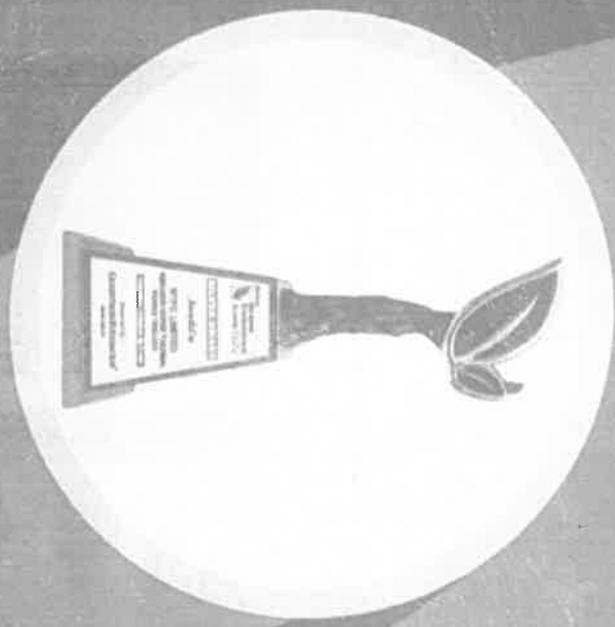


ISSUED ON
16th October 2021


PRESIDENT
APEX INDIA FOUNDATION

13th Annual


GREENTECH
Environment
Award 2012



GREENTECH FOUNDATION
 NEW DELHI (INDIA)
 www.greentech.org

Certificate

This is to certify that
NTPC LIMITED
SIMHADRI SUPER THERMAL POWER PROJECT
has been Declared Winner of
SILVER AWARD
in THERMAL POWER SECTOR
for outstanding achievement
in Environment Management


KAMALESHWAR SHARAN
 President

29th October 2012
 Hyderabad (India)

8th Annual

**GREENTECH**
Environment Excellence Award

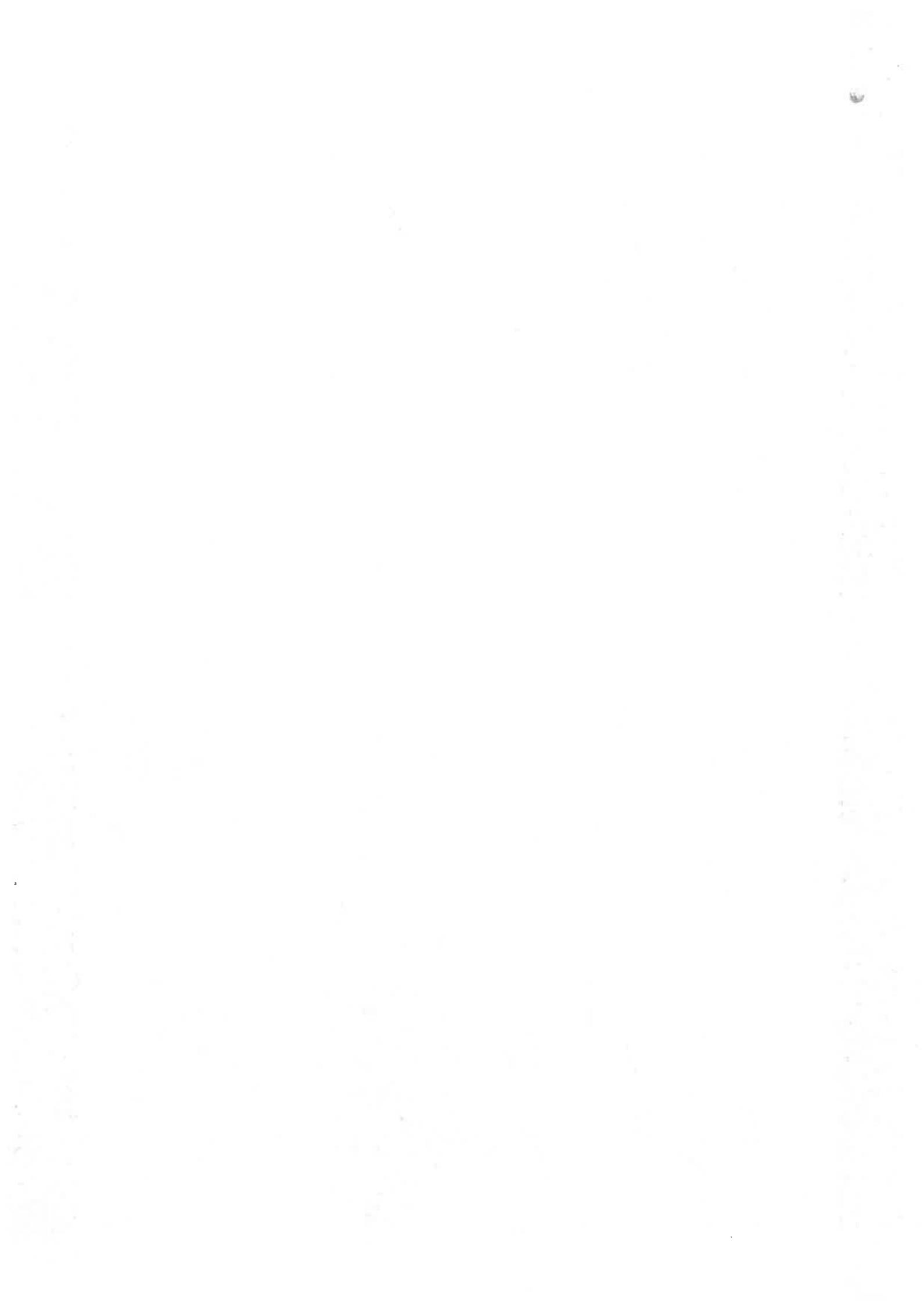
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*This is to certify that
NTPC Limited,
Simhadri Thermal Power Project
has been declared Winner of
Silver Award
in Thermal Power Sector
for outstanding achievement
in Environment Management*

Goa (India)
29th August 2007

Kamalleshwar Sharan
President

GREENTECH FOUNDATION
www.greentech.org





सत्यमेव जयते

INDIRA PRIYADARSHINI VRIKSHAMITRA AWARD

2003



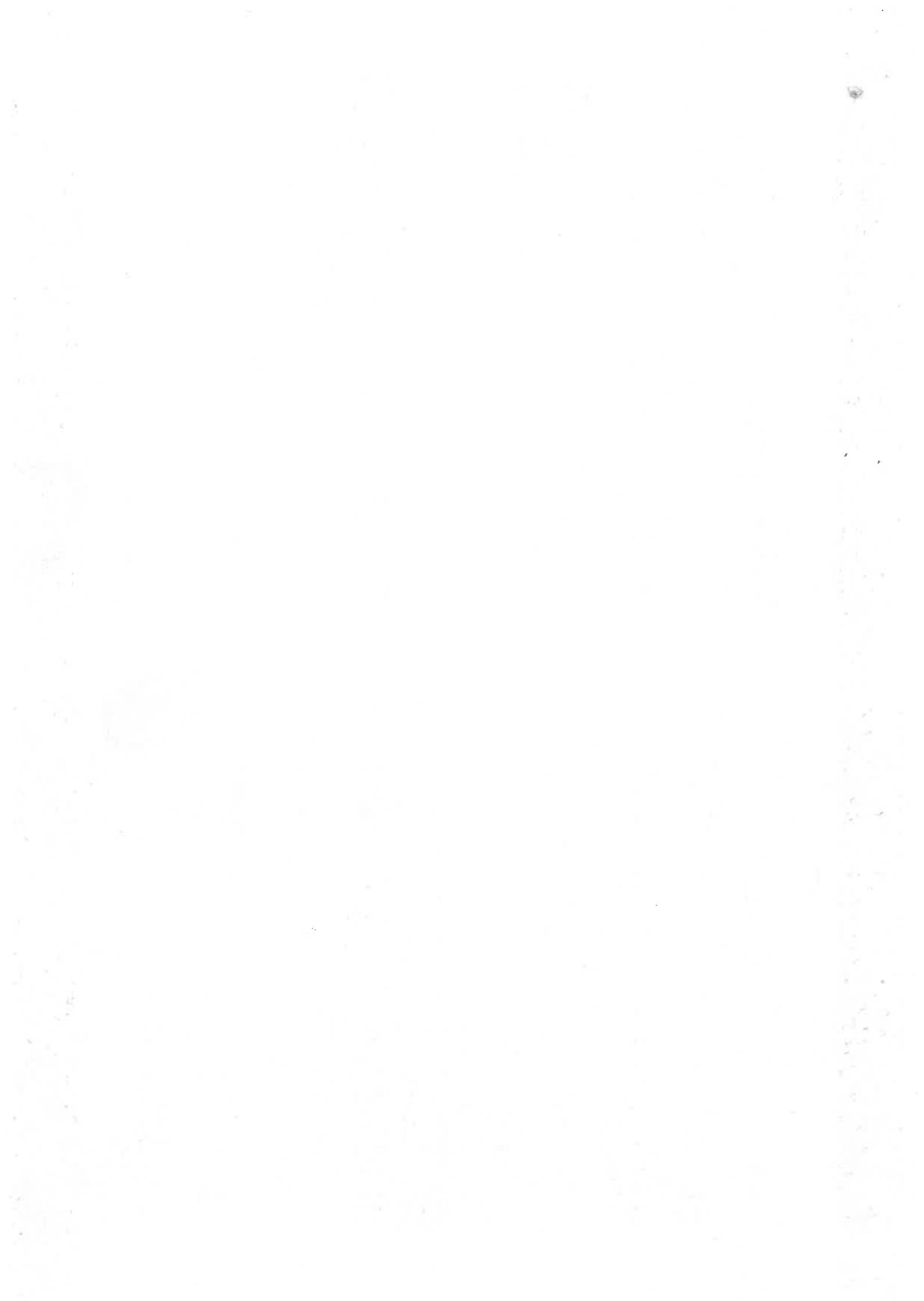
is awarded to

**National Thermal Power Corporation
Simhadri, Andhra Pradesh**

for outstanding contributions made
in the field of afforestation and
wasteland development.

A. RAJA

Minister
Environment and Forests
Government of India





CERTIFICATE OF MERIT

In recognition of the meritorious service rendered with exemplary devotion to duty, ~~Shri/Smt~~ *Shri/Smt* ~~via~~ *achieving* ~~the~~ *targets* ~~for~~ *for* plantation of ~~trees~~ *as part of* ~~Green Visakha~~ *M/s NTPC Ltd.* is awarded certificate of merit on the occasion of Republic Day, 2017

Date: 26-01-2017
Visakhapatnam

[Signature]
PRAVIN KUMAR, I.A.S.,
Collector & District Magistrate
Visakhapatnam



15th Annual
GREENTECH
Environment
Award 2014



GREENTECH FOUNDATION
NEW DELHI (INDIA)
www.greentech.org

Certificate

This is to certify that
NTPC LIMITED
SIMHADRI SUPER THERMAL POWER STATION
has been declared Winner of
15th Annual Greentech Environment Award 2014
GOLD AWARD
in THERMAL POWER SECTOR
for outstanding achievement
in Environment Management

28 January 2015
Kolkata (India)

M. Sharan
..

KAMALESHWAR SHARAN
Member
GREENTECH FOUNDATION

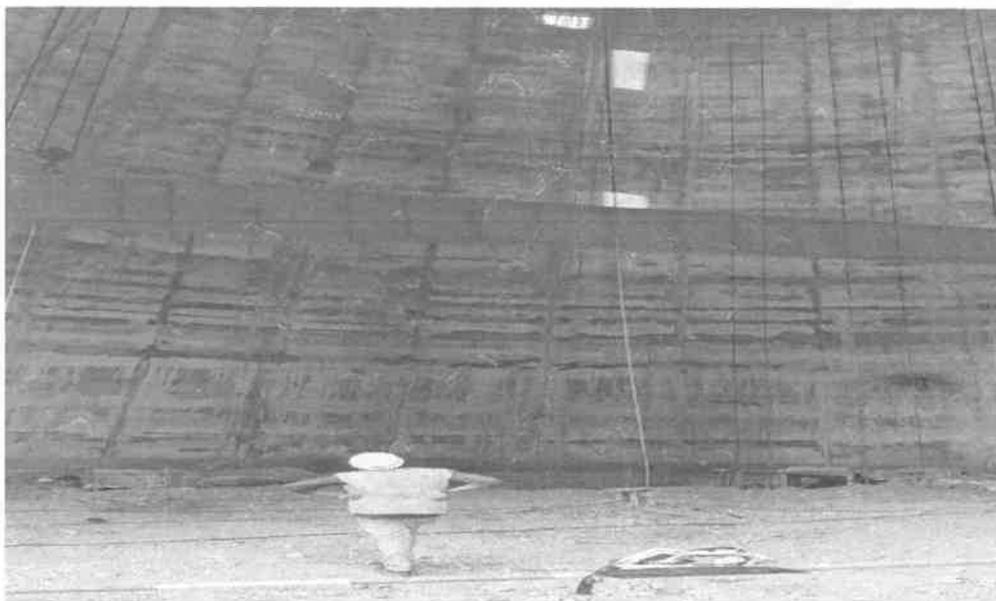
FLUE GAS DESULPHURISATION (FGD) SYSTEM – NTPC SIMHADRI

Flue-gas desulfurization (FGD) is a process used to mitigate sulphur dioxide from flue gas generated during coal combustion in a power station, FGD system is under installation in all the four units (4 x 500 MW) of Simhadri and work is progressing as per schedule and expected to commissioned by 2022 as per plan mentioned below.

Project details at a glance:

SCOPE	4 X 500MW (ALL 4 UNITS)
Awarded Value	871.4 Cr
First contract (Supply)	528.74 Cr
Second contract (Const & Erect)	342.7 Cr
Date of award / Agency	24.05.2019 / M/s GEPIL
Commissioning target	23.11.2021 U1&4 (30 Months)
	23.02.2022 U2&3 (33 Months)
Completion target (COF)	23.01.2022 U1&4 (32 Months)
	23.04.2022 U2&3 (35 Months)

Work progress at site

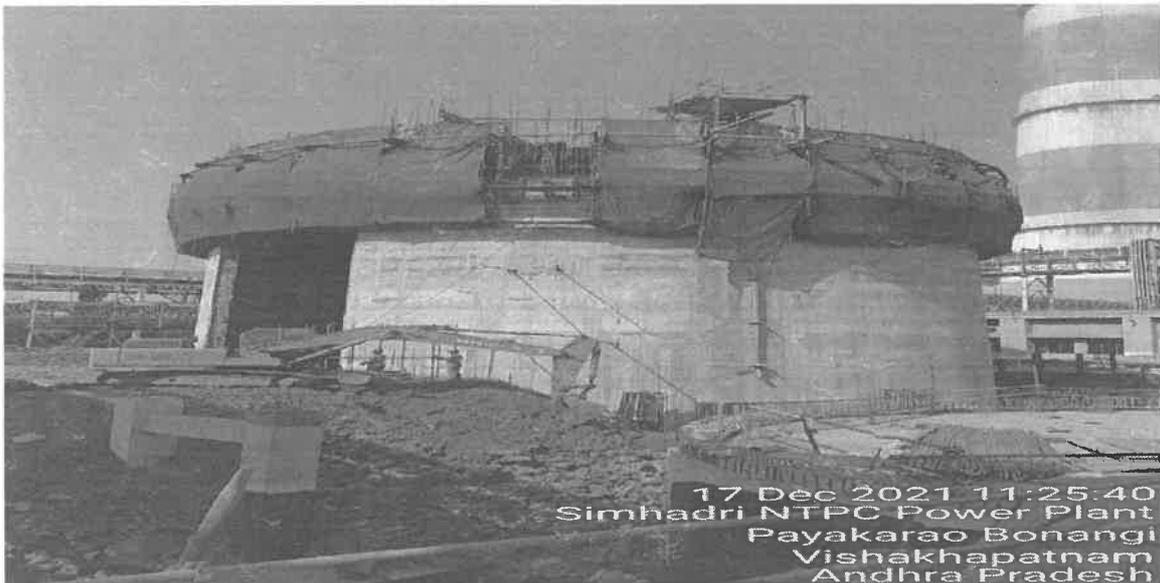


Unit no #1: U#1 Chimney-Shell casting completed; other works in progress

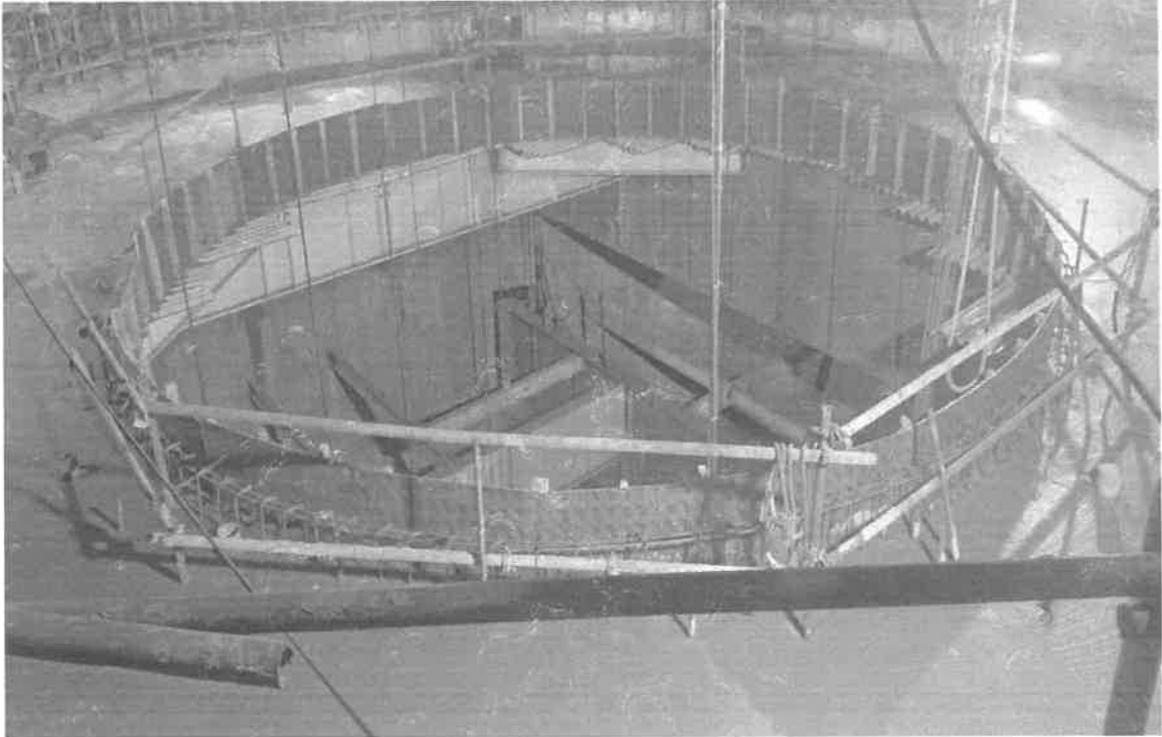
44



Unit no #2 Chimney – Shell casting reached @ EL (+)132m /143.3m other works in progress



Unit no #3 Chimney –Shell casting done upto EL (+)11.5 m & backfilling work in progress



Unit no #4 Chimney –Shell casting completed, slab casting at EL 141.8m completed, other works in progress



भारत का राजपत्र

The Gazette of India

सी.जी.-डी.एल.-अ.-01042021-226335
CG-DL-E-01042021-226335

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 192]
No. 192]

नई दिल्ली, बृहस्पतिवार, अप्रैल 1, 2021/चैत्र 11, 1943
NEW DELHI, THURSDAY, APRIL 1, 2021/CHAITRA 11, 1943

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय
अधिसूचना

नई दिल्ली, 31 मार्च, 2021

सा.का.नि. 243(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3, धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण (संरक्षण) नियम, 1986 का और मंशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :-

1. (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) संशोधन नियम, 2021 है।

(2) ये नियम राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।

2. पर्यावरण (संरक्षण) नियम, 1986 की अनुमूची-1, के क्रम संख्यांक 25 में, “*टीपीपी (डकाईयां) इस अधिसूचना के प्रकाशन की तारीख से दो वर्ष के भीतर मीमाओं को पूरा करेंगी”, अक्षरों, कोष्ठकों और शब्दों के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात् :-

“(i) पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, विद्युत मंत्रालय, केन्द्रीय विद्युत प्राधिकरण (सीईए) और केन्द्रीय प्रदूषण नियंत्रण बोर्ड के प्रतिनिधियों से मिलकर बने कार्य बल का गठन केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीवी) द्वारा सारणी-1 में यथाविनिर्दिष्ट तीन प्रवर्गों में सारणी-1 के स्तंभ (4) में यथाविनिर्दिष्ट समय सीमा के भीतर उत्सर्जन मानदंडों के अनुरूप होने के लिए उनकी अवस्थिति के आधार पर तापीय विद्युत संयंत्रों के प्रवर्गीकरण हेतु किया जाएगा, अर्थात् :-

सारणी-1

क्र.सं.	प्रवर्ग	अवस्थिति/स्थान	अनुपालन के लिए समय सीमाएं	
			निवृत्त नहीं होने वाली इकाईयां	निवृत्त होने वाली इकाईयां
(1)	(2)	(3)	(4)	(5)
1	प्रवर्ग क	10 लाख से अधिक जनसंख्या वाले राष्ट्रीय राजधानी क्षेत्र या शहरों की 10 किलोमीटर की परिधि के भीतर 1	31 दिसम्बर, 2022 तक	31 दिसम्बर, 2022 तक
2	प्रवर्ग ख	गंभीर रूप से प्रदूषित क्षेत्रों या गैर प्राप्ति शहरों की 10 किलोमीटर की परिधि के भीतर 2	31 दिसम्बर, 2023 तक	31 दिसम्बर, 2025 तक
3	प्रवर्ग ग	प्रवर्ग क और ख में सम्मिलित से भिन्न	31 दिसम्बर, 2024 तक	31 दिसम्बर, 2025 तक

1 भारत की 2011 की जनगणना के अनुसार।

2 सीपीसीबी द्वारा यथापरिभाषित।

(ii) सारणी-1 के स्तंभ (5) में यथाविनिर्दिष्ट तारीख के पूर्व निवृत्त होने के लिए घोषित तापीय विद्युत संयंत्र से, उस स्थिति में जहां ऐसे संयंत्र उनके निवृत्त होने के आधार पर छूट के लिए सीपीसीबी और सीईए को एक प्रतिज्ञान प्रस्तुत करते हैं, विनिर्दिष्ट मानदंडों को पूर्ण करने की अपेक्षा नहीं की जाएगी:

परन्तु ऐसे संयंत्रों से, उस स्थिति में जहां उनका प्रचालन प्रतिज्ञान में यथाविनिर्दिष्ट तारीख से आगे जारी रहता है, जनित विद्युत के प्रति यूनिट पर 0.20 रुपए की दर से पर्यावरण प्रतिकर उद्धृत किया जाएगा;

(iii) निवृत्त नहीं होने वाले तापीय विद्युत संयंत्र से, सारणी-1 के स्तंभ (4) में यथाविनिर्दिष्ट तारीख के पश्चात्, सारणी-2 में विनिर्दिष्ट दरों के अनुसार पर्यावरण प्रतिकर उद्धृत किया जाएगा, अर्थात् :-

सारणी-2

समय-सीमा से आगे गैर अनुपालन प्रचालन	पर्यावरणीय प्रतिकर (रुपए प्रति यूनिट जनित विद्युत)		
	प्रवर्ग क	प्रवर्ग ख	प्रवर्ग ग
0-180 दिवस	0.10	0.07	0.05
181-365 दिवस	0.15	0.10	0.075
366 दिवस और अधिक	0.20	0.15	0.10"

[फा.सं. क्यू-15017/40/2007-सीपीडब्ल्यू]

नरेश प्राल गंगवार, संयुक्त सचिव

टिप्पण: मूल नियम, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (i) में अधिसूचना संख्या का.आ. 844(अ), तारीख 19 नवम्बर, 1986 द्वारा प्रकाशित किए गए थे और उनका अंतिम संशोधन अधिसूचना संख्या मा.का.नि. 662(अ), तारीख 19 अक्टूबर, 2020 द्वारा किया गया।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 31st March, 2021

G.S.R. 243(E).—In exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

1. (1) These rules may be called the Environment (Protection) Amendment Rules, 2021.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986, in Schedule – I, in serial number 25 for letters, brackets and words “*TPPs (units) shall meet the limits within two years from date of publication of this notification”, the following shall be substituted, namely: -

“* (i) A task force shall be constituted by Central Pollution Control Board (CPCB) comprising of representative from Ministry of Environment and Forest and Climate Change, Ministry of Power, Central Electricity Authority (CEA) and CPCB to categorise thermal power plants in three categories as specified in the Table-I on the basis of their location to comply with the emission norms within the time limit as specified in column (4) of the Table-I, namely: -

Table-I

Sl. No.	Category	Location/area	Timelines for compliance	
			Non retiring units	Retiring units
(1)	(2)	(3)	(4)	(5)
1	Category A	Within 10 km radius of National Capital Region or cities having million plus population ¹ .	Upto 31 st December 2022	Upto 31 st December 2022
2	Category B	Within 10 km radius of Critically Polluted Areas ² or Non-attainment cities ²	Upto 31 st December 2023	Upto 31 st December 2025
3	Category C	Other than those included in category A and B	Upto 31 st December 2024	Upto 31 st December 2025

¹ As per 2011 census of India.

² As defined by CPCB.

(ii) the thermal power plant declared to retire before the date as specified in column (5) of Table-I shall not be required to meet the specified norms in case such plants submit an undertaking to CPCB and CEA for exemption on ground of retirement of such plant:

Provided that such plants shall be levied environment compensation at the rate of rupees 0.20 per unit electricity generated in case their operation is continued beyond the date as specified in the Undertaking;

(iii) there shall be levied environment compensation on the non-retiring thermal power plant, after the date as specified in column (4) of Table-I, as per the rates specified in the Table-II, namely:-

Table-II

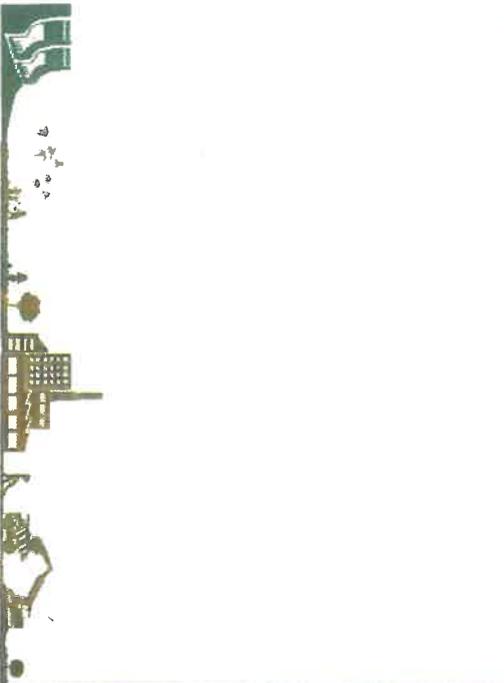
Non-Compliant operation beyond the Timeline	Environmental Compensation (Rs. per unit electricity generated)		
	Category A	Category B	Category C
0-180 days	0.10	0.07	0.05
181-365 days	0.15	0.10	0.075
366 days and beyond	0.20	0.15	0.10. ”

[F. No. Q-15017/40/2007-CPW]

NARESH PAL GANGAWAR, Jt. Secy.

Note: The principle rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide number S.O. 844(E), dated the 19th November, 1986 and lastly amended vide notification G.S.R. 662(E), dated the 19th October, 2020.

Plantation inside Plant – Coal Pile area



Handwritten text along the left margin, appearing to be a list of numbers or characters.



SCIENTIFIC ENVIRONMENTAL STUDY ON

HUMAN HEALTH RISK ASSESSMENT

FOR

M/s. NTPC LIMITED

SIMHADRI SUPER THERMAL POWER STATION
VISA KHAPATNAM, ANDHRA PRADESH
INDIA

Prepared by:

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Preface

This report has been prepared for M/s. NTPC Limited, Simhadri. Historically, human health risk assessment methodologies have generally developed independently. Integrated Approaches to Human Health and Environmental Risk Assessment, in conjunction with US EPA guidelines on Extrapolation in Human Health Risk Assessment have been made. If it were possible to prevent all human exposure from all pollutants, there would be no need for risk assessment. However, the total removal of harmful pollutants from the environment is often infeasible or impossible, and many naturally occurring substances also pose health risks. Risk assessment helps to identify serious health hazards if any and determine realistic goals for reducing exposure to toxics so that there is no significant health threat to the public.

The term "health risk assessment" is often misinterpreted. People sometimes think that a risk assessment will tell them whether a current health problem or symptom was caused by exposure to a pollutant. This is not the case. As per USEPA studies, links between chemical exposures and health problems in a community may conduct an epidemiologic study. These studies typically include a survey of health problems in a community and a comparison of health problems in that community, or the population as a whole.

Epidemiological studies evaluate whether past chemical exposures may be responsible for documented health problems in a specific group of people. Health risk assessments are used to estimate whether current or future pollutants exposures will pose health risks to a broad population.

Protecting the available environment is therefore our shared responsibility. With these facts, we would like to represent a forwarding step by conducting Human Health risk Assessment study for NTPC - Simhadri.

Harshal Gandhi
Project Coordinator
Pollucon Laboratories Pvt Ltd.
Surat, Gujarat, India

Acknowledgement

Pollucon Laboratory Pvt. Ltd. is pleased to acknowledge with thanks for the job of "Human Health Risk Assessment Study at NTPC Simhadri". We are very much thankful to Shri. Balaji Iyengar, HOP for giving us this opportunity.

We wish to extend special thanks to Dr. K. Yagnanarayana-Rt. AGM(EMG & AU), Shri Y S Gupta, AGM(EMG & AU), Shri. B A Narasimha Rao, Dy. Manager(EMG), Dr. S. Bardhan, CMO for their special attention to the arrangement of site visits. We are also thankful to all departments for furnishing details, without which it would have been difficult to accommodate the findings.

EXECUTIVE SUMMARY

This study presents the evaluation of carcinogenic and non-carcinogenic risk on human health and eco system around NTPC Simhadri power project which is situated near Parawada village, 40 km from Visakhapatnam city, Andhra Pradesh having 1000 MW (2x500 MW) power generation capacity. Further expansion of 1000 MW (2x500 MW) is under progress.

Human health risk assessment is a scientific method to estimate the potential human health risk associated with different pollutants emitted by coal based power plant through RISC software solutions. Risk assessment is evaluated for a populated area surrounding study site. The chemical of potential concern for quantitative risk assessment were selected in accordance with USEPA risk assessment guidelines.

Also this HHRA considers potential future exposures for adult and child consumers [Adult and Child Residents] via ingestion, inhalation and dermal contact with different pollutants. The chemical of potential concerns (COPCs) in each exposure medium were identified by using monitored average concentrations during the study period covering pre and post monsoon.

The following potential exposure populations are discussed in this HHRA:

<i>Onsite</i>	<i>Offsite</i>
<ul style="list-style-type: none"> • Operation workers • Non operation workers 	<ul style="list-style-type: none"> • Residents of villages (old aged, adult, adolescent, child) surrounding the power plant • Residents of NTPC Township (old aged, adult, adolescent, child)

To evaluate the potential health risks associated with exposure to COPCs, potentially complete exposure pathways were identified. The following exposure scenarios were quantified in the HHRA:

- *Ambient air:* Hypothetical future inhalation of outdoor air by onsite and offsite receptors
- *Ground water:* Hypothetical future dermal contact with shallow groundwater in excavations by offsite receptors
- *Surface soil:* Hypothetical future ingestion, dermal contact, and inhalation by onsite and offsite receptors
- *Surface water:* Current and future ingestion and dermal contact by offsite residents (adult, adolescent, and child)
- *Sediment:* Ingestion and dermal contact by offsite residents (adult, adolescent, and child);

Non - carcinogenic and carcinogenic health effects were evaluated in this HHRA. For COPCs, potential non carcinogenic effects is evaluated by comparing the estimated daily intake of the chemical over a specific time period with the RfD for that chemical derived for a similar period of exposure. This comparison results in a Hazard Quotient (HQ).

- *If the HQ for a chemical is equal to or less than one, it is believed that there is no adverse health effect. If the HQ exceeds one, there is some possibility that non-cancer effects may occur, although an HQ above one does not indicate an effect will definitely occur. This is because of the margin of safety inherent in the derivation of all reference (RfD) values.*
- *If an individual is exposed to more than one chemical, then total non-cancer risk is derived simply by summation of HQ value for each chemicals. This total is referred to as the Hazard Index (HI). HI can be used only if chemicals have same target tissue or organ system. If the HI value is less than one, non-cancer risks are not expected from any chemical, alone or in combination with others. If the HI exceeds one, it may be appropriate to perform a follow-on evaluation in which HQ values are combined only if they affect the same target tissue or organ system (e.g., the liver). This is because chemicals which do not cause toxicity in the same tissues are not likely to cause additive effects.*
- *For evaluations of carcinogenic effects, incremental cancer risks were calculated by combining the estimated lifetime average daily intakes of each pollutant. As per USEPA guideline excess cancer risks that are below about 1 chance in 1,000,000 (1×10^{-6} or $1E-06$) considered to be so small as to be negligible, and Excess cancer risks that range between $1E-06$ and $1E-04$ are generally considered to be acceptable.*

HHRA comprise following major activities:

Environmental study – which analyze and measure the environmental concentrations of contaminants attributable to the power plant, and compares them with national and international standards, to assess potential risks. Environmental study area was same as in epidemiological study. Ambient air, ground & surface water, soil from surrounding 12 villages were selected for environment study.

Epidemiological study – which compare the health status of the residents and workers of NTPC Simhadri with the general population, and assess the relationship between occupational and residential exposures and adverse health effects. During epidemiological study of Human –Total 611 respondents were contacted, out of that 157 respondents were from NTPC Township (94 male & 63 female) and 454 respondents (212 male & 242 female) were from the surrounding villages.

Epidemiological study of Animals - Total 111 animals was selected by Multi Stage Random Sampling from the surrounding 6 villages.

Simulation Study – which comprise dispersion model, health risk and ecological risk assessments to find out the carcinogenic and non carcinogenic effect for target populations.

Risk Assessment Methodology:

Study area was considered 10 Km radius from the stack area. Environmental monitoring was conducted within this area in two seasons, for epidemiological study same study area was considered and the study design was Cross-sectional and sampling type was Multi stage random Sampling and the HHRA study conducted during June 2011 to May 2012.

The basic steps of the Human health risk assessment study are the following:

- 1) Data Collection and Analysis, to determine the nature and extent of chemical contamination in environmental media, such as sediment, water, and air;
- 2) Exposure Assessment, which is an identification of possible exposed populations and an estimation of human chemical intake through exposure routes such as ingestion, inhalation, or skin contact;
- 3) Toxicity Assessment, which is an evaluation of chemical toxicity including cancer and non-cancer health effects from exposure to chemicals; and
- 4) Risk Characterization, which describes the likelihood and degree of chemical exposure at a site and the possible adverse health effects associated with such exposure.

Data Collection and Analysis

The team of doctors visited the surrounding villages within the radius of 10 kms and conducted the epidemiological studies on the respective locations in the month of September 2011. Environmental monitoring team conducted monitoring activity within same study area in the month of September 2011 and March 2012.

OBSERVATIONS:**1) Human Health risk****a) OUTDOOR AIR:**

For evaluation of risk assessment, many assumptions and uncertainties applied with respect to the receptors – child and adult residents surrounding the NTPC Simhadri power plant. Average time for carcinogen is assumed 70 yrs for both adult & child receptors and exposure duration is estimated 6 yrs and 24 yrs as well as inhalation rate assumed 1.2 and 1.6 m³/hr [USEPA] for child and adult resident respectively.

As shown in table 1, Total carcinogenic risk for child resident is 0.00003% (means chance of cancer is 3.0 in 10000000 people) and for adult resident is 0.00017% (means chance of cancer is 1.7 in 1000000 people)

For 1st environment monitoring

Hazard Quotient of child resident and adult resident due to mainly inhalation of sulphur dioxide, Oxides of nitrogen, Particulate matter (PM₁₀ & PM_{2.5}), Arsenic, Lead and Mercury in the outdoor air are presented in table 2. Hazard quotients for different chemicals are below 1 indicate there is no adverse effect on health.

For 2nd environment monitoring

Hazard Quotient of child resident and adult resident due to mainly inhalation of sulphur dioxide, Oxides of nitrogen, Particulate matter (PM₁₀ & PM_{2.5}), Arsenic, Lead and Mercury in the outdoor air are presented in table 3. Hazard quotients for different chemicals are below 1 indicate there is no adverse effect on health.

Table 1 Carcinogenic risk due to inhalation of outdoor air

Carcinogenic Risk		
Chemical	Child Resident	Adult Resident
Arsenic	3.0 x 10 ⁻⁷	1.7 x 10 ⁻⁶
Lead	ND	ND
Mercury	ND	ND
NO _x	ND	ND
PM ₁₀	ND	ND
PM _{2.5}	ND	ND
SO ₂	ND	ND
TOTAL RISK	3.0 x 10⁻⁷	1.7 x 10⁻⁶

Note: During carcinogenic risk evaluation, Chemical – arsenic, lead and mercury were not detected during 1st and 2nd environment monitoring. So input value was minimum detection limit for same chemicals. Therefore, presented results in table – carcinogenic risk is equal for 1st and 2nd environment monitoring.

Table 2 Non carcinogenic effects due to inhalation of outdoor air - I

Hazard Quotient – Outdoor Air		
1 st ambient air monitoring		
Chemical	Child Resident	Adult Resident
SO ₂	3.6 x 10 ⁻²	5.1 x 10 ⁻²
NO _x	4.2 x 10 ⁻²	5.9 x 10 ⁻²
PM ₁₀	8.0 x 10 ⁻¹	9.0 x 10 ⁻¹
PM _{2.5}	7.1 x 10 ⁻¹	8.5 x 10 ⁻¹
As	5.3 x 10 ⁻²	7.5 x 10 ⁻²
Pb	4.0 x 10 ⁻¹	5.6 x 10 ⁻¹
Hg	2.0 x 10 ⁻¹	2.8 x 10 ⁻¹

Table 3 Non carcinogenic effects due to inhalation of outdoor air - II

Hazard Quotient – Outdoor Air		
2 nd Environment monitoring		
Chemical	Child Resident	Adult Resident
SO ₂	4.7 x 10 ⁻²	6.6 x 10 ⁻²
NO _x	4.9 x 10 ⁻²	6.8 x 10 ⁻²
PM ₁₀	8.7 x 10 ⁻¹	9.5 x 10 ⁻¹
PM _{2.5}	7.2 x 10 ⁻¹	8.7 x 10 ⁻¹
As	5.3 x 10 ⁻²	7.5 x 10 ⁻²
Pb	4.0 x 10 ⁻¹	5.6 x 10 ⁻¹
Hg	2.0 x 10 ⁻¹	2.8 x 10 ⁻¹

a) GROUND WATER:

Exposures to contaminants were assumed to potentially occur through consumption of groundwater as a drinking water source, dermal contact with groundwater during bathing, inhalation of volatile compounds from groundwater during showering. Ingestion rate of drinking water is assumed 1.5 lit. for child and 3 lit. for adult.

Note: Concentration of arsenic, cadmium, Hexavalent chromium, lead, zinc, nickel and mercury were added for Ground water - risk evaluation.

As shown in table 4, **Total carcinogenic risk** for child resident is 0.045% (means chance of cancer is 4.5 in 10000 people) and for adult resident is 0.086% (means probability of cancer is 8.6 per 10000 people)

As shown in table 5, **Hazard index** for child resident is 0.29 and for adult resident is 0.14 which are less than the 1, indicates that there is no adverse effect on health.

c) SOIL:

Exposures path were assumed to potentially occur through incidental ingestion, dermal contact, and inhalation of soils and sediment. Exposure frequency is assumed 350 events per year for both receptors.

As shown in table 6, **Total carcinogenic risk** for child resident is 0.00021% (means probability of cancer is 2.1 per 1000000 people) and for adult resident is 0.00071% (means probability of cancer is 7.1 per 1000000 people)

Hazard index for child resident is 0.23 and for adult resident is 0.1 which are less than 1, indicate that there is no non-carcinogenic effects on health. These results suggest that the exposure represented by this scenario pose an acceptable noncancerous health effects to the exposed people (refer table 7):

Table 4 Carcinogenic risk – ground water

Carcinogenic Risk – Ground water		
Exposure route	Child Resident	Adult Resident
Ingestion of Ground water	4.2 x 10 ⁻⁴	8.5 x 10 ⁻⁴
Dermal Contact During Shower	3.2 x 10 ⁻⁶	4.9 x 10 ⁻⁶
Inhalation During Shower	0.0	0.0
Ingestion of Irrigation Water	1.6 x 10 ⁻⁵	4.2 x 10 ⁻⁶
Dermal Contact with GW	1.3 x 10 ⁻⁶	2.5 x 10 ⁻⁷
Inhalation of GW Spray	0.0	0.0
Ingestion of Vegetables	2.4 x 10 ⁻⁶	5.3 x 10 ⁻⁶
Total risk	4.5 x 10⁻⁴	8.6 x 10⁻⁴

Table 5 Non carcinogenic effects – ground water

Hazard Index – Ground water		
Exposure route	Child Resident	Adult Resident
Ingestion of Ground water	2.5 x 10 ⁻¹	1.3 x 10 ⁻¹
Dermal Contact During Shower	1.5 x 10 ⁻³	5.8 x 10 ⁻⁴
Inhalation During Shower	0.0	0.0
Ingestion of Irrigation Water	9.3 x 10 ⁻³	6.2 x 10 ⁻⁴
Dermal Contact with GW	6.2 x 10 ⁻⁴	3.0 x 10 ⁻⁵
Inhalation of GW Spray	0.0	0.0
Ingestion of Vegetables	2.3 x 10 ⁻²	1.3 x 10 ⁻²
Hazard Index	2.9 x 10⁻¹	1.4 x 10⁻¹

Table 6 Carcinogenic risk - Soil

Carcinogenic Risk – Soil		
Exposure route	Child Resident	Adult Resident
Ingestion of Soil	1.5 x 10 ⁻⁸	7.5 x 10 ⁻⁹
Dermal Contact with Soil	1.5 x 10 ⁻⁶	3.0 x 10 ⁻⁷
Ingestion of Vegetables	6.2 x 10 ⁻⁷	1.4 x 10 ⁻⁶
Total risk	2.1 x 10⁻⁶	1.7 x 10⁻⁶

Table 7 Non carcinogenic effects – Soil

Hazard Index – Soil		
Exposure route	Child Resident	Adult Resident
Ingestion of Soil	8.8 x 10 ⁻³	1.1 x 10 ⁻³
Dermal Contact with Soil	3.8 x 10 ⁻²	2.0 x 10 ⁻³
Ingestion of Vegetables	1.8 x 10 ⁻¹	1.0 x 10 ⁻¹
Hazard Index	2.3 x 10⁻¹	1.1 x 10⁻¹

Note: Chemicals arsenic, cadmium, Hexavalent chromium, lead, zinc, copper, nickel and mercury were considered for soil - risk evaluation.

2) EPIDEMIOLOGICAL STUDY

During epidemiological study of Human – 25% respondents were from NTPC Township (60% male & 40% female) and 75% respondents (47% male & 53% female) were from the surrounding villages.

Health status of the residents during epidemiological survey in each community demonstrated no relationship between health status and adverse impact due to existing of the power plant. A relationship between the health statuses from previous years to current years was observed. Previous health status was primarily “**ABOUT THE SAME**” with current health status for the majority of respondents in each community. The current health status for most residents was primarily good or fair for all distances and directions from the Coal base power plant.

3) ECOLOGICAL RISK

a) Surface water

Exposure path assumed to occur through incidental ingestion of surface water, dermal contact with surface water during bath. Exposure frequency assumed 350 events per year for both receptors.

Estimated the carcinogenic risk for child is 0.00032% (means chance of cancer is 3.2 in 1000000 people) and for adult is 0.00049% (means chance of cancer is 4.9 per 1000000 people).

Estimated Hazard quotients for child is 0.0014 for adult is 0.0052 which are far less than 1, indicates that there is no non-carcinogenic effects on health.

b) Bird

For evaluation of ecological risk on bird, two species of bird was selected one which diet with the typical consumption of dairy or meat at every meal that is crow and second which is feeding only plants that is pigeon. There is assumed that ingestion of all COPCs through diet.

Estimated the total hazard quotients for Omnivorous bird i.e. Crow is 0.017 and for Herbivorous i.e. Pigeon is 0.038 which are far less than 1 indicates that there is no non-carcinogenic effects on birds.

CONCLUDING REMARK:

Environment study:

The Air dispersion model was performed to estimate the ground level concentration of gaseous pollutants with respect to distance and direction within the 10 kms radius from the emission source using ISCST 3 model. The model is designed based on the steady state Gaussian plume model. The input data were the emission rate of SO₂ and NO_x of all units and meteorological data.

The maximum ground level concentrations (GLCs) of SO₂ were estimated to be 40 - 50 µg/m³ in post monsoon and 60 - 70 µg/m³ in pre-monsoon. The maximum ground level concentrations (GLC) of NO_x were estimated to be 30 - 40 µg/m³ in post monsoon and 60 - 70 µg/m³ in pre-monsoon.

The maximum GLCs of SO₂ and NO_x were found between 2 and 6 km, mainly towards the north directions during post-monsoon and pre-monsoon.

Ambient air, ground & surface water, and soil samples from the surrounding villages, there were not detected significant concentration of any chemical of potential concerns during HHRA study.

The ecological risk simulations indicate that there is no adverse impact on plant, surface water and birds due to activities of coal base power plant

Human Health study:

A relationship between the health status from previous years to current years was observed. Previous health status was primarily "**ABOUT THE SAME**" with current health status for the majority of respondents in each community.

The health related problems found during the study like general health related problems, skin problems, mal-nutrition, anemia, and refractive error, were mainly due to life style related factors and not due to any mentioned pollutants from the power plant. The health status of study population (both human and animal) under study was reasonable.

Suggestions:

The station emission and related risk assessment indicated a reasonably fare operation of the plant as there is negligible impact on human health risk. The impact also covers a carcinogenic as well as non carcinogenic health effect which has been evaluated through data generation and software solution. However, the technology application can be considered for better emission control.

FGC system:

It is known that coal burning results in generation of coal residues containing very fine particular matters (PM) which are separated by Electrostatic precipitators (ESPs). Due to high resistivity of fine particles it could not efficiently separated from the flue gas. Therefore, Flue gas conditioning is practiced to reduce the resistivity of PM and increase the efficiency of ESPs, with addition of chemical additives (conditioning agent) or sprinkling water to the flue gas. This process increases the collection efficiency of the electrostatic precipitators, and thereby results in reduction of the PM level. FGC involves injection of conditioning agent which alters the physic-electrical properties results in reduce the resistivity of PM. Conditioning agents are water/steam, sodium carbonate/sodium sulfate, sulphur trioxide, ammonia gas etc.

It is also suggested that by the use of natural resources and giving more attention on development of afforestation on a larger scale covering the study area can be thought of which will help making green belt expansion the thermal power plant.

R7 61

**OFFICE OF MEDICAL OFFICER
PRIMARY MEDICAL HEALTH CENTRE
PARAWADA, VISAKHAPATNAM**

Rc.No.MO/Parawada PHC/NTPC/2021

Date: 03.01.2022

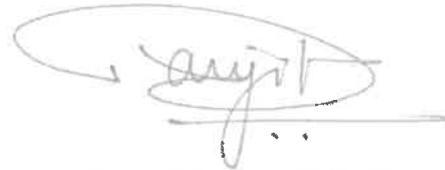
Sub : Report of treatments and data for the major diseases

The Medical Officer, Primary Health Centre, Parawada providing medical services to the villages of Parawada Mandal and conducting regular medical camps in the villages besides routine medical check-ups, treatment and distribution of medicines to the patients. Major diseases data observed in the purview of PHC, Parawada is provided hereunder:-

NATURE OF DISEASES	2018-19	2019-20	2020-21
INFANT MORTALITY RATE	03	2	01
MATERNAL MORTALITY RATE	0	0	0
UNDER 5 MORTALITY RATE	1	2	0
MALRIA	0	2	0
T.B.	08	04	2
ASTHMA	4	5	9
HIV	02	02	0
DERMATOLOGY	-	-	-
ANY OTHER (Pl.specify)	-	-	-

No. of Patients visited - 28,832 33,072 22,467

The above is for information please.



Dr. I.R.RANJIT
Regd. No.82542
Civil Assistant Surgeon
Primary Health Centre
Parawada, Visakhapatnam Dist.

OFFICE OF MEDICAL OFFICER
PRIMARY MEDICAL HEALTH CENTRE
VADACHEEPURUAPLLI, VISAKHAPATNAM

Rc.No.MO/VC/NTPC/2021

Dt. 03.01.2022

Sub : Report of treatments and data for the major diseases

The Medical Officer, Primary Health Centre, Vada Cheepurupalli conducting medical camps besides routine check-ups and providing treatment and medicines to the patients. The PHC is catering to the medical needs of the patients coming to our Primary Health Centre, Vadacheepurpalli from the nearby villages and the data on major findings of diseases are furnished below :-

NATURE OF DISEASES	2018-19	2019-20	2020-21
INFANT MORTALITY RATE	6.3	2	0
MATERNAL MORTALITY RATE	0	0	0
UNDER 5 MORTALITY RATE	1	2	0
MALRIA	2	2	0
T.B.	35	17	2
ASTHMA	5	5	0
HIV	0	0	0
DERMATOLOGY	-	-	-
ANY OTHER (Pl. specify) ^{NCD/HTN/DM}	56	62	46
No. of Patients Visited (A.P.P.)	24000	29000	25000

The above data pertains to PHC-Vadacheepuruaplli for information.


 Primary Health Centre
 Vadacheepurupalli
 Visakhapatnam D

OFFICE OF MEDICAL OFFICER
PRIMARY MEDICAL HEALTH CENTRE
DEVADA, VISAKHAPATNAM

Rc.No.Spl./MO/NTPC/2021

Datet : 04.01.2022

Sub : Report of treatments and data for the major diseases

The Medical Officer, Primary Health Centre, Devada providing medical services to the Devada & surrounding villages of Pedagantyada Mandal, Visakhapatnam and conducting regular medical camps in the villages besides routine medical check-ups, treatment and distribution of medicines to the patients. Data on major diseases observed in the purview of PHC, Devada has been furnished below for information :-

NATURE OF DISEASES	2018-19	2019-20	2020-21
No.of Patients visited to PHC	13207	7693	7419
INFANT MORTALITY RATE	4.6%	4.6%	15.5 per 1000
MATERNAL MORTALITY RATE	- 0 -	- 0 -	- 0 -
UNDER 5 MORTALITY RATE	- 0 -	- 0 -	0.0008 per 1000.
MALRIA	5	2	1
T.B.	9	2	1
ASTHMA	2	2	0
HIV	1	4	0
DERMATOLOGY	1035	357	267
ANY OTHER (Pl.specify)	-	-	-

The above is for information please.

Swarna
6/01/2022
MEDICAL OFFICER
PRIMARY HEALTH CENTER
DEVADA, VSP (DT)


भारत का राजपत्र
The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 2620]

नई दिल्ली, मंगलवार, दिसम्बर 8, 2015/अग्राहायणा 17, 1937

No. 2620]

NEW DELHI, TUESDAY, DECEMBER 8, 2015/AGRAHAYANA 17, 1937

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 7 दिसम्बर, 2015

का.आ. 3305(अ).—केंद्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए पर्यावरण (संरक्षण) नियम, 1986 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात्:—

1.(1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) संशोधन नियम, 2015 है।

(2) ये उनके राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।

2. पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची 1 में,—

(क) क्रम सं. 5 और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित क्रम सं. और प्रविष्टियां अंतःस्थापित की जाएंगी, अर्थात्:—

क्रम सं.	उद्योग	मापदंड	मानक
1	2	3	4.
5क	ताप विद्युत संयंत्र (जल उपभोग सीमा)	जल उपभोग	1. एक बार शीतलन (ओटीसी) के माध्यम से सभी संयंत्र शीतलन टावरों (सीटी) को प्रतिष्ठापित करेंगे और अधिसूचना की तारीख से दो वर्ष की अवधि के भीतर अधिकतम 3.5m ³ /MWh के त्रिनिर्दिष्ट जल उपभोग को हासिल करेंगे।

			<p>II. सभी विद्यमान सीटी-आधारित संयंत्र 3.5m³/MWh इस अधिसूचना के प्रकाशन की तारीख से दो वर्ष के भीतर अधिकतम 3.5m³/MWh तक के विनिर्दिष्ट जल उपभोग को कम करेंगे।</p> <p>III. जनवरी, 2017 के पश्चात् प्रतिष्ठापित किए जाने वाले नए संयंत्र अधिकतम 2.5 m³/MWh तक के विनिर्दिष्ट जल उपभोग को पूरा करेंगे और शून्य जल दुर्व्यय को हासिल करेंगे।</p>
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(ख) क्रम सं. 25 और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित क्रम सं. और प्रविष्टियां रखी जाएंगी, अर्थात् :-

क्रम सं.	उद्योग	मापदंड	मानक
1	2	3	4
		विवक्त पदार्थ	100 mg/Nm ³
		सल्फर डायोक्साइड (SO ₂)	600 mg/Nm ³ (500 मेगावाट से कम क्षमता की इकाईयों से लघु इकाईयां) 200 mg/Nm ³ (500 मेगावाट और उससे अधिक क्षमता की इकाईयां)
		नाइट्रोजन के आक्साइड (NO _x)	300 mg/Nm ³
		पारा (Hg)	0.03 mg/Nm ³ (500 मेगावाट और उससे अधिक क्षमता की इकाईयां)
		1 जनवरी, 2003 के पश्चात् 31 दिसंबर, 2016 तक प्रतिष्ठापित टीपीपी (इकाईयां)	
		विवक्त पदार्थ	50 mg/Nm ³
		सल्फर डायोक्साइड (SO ₂)	600 mg/Nm ³ (500 मेगावाट से कम क्षमता की इकाईयों से लघु इकाईयां) 200 mg/Nm ³ (500 मेगावाट और उससे अधिक क्षमता की इकाईयां)
		नाइट्रोजन के आक्साइड (NO _x)	300 mg/Nm ³
		पारा (Hg)	0.03 mg/Nm ³
		1 जनवरी, 2017 से प्रतिष्ठापित टीपीपी (इकाईयां)	
		विवक्त पदार्थ	30 mg/Nm ³
		सल्फर डायोक्साइड (SO ₂)	100 mg/Nm ³
		नाइट्रोजन के आक्साइड	100 mg/Nm ³

	(NOx)	
	पारा (Hg)	0.03 mg/Nm ³

- * टीपीपी (इकाईयां) इस अधिसूचना के प्रकाशन की तारीख से दो वर्ष के भीतर परिसीमाओं को पूरा करेंगी।
 ** इसके अंतर्गत सभी टीपीपी (इकाईयां) हैं, जिन्हें पर्यावरणीय निकासी प्रदान की गई है और संनिर्माण के अधीन है।

[फा. सं. क्यू-15017/40/2007-सीपीडब्ल्यू]

डा. राशिद हुसैन, सलाहकार

टिप्पण :- मूल नियम भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii) में सं. का.आ. 844(अ) 19 नवंबर, 1986 द्वारा प्रकाशित किए गए थे और उनका पश्चातवर्ती का.आ. 433(अ) तारीख 18 अप्रैल, 1987 ; सा.का.नि. 176(अ) तारीख 2 अप्रैल, 1996; सा.का.नि. 97 (अ), तारीख 18 फरवरी, 2009 ; सा.का.नि. 149(अ) तारीख 4 मार्च, 2009 ; सा.का.नि. 543(अ) तारीख 22 जुलाई, 2009 ; सा.का.नि. 739(अ) तारीख 9 सितम्बर, 2010 ; सा.का.नि. 809(अ) तारीख 4 अक्टूबर, 2010, सा.का.नि. 215(अ) तारीख 15 मार्च, 2011 ; सा.का.नि. 221(अ) तारीख 18 मार्च, 2011 ; सा.का.नि. 354(अ) तारीख 2 मई, 2011 ; सा.का.नि. 424(अ) तारीख 1 जून, 2011 ; सा.का.नि. 446(अ) तारीख 13 जून, 2011 ; सा.का.नि. 152(अ) तारीख 16 मार्च, 2012 ; सा.का.नि. 266(अ) तारीख 30 मार्च, 2012 ; सा.का.नि. 277(अ) तारीख 31 मार्च, 2012; सा.का.नि. 820(अ) तारीख 9 नवम्बर, 2012 ; सा.का.नि. 176(अ) तारीख 18 मार्च, 2013 ; सा.का.नि. 535(अ) तारीख 7 अगस्त, 2013 ; सा.का.नि. 771(अ) तारीख 11 दिसम्बर, 2013 ; सा.का.नि. 2(अ) तारीख 2 जनवरी, 2014 ; सा.का.नि. 229(अ) तारीख 28 मार्च, 2014 ; सा.का.नि. 232(अ) तारीख 31 मार्च, 2014 ; सा.का.नि. 325(अ) तारीख 7 मई, 2014, सा.का.नि. 612(अ) तारीख 25 अगस्त, 2014 और अन्तिम संशोधन सा.का.नि. 789(अ) तारीख 11 नवम्बर, 2014 किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 7th December, 2015

S.O. 3305(E).— In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:—

- (1) These rules may be called the Environment (Protection) Amendment Rules, 2015.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986, in Schedule - I, -
 - (a) after serial number 5 and entries relating thereto, the following serial number and entries shall be inserted, namely:—

Sr. No.	Industry	Parameter	Standards
1	2	3	4
5A.	Thermal Power Plant (Water consumption limit)	Water consumption	I. All plants with Once Through Cooling (OTC) shall install Cooling Tower (CT) and achieve specific water consumption upto maximum of 3.5m ³ /MWh within a period

			of two years from the date of publication of this notification.
			II. All existing CT-based plants reduce specific water consumption upto maximum of 3.5m ³ /MWh within a period of two years from the date of publication of this notification.
			III. New plants to be installed after 1 st January, 2017 shall have to meet specific water consumption upto maximum of 2.5 m ³ /MWh and achieve zero waste water discharged”;

(b) for serial number 25, and the entries related thereto, the following serial number and entries shall be substituted, namely:-

Sr. No.	Industry	Parameter	Standards
1	2	3	4
25.	Thermal Power Plant	TPPs (units) installed before 31 st December, 2003*	
		Particulate Matter	100 mg/Nm ³
		Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (Units Smaller than 500MW capacity units) 200 mg/Nm ³ (for units having capacity of 500MW and above)
		Oxides of Nitrogen (NOx)	600 mg/Nm ³
		Mercury (Hg)	0.03 mg/Nm ³ (for units having capacity of 500MW and above)
		TPPs (units) installed after 1 st January, 2003, upto 31 st December, 2016*	
		Particulate Matter	50 mg/Nm ³
		Sulphur Dioxide (SO ₂)	600 mg/Nm ³ (Units Smaller than 500MW capacity units) 200 mg/Nm ³ (for units having capacity of 500MW and above)
		Oxides of Nitrogen (NOx)	300 mg/Nm ³
		Mercury (Hg)	0.03 mg/Nm ³
		TPPs (units) to be installed from 1 st January, 2017**	
		Particulate Matter	30 mg/Nm ³
		Sulphur Dioxide (SO ₂)	100 mg/Nm ³
		Oxides of Nitrogen (NOx)	100 mg/Nm ³
Mercury (Hg)	0.03 mg/Nm ³		

*TPPs (units) shall meet the limits within two years from date of publication of this notification.

**Includes all the TPPs (units) which have been accorded environmental clearance and are under construction”.

[F. No. Q-15017/40/2007-CPW]

Dr. RASHID HASAN, Advisor

Note: - The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (j) *vide* number S.O. 844(E), dated the 19th November, 1986 and subsequently amended *vide* the following notifications:—

S.O. 433(E), dated 18th April 1987; G.S.R. 176(E) dated 2nd April, 1996; G.S.R. 97(E), dated the 18th February, 2009; G.S.R. 149(E), dated the 4th March, 2009; G.S.R. 543(E), dated 22nd July, 2009; G.S.R. 739(E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010; G.S.R. 215(E), dated the 15th March, 2011; G.S.R. 221(E), dated the 18th March, 2011; G.S.R. 354(E), dated the 2nd May, 2011; G.S.R. 424(E), dated the 1st June, 2011; G.S.R. 446(E), dated the 13th June, 2011; G.S.R. 152(E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277(E), dated the 31st March, 2012; and G.S.R. 820(E), dated the 9th November, 2012; G.S.R. 176(E), dated the 18th March, 2013; G.S.R. 535(E), dated the 7th August, 2013; G.S.R. 771(E), dated the 11th December, 2013; G.S.R. 2(E), dated the 2nd January, 2014; G.S.R. 229(E), dated the 28th March, 2014; G.S.R. 232(E), dated the 31st March, 2014; G.S.R. 325(E), dated the 07th May, 2014, G.S.R. 612(E), dated the 25th August, 2014 and lastly amended *vide* notification G.S.R. 789(E), dated 11th November, 2014.

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रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99


समय-व-गामे

भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 590]

नई दिल्ली, सोमवार, मार्च 7, 2016/फाल्गुन 17, 1937

No. 590]

NEW DELHI, MONDAY, MARCH 7, 2016/PHALGUNA 17, 1937

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

शुद्धिपत्र

नई दिल्ली, 7 मार्च, 2016

का.आ. 682(अ).—भारत के राजपत्र में प्रकाशित पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की अधिसूचना सा.का.नि. 3305(अ) तारीख 7 दिसंबर, 2015 द्वारा अधिसूचित पर्यावरण (संरक्षण) संशोधन नियम, 2015 के अंतर्गत आने वाली नीचे उल्लिखित प्रविष्टियों को निम्न पढ़ें:

1. पृष्ठ सं. 2, क्रम सं. 25, पंक्ति सं. 2 के नीचे सारणी में स्तम्भ 3 और 4 में "31 दिसंबर, 2003 से पहले संस्थापित टीपीपी (इकाईयां)"
2. पृष्ठ सं. 2, क्रम सं. 25, पंक्ति सं. 6 की सारणी के स्तम्भ 4 में "300 mg/Nm³" के स्थान पर "600 mg/Nm³" पढ़ें
3. पृष्ठ सं. 2, क्रम सं. 25, पंक्ति सं. 8 की सारणी के स्तम्भ 3 और 4 में "1 जनवरी, 2003" के स्थान पर "1 जनवरी, 2004" पढ़ें

[फा.सं. क्यू. 15017/40/2007-सीपीडब्ल्यू]

डा. राशिद हसन, सलाहकार

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**CORRIGENDUM**

New Delhi, the 7th March, 2016

S.O. 682(E).—In the notification of the Government of India in the Ministry of Environment, Forest and Climate Change vide number S.O. 3305(E), dated the 7th December, 2015, published in the Gazette of India, Part II, Section 3, Sub-section (ii), in page 4, in the Table, against serial number 25, for “1st January, 2003” substitute “1st January, 2004”.

[F.No. Q-15017/40/2007-CPW]

Dr. RASHID HASAN, Advisor



भारत का राजपत्र The Gazette of India

असाधारण

EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)

PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 435]

नई दिल्ली, शुक्रवार, जून 29, 2018/आषाढ़ 8, 1940

No. 435]

NEW DELHI, FRIDAY, JUNE 29, 2018/ASHADHA 8, 1940

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 28 जून, 2018

सा.का.नि. 593 (अ).— भारत के राजपत्र, असाधारण में भारत सरकार, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की दिनांक 16 अक्टूबर, 2017 की अधिसूचना संख्या सा.का.नि. 3337 (अ) के द्वारा एक प्रारूप अधिसूचना प्रकाशित की गई थी जिसमें उन सभी व्यक्तियों, जिनके उससे प्रभावित होने की संभावना थी, से उस तारीख से जिसकी उक्त अधिसूचना की राजपत्र की प्रतियां जन-साधारण को उपलब्ध कराई गई थीं, साठ दिन की अवधि के भीतर आपत्तियां और सुझाव मांगे गए थे।

और, राजपत्र की प्रतियां दिनांक 16 अक्टूबर, 2017 को जन-साधारण को उपलब्ध कराई गई थीं।

और, केंद्र सरकार द्वारा इस प्रारूप अधिसूचना के प्रत्युत्तर में सभी व्यक्तियों और पक्षों से प्राप्त सभी आपत्तियों और सुझावों पर विधिवत् रूप से विचार किया गया है।

अतः अब, पर्यावरण (संरक्षण) नियम, 1986 के नियम (5) के उप नियम (3) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 6 और 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केंद्र सरकार, एतद्वारा पर्यावरण (संरक्षण) नियम, 1986 में और संशोधन करने के लिए निम्नलिखित संशोधन करती है, अर्थात्:—

- (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) संशोधन नियम, 2018 है।
(2) ये राजपत्र में प्रकाशन की तारीख को प्रवृत्त होंगे।
- पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची 1 में,—

(क) स्तंभ 4 में क्रम संख्या 5क के सामने, मद 3 के स्थान पर निम्नलिखित मद रखी जाएगी, अर्थात्:—

“III. विनिर्दिष्ट जल उपभोग, तारीख 1 जनवरी, 2017 के पश्चात् संस्थापित किए गए नए संयंत्र के लिए 3.0 मी³/एमडब्ल्यूएच से अधिकतम नहीं होगा और ये संयंत्र शून्य अपशिष्ट जल बहाव को हासिल करेंगे।”

(ख) क्रम संख्या 5 क और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित क्रम संख्या और प्रविष्टियों को अंतःस्थापित किया जाएगा, अर्थात्:-

क्रम सं	उद्योग	पैरामीटर	मानक
1	2	3	4
"5ख	तापीय विद्युत संयंत्र (जल उपभोग सीमा समुद्री जल का प्रयोग)	जल उपभोग	उपरोक्त क्रम सं 5क में स्तंभ 4 में मद I से III समुद्री जल का प्रयोग करने वाले तापीय विद्युत संयंत्र पर लागू नहीं होगा";

(ग) क्रम सं 25 में, निम्नलिखित टिप्पण अंतःस्थापित किया जाएगा, अर्थात्:—

"टिप्पण : सल्फर डाइआक्साइड, नाइट्रोजन और धूल-कण के लिए सभी मानीटर किए गए मान को शुष्क आधार पर 6% आक्सीजन के लिए संशोधित किया जाएगा";

(घ) क्रम सं 33 और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित क्रम संख्या और प्रविष्टियों को अंतःस्थापित किया जाएगा:-

क्रम सं	उद्योग	पैरामीटर	मानक
1	2	3	4
"33क	आर्द्र-फ्लू गैस डीसल्फयुराईजेशन (एफजीडी) के साथ तापीय विद्युत संयंत्र	चिमनी की ऊंचाई/मीटर में सीमा	विद्युत उत्पादन क्षमता: 100 मेगावाट और अधिक एच= 6.902 (क्यू x 0.277) ^{0.555} अथवा 100 मीटर न्यूनतम 100 मेगावाट से कम एच= 6.902 (क्यू x 0.277) ^{0.555} अथवा 30 मीटर जो भी अधिक हो"; क्यू=सल्फर डाइआक्साइड की कि.ग्रा./उत्सर्जन दर" एच= मीटर में भैतिक स्टाक ऊंचाई।" "चिमनी से जुड़ी सभी यूनिटों का योग टिप्पणी : ये मानक कोयला/लिग्नाइट आधारित तापीय विद्युत संयंत्रों पर लागू होंगे।

[फा. सं. क्यू-15017/40/2007-सीपीडब्ल्यू]

डॉ. ए. सेंथिल वेल, वैज्ञानिक 'जी'

टिप्पण : मूल नियम के राजपत्र असाधारण, भाग II, खंड 3, उपखंड (i) का.आ. 844 (अ) तारीख 19 नवम्बर, 1986 द्वारा प्रकाशित किया गया था और पिछली बार अधिसूचना सा.का.नि. 568 (अ) दिनांक 18 जून, 2018 के द्वारा संशोधित किया गया।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 28th June, 2018

G.S.R. 593 (E).—Whereas, a draft notification, for Thermal Power Plants was published in the Gazette of India, Extraordinary, vide notification of the Government of India in the erstwhile Ministry of Environment, Forest and Climate Change number G.S.R. 3337(E), dated the 16th October, 2017, inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the dated on which copies of the Gazette containing the said notification were made available to the public;

And Whereas, copies of the Gazette were made available to the public on the 16th October, 2017;

And Whereas, all objections and suggestions received from all persons and stakeholders in response to the draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

1. (1) These rules may be called the Environment (Protection) Amendment Rules, 2018.
(2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986, in Schedule-I,-
(a) against serial number 5A, in column 4, for item III, the following item shall be substituted, namely:-
"III. Specific water consumption shall not exceed maximum of 3.0 m³/MWh for new plants installed after the 1st January, 2017 and these plants shall also achieve zero waste water discharge.";
(b) after serial number 5A and the entries relating thereto, the following serial number and entries shall be inserted, namely:-

Sl. No.	Industry	Parameter	Standards
1	2	3	4
"5B.	Thermal Power Plant (water consumption limit) using sea water	Water consumption	Items I to III in column 4 in serial number 5A above shall not be applicable to the Thermal Power Plants using sea water";

- (c) in serial number 25, the following Note shall be inserted, namely:—

"Note: All monitored values for SO₂, NO_x and Particulate Matter shall be corrected to 6% Oxygen, on dry basis";

- (d) after serial number 33 and the entries relating thereto, the following serial number and entries shall be inserted, namely:—

Sl. No.	Industry	Parameter	Standards
1	2	3	4

"33A.	Thermal Power Plants with wet Flue Gas Desulphurization (FGD)	Stack Height/Limit in Meters	Power generation capacity: 100 MW and above $H=6.902(QX0.277)^{0.555}$ or 100 m minimum Less than 100 MW $H=6.902(QX0.277)^{0.555}$ or 30 m whichever is more"; Q = Emission rate of SO ₂ in kg/hr* H = Physical stack height in meter *total of the all Unit's connected to stack Note: These standards shall apply to coal / lignite based Thermal Power Plants."
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[F. No. Q-15017/40/2007-CPW]
DR. A. SENTHIL VEL, Scientist 'G'

Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide number S.O. 844 (E), dated the 19th November, 1986 and last amended vide notification number G.S.R. 263(E), dated the 22nd March, 2018.

RAKESH
SUKUL

Digitally signed by RAKESH
SUKUL
Date: 2018.07.03 20:39:18
+05'30'

Stage-I (R.C)

No.J.13011/19/94-IA.II.

तार :

Telegram : PARYAVARAN,
NEW DELHI

दूरभाष :

Telephone : 4360478

टेलिक्स (द्विभाषीय) :

Telex : (bi-lingual) : W-66195 DOE IN

FAX : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन सी. जी. ओ. कॉम्प्लेक्स

PARYAVARAN BHAVAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODHI ROAD, NEW DELHI-110003

July 23, 1996.

OFFICE MEMORANDUM

Subject : 2 x 500 MW Simhadri Thermal Power Project by National Thermal Power Corporation, Andhra Pradesh.

Reference is invited to letter No.CE(Gen)/EE/EC/F.14/50/95 dated 4th December, 1995 from Andhra Pradesh State Electricity Board and letters No.CEV-Simhadri-96 dated 3rd June, 1996 and 17th July, 1996 from National Thermal Power Corporation Ltd. regarding the above mentioned project.

2. The proposal for the setting up of the 1000 MW Coal Based Power Project has been examined and clearance is hereby accorded from environmental angle subject to effective implementation of the following conditions :-

- (i) The Consent Order No.20/PCB/C.Estt./RO-VSP/AEE-VIII/95 dated 13th.-November,1995 of Andhra Pradesh Pollution Control Board for establishment of Simhadri Thermal Power Project should be got transferred in favour of NTPC Limited, the executing agency. All the conditions stipulated by the State Pollution Control Board should be strictly implemented along with the additional ones, if stipulated during transfer of Consent Order.
- (ii) A Bi-flue of height 275 m with continuous stack monitoring facility should be installed.
- (iii) Electro-static-precipitator having efficiency of not less than 99.8% should be installed and it should be ensured that particulate emission would not exceed the prescribed limit of 150 ug/Nm³.
- (iv) A closed circuit cooling device should be provided. The water requirement should be limited to 600 CUM/hour from the Yellow Canal and 9100 CUM/hour from the sea. The proposed pipeline of 6 km. for sea water intake should conform to the regulations of the Coastal Zone Notification of February, 1991.

- (v) Adequate space should be provided for installation of flue gas desulphurisation plant in future for control of sulphur-di-oxide.
- (vi) Acquisition of land should be restricted to 2381.00 acres including the area of 630 acres for ash disposal.
- (vii) Only beneficiated coal to the tune of 14,844 tonnes/day should be used. Fly ash generated to the tune of 33.5 million CUM should be collected in dry form in silos and fully utilised in a phased manner. Presently, plan has been drawn for utilisation of 20% ash. A detailed scheme for full utilisation should be submitted to the Ministry by 31 December, 1996. For avoiding contamination of ground water, ash pond should be suitably lined and dyked.
- (viii) Noise level should be limited to 85 dBA and regular maintenance of equipments be undertaken. For people working in the area of generator halls and other high noise areas, ear pluggs should be provided.
- (ix) A Rehabilitation Master Plan covering details of the provisions made for rehabilitation of 150 families, compensation package, training facilities etc. should be submitted within four months i.e. by November, 1996. The plan should specifically indicate the schedule and implementation.
- (x) For controlling fugitive dust, regular sprinkling of water in coal handling and other vulnerable areas of the plant should be ensured.
- (xi) Afforestation should be undertaken covering an area of 292 acres and should be implemented in a phased manner. After care, gap filling and monitoring should also be ensured. A norm of 1500-2000 trees per ha should be followed. The afforestation plan may be submitted by November, 1996 and the schedule given in it is adhered to strictly.
- (xii) Continuous monitoring of ground water should be undertaken by establishing good network of observation wells in consultation with the Central Ground Water Board. Results and data collected should be analysed to ascertain the status of water quality and findings should be submitted for evaluation.
- (xiii) All effluents generated in various plant activities should be collected in the Central Effluent Treatment Plant and treated to ensure adherence to specified standards of discharge. The concept of zero discharge should be adopted to a maximum possible extent.
- (xiv) Keeping in view that 2 x 520 MW Thermal Power Plant by M/s Hinduja National Power Corporation Ltd. (HNPCL) is proposed in the vicinity of Simhachki Project, common facilities for coal transportation, laying of rail line etc. should be worked out in mutual consultation to avoid duplication of the facilities and acquisition of additional area.

- (xv) A financial provision of Rs. 301.55 crores should be provided for implementation of environmental mitigative measures with adequate scope for its enhancement, if required, in future.
- (xvi) Regular monitoring for SPM, SO₂ and NO_x around the power plant may be carried out and records maintained. The data so collected should be properly analysed and submitted to the Ministry every six months.
- (xvii) Full cooperation should be extended to the Scientists/Officers from the Regional Office of the Ministry at Bangalore who would be monitoring the compliance of environmental status. Complete set of impact assessment report and the Management Plans should be forwarded to the Regional Office for their use during monitoring.
- (xviii) Monitoring Committee should be constituted for reviewing the compliance to various safeguard measures by involving recognised local NGOs, Pollution Control Boards, Institutions, Experts etc.

3. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.

4. In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the conditions imposed and to add additional environmental protection measures required, if any.

5. The above stipulations would be enforced among others under the 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, the Impact Assessment Notification of January, 1994 and its amendments.

NBhat

(Nalini Bhat)
Additional Director

Chairman and Managing Director,
National Thermal Power Corporation Ltd.,
NTPC Bhavan, SCOPE Complex,
Lodhi Road,
New Delhi-110003.

Copy for information to:-

1. The Secretary, Ministry of Power, Shram Shakti Bhavan, Rafi Marg, New Delhi.
2. The Chairman, Andhra Pradesh Pollution Control Board, 1st floor, HUDA Complex, Maitrivanam, Ammerpet, Hyderabad-35.

3. The Chairman, Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.
4. The Chief Conservator of Forests, Regional Office, Bangalore.
5. The Chairman, Central Pollution Control Board, East Arjun Nagar, Delhi.
6. Guard File.

(Najini Bhat)
Additional Director

तार

Telegram : PARYAVARAN,
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भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORES

पर्यावरण भवन, सी० जी० ओ० कॉम्प्लेक्स

PARYAVARAN BHAWAN, CGO COMPLEX

लोदी रोड, नई दिल्ली-110003

LODHI ROAD, NEW DELHI-110003

Dated : 6.2.1998.

Subject:- 2 x 500 MW Simhadri Thermal Power Project
by National Thermal Power Corporation Ltd.,
Andhra Pradesh.

Reference is invited to communication No. 33/3/
9531(F-97)/3/004/D dated the 16th December, 1997 and dated
16th January, 1998 from National Thermal Power Corporation
Ltd. regarding the permission to use Raw Coal for Simhadri
Super Thermal Power Project, Andhra Pradesh.

2. Keeping in view the provision of Notification
No. G.S.R. 560 (E) dated the 19th September, 1997, the
Ministry has no objection in using the Raw Coal for the
proposed Simhadri Super Thermal Power Project. Accordingly,
the condition No. vii stipulated in our clearance letter
of even number dated 23rd July, 1996 may be read as under:-

" Use of coal should not exceed 16,800 tonnes
per day for 100 % PLF operation. Fly ash
should be collected in dry form and should
be fully used in a phased manner. Acquisition
of land for ash disposal should be restricted
to 630 acres. Presently, Plan has been drawn
for utilisation of only 20% ash. A detailed
Scheme should be drawn for full utilisation
and submitted by June, 1998. For avoiding
contamination of ground water, ash pond should
be suitably lined and dyked".

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3. All other conditions stipulated in our earlier clearance letter will remain unchanged.

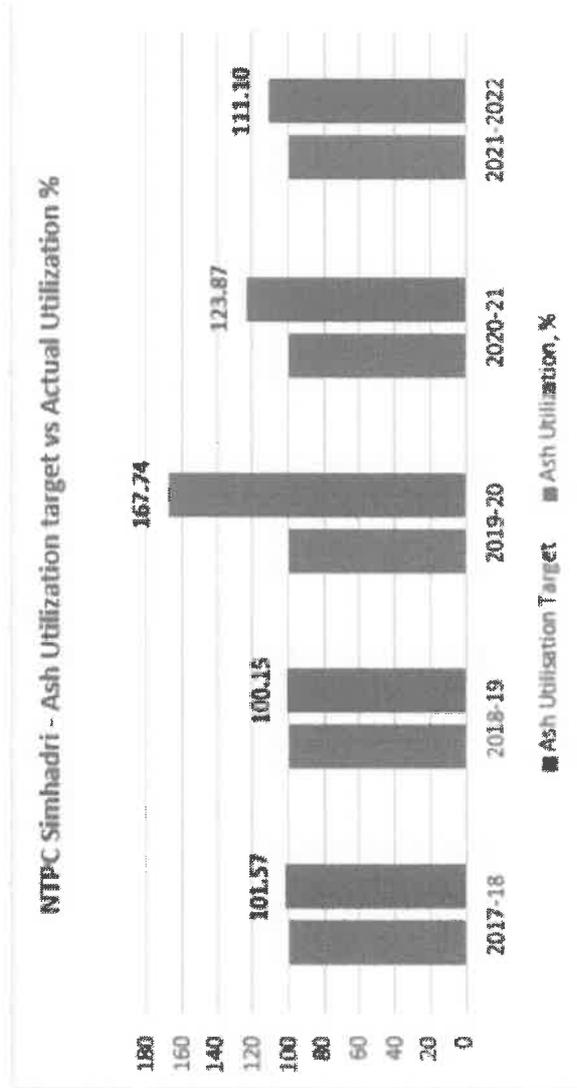

(DR. A.K. TYAGI)
Joint Director

The Chairman and Managing
Director,
National Thermal Power Corpn. Ltd.,
Plot No. A-8A, Sector-24,
P.B. No. 13,
Noida (UP) - 201 301.

Copy to:-

1. The Secretary, Ministry of Power Shram Shakti Bhawan,
Rafi Marg, New Delhi.
2. The Chairman, Andhra Pradesh Pollution Control Board,
IInd Floor, HUDA Complex, Maitrivanam, Ammerpet,
Hyderabad - 38.
3. The Chairman, Central Electricity Authority, Sewa
Bhawan, R.K. Puram, New Delhi.
4. The Chief Conservator of Forests, Regional Office,
Bangalore.
5. The Chairman, Central Pollution Control Board, East
Arjun Nagar, Delhi - 32.
6. Guard File.

(DR. A.K. TYAGI)
Joint Director



R10 81

नोएडा कार्यालय
NOIDA OFFICE



नेशनल थर्मल पावर कारपोरेशन लिमिटेड
(भारत सरकार का उपक्रम)

National Thermal Power Corporation Ltd.
(A Government of India Enterprise)

M. H. RAO

Dy. General Manager (Environmental Engineering)

संदर्भ संख्या / Ref. No.:

दिनांक / Date :

CC:ESE:3520:2002:GEN:04D

14th August 2002

Sh. R. Anand Kumar,
Advisor,
Ministry of Environment & Forests,
Paryavaran Bhawan,
CGO Complex, Lodi Road,
New Delhi-110003.

Sub: Action Plan for Utilization of Fly Ash for Simhadri TPP (2x500MW).

Dear Sir,

This has reference to letter no. EP/12.2/MIN/91/Vol.viii/811 dated 1st August 2002 regarding the Fly Ash Utilization Plan for Simhadri TPP received at Simhadri project from Regional MOEF office, Bangalore. As suggested, a copy of Ash Utilization Plan prepared as per the notification dated 14.09.99 for Simhadri TPP is enclosed for your kind information.

Thanking you,

Yours faithfully,

(M.H. RAO)

Encl: As Above.

इंजीनियरिंग आफिस कॉम्प्लेक्स ए- 8 ए, सेक्टर-24, नोएडा, जिला : गौतम बुद्ध नगर (उ० प्र०) पिन-201301

टेलिफोन न०-011-91-538872 , फैक्स : 011-8-536136,536155

पंजीकृत कार्यालय - एन टी पी सी भवन, स्कोप कॉम्प्लेक्स, 7, इन्स्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110003

ENGINEERING OFFICE COMPLEX A-8A, SECTOR-24, NOIDA , Distt. G.B. NAGAR (U.P.) PIN 201301

TEL.: 011-91-538872 ; FAX : 011-8-536136, 536155

REGD. OFFICE : NTPC BHAVAN, SCOPE COMPLEX, 7, INSTITUTIONAL AREA, LODI ROAD, NEW DELHI-110003

**ASH UTILIZATION PLAN
FOR
SIMHADRI THERMAL POWER PROJECT
(2X500 MW)**

**National Thermal Power Corporation Limited,
Simhadri Thermal Power Project ,
Parwada.**

March 2002.

ASH UTILIZATION PLAN FOR SIMHADRI THERMAL POWER PROJECT

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- 10. ANNEXURES**

PREFACE

The First 500MW unit of Simhadri Thermal Power Project of the National Thermal Power Corporation is synchronized in the month of February 2002 and the unit is expected to go for coal firing shortly there after ash will be produced as a byproduct.

The ash produced is to be utilized beneficially to avoid huge quantity of land occupied by the ash ponds. Moreover the Ministry of Environment and Forests and the Andhra Pradesh Pollution Control Board emphasized the effective utilization of ash in the Environment Clearance and Consent for establishment issued by them respectively.

MOEF, Government of India vide its Gazette notification dated 14/09/1999 stipulated 100% ash utilization targets for the thermal power stations.

NTPC, a premiere organization in the field of power generation In the country has its own ash utilization policy and guidelines for ash utilization even prior to the notifications of the statutory guidelines/requirements.

With the above background a comprehensive ash utilization plan is required for effective follow up. IN view of this and considering the various avenues for the ash utilization and Policy/guidelines of the company an ash utilization plan is made for the Simhadri Thermal Power Project.

PROJECT PROFILE OF SIMHADRI THERMAL POWR PROJECT

NAME OF PROJECT : SIMHADRI THERMAL POWER PROJECT

CAPACITY : 2 X 500 MW

LOCATION

DISTRICT : VISAKHAPATNAM

MANDAL : PARAWADA

ROAD CONNECTION

DISTANCE FROM NH5 : 8 KM

DISTANCE FROM ANAKAPALLI TOWN : 17 KM

DISTANCE FROM VISAKHAPATNAM : 40 KM

FUEL : COAL

FUEL SOURCE : TALCHER COAL FIELDS

ASH COLLECTION : DRY/WET

DRY ASH STORAGE : STORAGE SILOS

PROJECTED ASH PRODUCTION FOR THE NEXT NINE YEARS

The project is under commissioning stage and the first unit is expected to become operational from April 2002 and the second unit from July 2002.

The initial years of operation of the units the plant load factor is expected to be at lower side and will attain 80% PLF after two years of operation. Afterwards it is assumed that the plant will be operated continuously at 80% PLF for the purpose of arriving at the ash quantity for a year.

For calculating the ash quantity, it is assumed that the ash content of coal will be 40% which is on the maximum side and the quantity calculated may also be on higher side. If we get better quality of coal/ washed coal in future the projected ash quantity will be lesser than the calculated figure.

The next nine years' projected ash production is as per the table in annexure-1.

FACILITIES FOR ASH COLLECTION

The Simhadri Thermal Power Station will have both dry and wet ash collection systems.

Normally the bottom ash will be collected through wet ash system and the ash will be dumped in slurry form in the ash pond.

Fly ash can be collected in dry form up to 100% and transported through pneumatic system to the silos. The plant will have three silos of capacity 500 MT each.

The silos can load both open and closed vehicles. The open lorries can receive conditioned ash with water spray and the closed vehicles can receive the dry ash through a telescopic discharge pipe.

Considering the convenience of the ash receiving agencies the ash storage silos are located outside the plant boundary wall. The silos are located between the plant boundary and the approach road of the plant.

The above facilities provided at Simhadri will facilitate the ash-based industries to receive the ash without any hindrance.

ASH UTILISATION IN BRICK MAKING

The Simhadri Thermal Power Project set an example in utilizing fly ash bricks for construction. In the entire construction of the project and township only ash bricks are used and more than 5 crore bricks are already used in the project construction.

Due to this a number of ash brick manufacturing units have come up in the vicinity of the project and also public awareness is created about the usage of fly ash bricks.

Presently the ash brick manufacturers are getting the ash from far away places and they will switch over to NTPC for their fly ash requirement. The dry ash collection system is expected to ready fully in the month of September or October 2002 and thereafter the ash will be issued to the brick manufacturers from NTPC. Hence the quantity projected for the year 2002-2003 (approximately for five months) is doubled for 2003-2004 and further increase in quantity is envisaged afterwards due to more popularity of using fly ash bricks and the cost of ash bricks are expected to be cheaper than conventional bricks. Hence it is expected a steady growth in consumption of ash in the manufacture of brick as shown in the annexure 2.

ASH UTILISATION IN CEMENT MANUFACTURE

Utilization of ash in the manufacturing Portland Pozolana cement is already proven as a commercially viable one and number of cement units are already using the ash in the manufacturing of cement.

At present number of cement manufacturing/grinding units are already existing in the district. However they are presently using the blast furnace slag from the visakhapatnam steel plant as no ash is available in the region. The slag is being issued by the steel plant at a price of Rs.200/ton. As NTPC policy provides for free issue of the ash these units are likely to switch over to fly ash. Visakhapatnam is being projected as the fastest growing city and hence the consumption of cement also expected to go up in the coming years. Considering this and the familiarity expected to be gained among the users/ manufacturers about the fly ash based Portland pozolana cement the initial projection of 70000 MT/year is expected to increase progressively to 3.5MT/year within eight years of time as shown in annexure-2.

ASH UTILISATION IN ROAD CONSTRUCTION

The utilization of fly ash in the construction of road is already proved and the Central Road Research Institute, New Delhi, develops the technologies.

Even though the utilization of fly ash in the construction of road is a proven and demonstrated one, this has not become popular among the agencies responsible for the design and construction of the road. Hence in the initial years the projected quantity of utilization in this area is less and it is expected to go up in future once the economics and availability of ash is established.

The project is nearer to Anakapalli where from the National Highways road is proposed to be widened towards Tuni. More roads are expected to be laid in the area in connection with the proposed industrial estate at Parawada and proposed Gangawaram port, which are at a distance of about 5 Km from the plant.

As the length and number of roads in the vicinity of the project is expected to grow, the utilization of ash also expected to go up in this area steadily and the possible quantities are projected in annexure-2.

ASH UTILISATION IN ASH POND CONSTRUCTION

The ash pond is require to dump the bottom ash slurry and non utilized portion of fly ash in the slurry form. Normally the ash pond embankment will be made with earth and constructed to the full height with earth only.

Now the technologies are available to construct the embankment with the help of fly ash. Because of this, the Simhadri ash pond embankment construction is being made in stages by using ash as the construction medium. Presently only the starter ash dyke is constructed and it is expected to be raised after the fifth year of operation .

As this is going to be in house utilization, the utilization in this area is certain and the expected year wise utilization figures are given in the table enclosed as annexure-2.

ASH UTILISATION IN LAND DEVELOPMENT

The Simhadri Project site is located near the proposed parawada industrial estate and Gangavaram port. As the area proposed is not a plain area lot of filling is expected to take place especially in the construction of the proposed port.

In the various constructions lot of earth filling has taken place. Some of the contractors taken the nearby land on lease and digged a good amount of earth for their filling needs. Such landowners are to be identified and convinced to take up the reclamation with the help of ash. In the initial years this quantity will be substantial and later years the consumption in the port construction and industrial area development will be more. The expected quantity in land development is given in the table enclosed as annexure-2.

ANNEXURE-1

Calculation for Ash production & qty of ash to be utilized

calorific value 3300 kcal/kg

consumption per unit 0.7 kg

ash content of coal 40 %

Year	Projected MU	coal in MT	Ash in MT	Bottom ash MT	Fly ash in MT	Reqd AU as per projection %	Qty of fly ash to be utilized in MT
2002-03	2090	1463000	585200	117040	468160	8	37453
2003-04	5256	3679200	1471680	294336	1177344	14	164828
2004-05	6132	4292400	1716960	343392	1373568	30	412070
2005-06	7008	4905600	1962240	392448	1569792	38	596521
2006-07	7008	4905600	1962240	392448	1569792	47	737802
2007-08	7008	4905600	1962240	392448	1569792	57	894781
2008-09	7008	4905600	1962240	392448	1569792	67	1051761
2009-10	7008	4905600	1962240	392448	1569792	83	1302927
2010-11	7008	4905600	1962240	392448	1569792	100	1569792

Note

the quantity of ash may be less if better quality coal/washed coal is supplied in future

ANNXURE-2

Year	ash production in lakh MT	utilization % of rejected	ash . util projected in MT	land fill & dev	ash brick	cement	ash dyke	road	others	Total utilization in lakh MT
2002-03	4.68	8	37000	0	15000	22000	0	0	0	37000
2003-04	11.77	14	165000	40000	30000	60000	0	30000	5000	165000
2004-05	13.73	30	412000	270000	30000	70000	0	30000	10000	410000
2005-06	15.7	38	597000	300000	40000	100000	0	150000	10000	600000
2006-07	15.7	47	738000	250000	60000	200000	0	200000	25000	735000
2007-08	15.7	57	895000	200000	60000	250000	100000	250000	30000	890000
2008-09	15.7	67	1052000	250000	70000	300000	200000	200000	30000	1050000
2009-10	15.7	83	1303000	250000	100000	400000	300000	200000	50000	1300000
2010-11	15.7	100	1570000	200000	120000	450000	450000	300000	50000	1570000

ASH UTILIZATION PLAN FOR SIMHADRI THERMAL POWER STATION

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No.J.13011/19/94-IA.II(T)
Government of India/Bharat Sarkar
Ministry of Environment and Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110003.

May 20, 2002.

Subject : 2x500 MW Simhadri Thermal Power Station, Andhra Pradesh of M/s National Thermal Power Corporation Limited - Waiver of condition reg.

This has reference to letter No.33/3/9531(F-98)/3/004/D dated 19th September and 20th November, 1998 and No.ESE.3520:2001.GEN.04D dated 27th December, 2001 from National Thermal Power Corporation Limited requesting waiver of stipulation of lining of ash pond area for the above mentioned project.

2. The project report of December, 2001 on "Hydro-Geological Investigations for Lining of Ash Pond at Simhadri Thermal Power Plant, Andhra Pradesh" by National Institute of Hydrology, Roorkee, has been examined in the Ministry for reviewing the request regarding waiver for lining of ash pond area of Simhadri Thermal Power Project. The following findings of the report have been noted.

- The hydraulic conductivity of the soils is quite low and will not allow appreciable seepage of contaminated water.
- Even if the contaminated water seeps, it will flow towards Bay of Bengal due to natural gradient where enormous diluting capacity is available.
- The quality of ground water in the area is saline and not good for domestic use.
- Most of the villages are on the other side of the isolated hills and will not be affected due to ash disposal area.
- Even if some clay material from the ash disposal area has been used for construction of starter dyke, the investigators have expressed that there is still adequate layer of loam/silty loam in the ash disposal area to serve as impermeable layer.

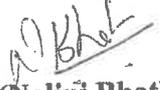
3. Keeping in view the findings of the study report and geo-hydrological conditions in the region, Ministry partially modifies condition No.2(viii) of the environmental clearance issued for the project vide its letter of even number dated 23rd July, 1996 regarding lining of ash pond. The ash disposal area identified for the project need not be lined. However, following mitigation measures should be ensured during operation of the plant.

- No earth/clay matter should be removed from the ash dyke henceforth for any activity related to the project.

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- Leachate collections should be undertaken through Lysimeter at 6-10 locations around the ash dyke and monitoring report should be regularly submitted along with its analysis for ascertaining its change in water quality. For facilitating comparison, continuous monitoring of ground water quality should be immediately initiated to serve as baseline data.
 - In the initial period, only fly ash should be discharged in ash dyke due to its grain size being similar to soil profile.
 - Green belt should be created around the ash dyke for controlling fugitive dust. A detailed proposal indicating area coverage and phased action plan should be submitted within three months.
4. NTPC should ensure strict implementation of all other environmental conditions stipulated in the clearance letter and its subsequent amendments.


(Nalini Bhat)
Director

Shri M.H. Rao,
DGM (Environmental Engineering),
National Thermal Power Corporation Ltd.,
Plot No.A-8A, Sector-24, P.B.No.13,
NOIDA (U.P.)-201 301.

Copy for information to :

1. Chief Conservator of Forests Chief Conservator of Forests, Regional Office, Southern Region, Ministry of Environment and Forests, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, IInd Block, Koramangala, Bangalore-560034.
2. Chairman, Andhra Pradesh Pollution Control Board, IInd Floor, Huda Complex, Maitrivanam, Ammerpet, Hyderabad-38.

(Nalini Bhat)
Director

33/3/9531(F-97)/3/004/D

10.12.98

Dr. (Mrs.) Nalini Bhat,
Additional Director,
Ministry of Environment & Forests,
Paryavaran Bhawan,
CGO Complex, Lodi Road,
NEW DELHI-110 003.

Sub: Environmental clearance for Simhadri TPP (2x500 MW)

Dear Madam,

This has reference to the environmental clearance for Simhadri TPP accorded vide letter no. J-13011/19/94-IA.II dated 23.07.96. As per stipulation at para no. 9, a Rehabilitation Master Plan is to be formulated by NTPC and submitted to MOEF.

In this connection, I would like to draw your kind attention to the meeting held on 12.11.98 chaired by District Collector, Visakhapatnam. As per the Minutes of the Meeting, the issue of rehabilitation and resettlement for Simhadri Thermal Power Project was discussed and it was opined that in view of the negotiated compensation, there is no need for a Rehabilitation Action Plan (RAP), per se in line with R&R policy of NTPC.

However, NTPC being a responsible Corporate Citizen, community development works in and around the villages of the project site will be undertaken for the benefit of the residents. Community Development Programme will be finalized in consultation with the District Administration.

Thanking you,

Yours faithfully,


15/12/98
(M.H.RAO)

DGM (ENV.ENGG.)

- 1.0 The list of participants are enclosed at Annexure.
- 2.0 The issue of rehabilitation and resettlement for Simhali Thermal Power Project was discussed and it was opined that in view of the negotiated compensation, for the land acquired, there is no need for formulating a rehabilitation action plan (RAP), per se, in line with the R&R policy of NTPC. However, as the demands for certain R&R benefits particularly employment in NTPC was made by MPs and land owners during the last State Level Negotiation Committee (SLNC) meeting at Hyderabad and the members of said negotiation Committee felt that there is a need for review and formulation of guidelines to address these issues. The Dist. Collector, therefore, stressed the need for formulating a clear and transparent guidelines and criteria for giving preference to land owners in the areas of supply of goods and services without effecting the price competitiveness or quality competitiveness expected by NTPC. These issues needs further discussion with affected people and their representatives before taking a final decision. The following areas were suggested where the land owners will be given preference based on a set criteria.
 - 2.1 Award of petty contracts: This could be either for maintenance/services or for supply of local material.
 - 2.2 Cooperatives/groups: This could be promoted for supplying the equipments like tractors, excavators, vehicles to the NTPC or its contractors on hire basis.
 - 2.3 Allotment of shops in the township
 - 2.4 Regular employment opportunity in NTPC: As regards providing employment opportunities, NTPC expressed that this project do not envisage significant job opportunities especially keeping in view the turnkey nature of mainplant package and also highly specialised manpower requirement. Most of the jobs will be filled from Internal transfers as per practice/policy of NTPC. In case any need for recruitment arises and suitable candidates are found against such needs of NTPC, preference will be given for land owners.

However it was suggested to NTPC, whenever any recruitment is taking place for Non-technical workmen like assistants, attendants, Mazdoors etc. preference to be given to local land custodes and in case, such land custodes are not found to be considered as capable in interview/written exam/selection tests as decided by NTPC, NTPC can recruit directly.

3.0 Community Development works:

The^{es} works will be identified in consultation with District Administration and VMC. These are to be implemented as one time capital expenditure. The responsibility of maintenance or the ownership will be that of State Government agencies or Village Panchayat. This needs to be planned in totality to be implemented over a period of 3 to 4 years to enable prepare a total budget for obtaining approval of NTPC Management.

4.0 Formation of VMC.

It has also been decided to constitute VMC immediately comprising the following.

- 1) District Collector or his nominee as Chairperson.
- 2) One Special Dy. Collector (L)
- 3) PD/~~xxxx~~ D.D.A
- 4) GM/ DIC
- 5) Presidents, Gram Panchayat of each village viz.,
Kavada, Nayambhuvan, Kalapaka, Chappurupalli (West) and Kavada and APICs.
- 6) Two representatives from NTPC
- 7) Land custodes nominated representatives (2 Nos.) from each of the above five villages and names of such nominated members shall be ascertained by SDO's concerned within three days.

GM (I/C) Simhadri, NTPC, in the meeting has confirmed the nominated members of NTPC as under.

- 1) Sri G. S. V. V. Prasad Rao, Manager (I&H), Simhadri.
- 11) Sri M. Hanukrishna Rao, Sr. Manager (Pers & Law), Simhadri.

GM (I/C, Simhadri requested to issue order confirming the constitution of VMC at the earliest.

5.0 Finalisation of the list of affected people and preparation of land custodes information sheet card: Keeping in view of past experience, the Dist. Collector, ...

need for the clear and unambiguous data on the land trustees and appreciated the format of 'Land trustees information Card'. He made certain suggestions to be incorporated in the card, which would be given to special Deputy Collectors, who will arrange to fillup the available information by 13.10.93. These forms will be computerized by NITC. This data will be verified with secondary data like Patten Card, Electoral roll and census and will also be compared with the computerised data available with Dist. Administration to ensure the validity of the information. This list will also published among the land trustees inviting objection if any, and will be endorsed by VDAC also.

6.0 The Dist. Collector will convene a meeting with the land trustees/their representatives to get their views for formulating these lists, VDAC, the guidelines and criteria for extending preferences to land trustees and community development plan.

7.0 Summarizing the above, the I&R issues will be addressed on two fronts.

7.1 Economic Rehabilitation. No plan is required as per NITC, I&R Policy, however the preferences are to be given to land trustees for which guidelines will be prepared. Certain budget provision is required for providing the technical assistance/facilitators/training etc.

7.2 Community Development Plan

This will be a one time expenditure and budget provision will be made for activities to be carried out over a period of 3 - 4 years.

//t.c.d.o//

W. J. Reddy
76/058

Sd/-S. Harsing Rao,
Collector,
Vizakhapatnam.

W. J. Reddy
SUPERINTENDENT (C)

LIST OF PARTICIPANTS

- 1) P. V. Jayanarayana Murthy, Joint Collector,
- 2) Kanowara Rao, Spl. Dy. Collector (Ld) NITC Unit. I
- 3) Verriah, Spl. Dy. Collector (Ld) NITC Unit. II
- 4) Yerrayya, Spl. Dy. Collector (Ld) NITC Unit. III
- 5) Suryanarayana, Spl. Dy. Collector (Ld) NITC Unit. IV
- 6) A. C. Ray Adl. General Manager I/C NITC, Vizakhapatnam.
- 7) Binesh Agarwal, Dy. General Manager (I&R) Corporate Office, NITC Unit. I
- 8) H. Venugopala Rao, Chief Finance Manager, Vizakhapatnam
- 9) H. G. Krishna Rao, Asst. Manager (Per - Law), Vizakhapatnam

SOME OF THE MAJOR CSR-SD ACTIVITIES DURING 2019-21

Sl.No.	Description of CSR Activities	Village/Mandal	Year/Period	Amount (Rs.in Lakhs)
1	Deposit of Financial support for providing 05 Nos. Ambulances	Visakhapatnam	March,2020	125.00
2	Girl Empowerment Mission – 4 week residential workshop for 120 girl students from MPP Schools (Class V Passed)	Paravada	May-June, 2019	55.00
3	Distribution of Notebooks to 14 Govt. High Schools & 59 MPP Schools	Paravada	Aug-19	14.00
4	Construction of Toilet Block in Andhra University	Visakhapatnam	Aug-19	14.00
5	RAIN WATER HARVESTING SOAK PITS AND RECHARGE PITS	Paravada	Jul-19	9.00
6	Vocational: Tailoring Training Program to Women	Paravada	Aug to Dec-19	4.13
7	Providing Yoga Trainer to ZP High Schools of Paravada	Paravada	2019	3.50
8	Merit Scholarships to wards of contract workers of Simhadri	Paravada	Aug-19	1.60
9	Specialist Health Camp	Mutyalammapalem	Aug-19	1.34
10	LMV training through Govt. ITI Gajuwaka	Paravada	2019-20	5.28
11	Provided compactor bins	Paravada Mandal	2019-20	9.80
12	Distribution of fruit bearing plants	Paravada Mandal	Oct-19	13.98
13	CONSERVATION OF OLIVE RIDLEY SEA TURTLES	09 Districts of Andhra Pradesh	2019-2020	100.00
14	Distribution of Aids & Assisive Devices to Physically Challenged	Paravada Mandal	Dec-19	6.72
15	COVID Financial Support to District Administration	Visakhapatnam	Mar-20	30.00
16	Sanitization work (fogging through cannon)	Paravada Mandal	March-Apr-2020	2.69
17	Distribution of Dry Ration Kits to Migrant Workers	Paravada Mandal	Mar-20	2.70
18	COVID Financial Support to KGH	Visakhapatnam	Apr-20	30.00
19	COVID Financial Support to GVMC	Visakhapatnam	Apr-20	22.50
20	COVID Financial Support to PHCs	Paravada Mandal	Apr-20	30.00
21	Contribution to KGH Oncology Ward CSR Block	Visakhapatnam	Oct-20	100.00
22	Mobilization of Mobile Healthcare Services	Paravada Mandal	2020-2022	86.00
23	Construction of 02 No.RO Plant	Paravada Mandal (Bottavanipalem & Venkatapuram)	Oct-20	20.00
24	Construction of Piped Water Scheme (OHT)	Pittavanipalem & surrounding villages	Oct-20	13.70
25	Installation of Rooftop Solar Power Systems in Schools & Public Buildings	Paravada	2019-2020	65.46
26	Installation of LED Street Lights	Mutyalammapalem	2019-20	16.50
27	Construction of Community Toilets	Paravada & Vadacheepurupalli	2019-20	32.00
28	Distribution of Sanitary Napkins	Paravada mandal	2019 onwards	9.50

29	Providing of Monthly Groceries to Association of Urban & Tribal Development, NGO, Visakhapatnam	Visakhapatnam	June,2021 to Sept.2021	4.96
30	Procurement and distribution of Covid Kits to the local community (nearby villages to plant) - 4000 Kits	Parawada, Devada, Pittavanipalem	May,2021 to July.2021	12.11
31	Construction of 20KL OHTs	Vennelapalem & Jalaripeta	July,2021	20.00
32	Financial support to Dist.Admn. for procurement of Oxygen concentrators for Govt. Hospitals, Visakhapatnam	Visakhapatnam	July,2021	30.00
33	Construction of Anganwadi Building	Pittavanipalem	August,2021	12.00
34	Distribution of Utkarsh Scholarships	Paravada	Oct-21	0.84
35	Construction of OHTs (Work in progress)	Kalapaka, Korangivanipalem & Ramudugari Village of Paravaa	Oct-21	44.50
36	Providing Data Entry Coaching to 60 Youth of Paravada	Paravada	Nov. & Dec.2021	4.80
37	Financial support for AP CM's CUP District level Sports Meet conducted at Andhra University, Vizag	Visakhapatnam	November,2021	3.00
38	Installation of Smart Classes at MJPAW Residential School & MPP School, Pandivanipalem	Thanam & Pandivanipalem	Nov-21	11.25
39	Handing over of Smart TV & Educational Toys to Anganwadi	Pandivanipalem, Paravada	Nov-21	1.00
40	Providing Aids & Assistive Devices to Physically Challenged	Paravada & Atchutapuram	Dec-21	9.79
41	Distribution of Merit Scholarship to wards of contract workers	Paravada	Dec-21	1.39
42	Specialist Health Camp	Pittavanipalem	Dec-21	1.60
43	Construction of CC Roads in 7 locations of Parawada Mandal	Parawada	December,21	28.00
44	Construction of MPP School, Pandivanipalem (work in progress)	Parawada	Nov.21 to Jan.2022	12.50
45	Deposit of Financial support to DFO, Vskp for Conservation of Olive Ridley Sea Turtles	Visakhapatnam (6 locations)	December,21	14.16
46	Construction of Additional Class Rooms in ZP High School, Vadacheepurupalli	Vadacheepurupalli	December,21	40.00
47	Construction of Dinning Complex in ZP High School, Mutyalammapalem	Mutyalammapalem	December,21	13.80
48	Repairs and construction of shed to Burial Ground	Pittavanipalem	July,2021	7.40
49	Construction of Gym-cum-Library	Vadacheepurupalli	July,2021	16.00
50	Repairs of RO Plants in 3 locations	Kalapaka, Pittavanipalem & Devada	Dec.2021	7.70
TOTAL				1121.20

Annexure - I

NTPC CSR Works at Pittavanipalem		Amount (Rs.in lakhs)
1	School Building for MPP School was constructed with an estimated value of Rs.3.00 Lakhs	3.00
2	Bus Shelter constructed with an estimated value of Rs.3.00 lakhs	3.00
2011-12		
1	Eye Camp was conducted where in 65 Eye Checkups were, 19 Cataract Surgeries were done and Spectacles were provided to the beneficiaries 22 Nos.	1.10
2	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.25
2012-13		
1	2 No. of Health Camps were conducted where in 178 Patients were benefitted in one Health Camp and in another 130 Patients were benefitted.	2.20
2	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.30
2013-14		
1	Eye Camp was conducted where in 104 Eye Checkups were done, 21 Cataract Surgeries were and 23 Spectacles were provided	1.50
2	Vocational Skills for Tailoring were imparted for the women and Sewing Machines were distributed	1.25
3	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.30
2014-15		
1	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.30
2	Health Camp was conducted where in 160 Patients were benefitted	1.50
3	Vocational Skills for LMV Driving was imparted to youth of Pittavanipalem Village	0.60
4	Play equipments & Utensils were provided at Pittavanipalem Anganwadi	0.50
2015-16		
1	RO Plant was constructed in Pittavanipalem	13.70
2	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.30
2016-17		
1	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.30
2	Construction of School Toilets in MPUP Pittavanipalem School	1.15
2017-18		
1	Note books were distributed to school Children of Upper Primary School, Pittavanipalem	0.30
2	Financial support of Rs. 5.88 Lakhs was extended to PHC Devada which is catering to Pittavanipalem Village for procurement of necessary Infrastructure	5.88
2018-19		
1	Compactor Bins, SS Dustbins & Push Carts provided	8.50
2	Health camp conducted on 1-Jul,2018 through Helpage India, where in General Check up done to 214 Patients and Medicines distributed to the beneficiaries.	0.60
4	LMV Driving Training with LLR & Permanent Driving Licence through Govt. ITI, Gajuwaka conducted to develop employability skills for Jobs/Self-employment in rural youth, wherein 25 students from Pittavanipalem in 1st & 2nd batches benefited.	0.79
5	CC Road construction undertaken at Temple (103.5 Mtrs.) with Rs.5.00 lakhs	5.00
6	Sp. Eye Check up conducted on 21.11.2018 at Kalapaka for the nearby villages, wherein total 05 Surgeries were done & 16 Spectacles were distributed to the beneficiaries from Pittavanipalem.	0.15
7	Construction of Shed & RO System at Chinnapalem	10.00

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2019-20		
1	Drinking Water supply started through Water Tankers in February,2019	0.00
2	Distribution of Note Books to the Govt. School MPP Children in June 2019	0.30
3	Construction of Anganwadi Building with an estimated value of Rs.12.00 Lakhs approved & work would be started by PRI Dept. soon.	12.00
4	Repairing of burial Ground at Pittavanipalem Village, work shall be awarded to PRI Dept. shortly	7.40
6	LMV Driving Training with LLR & Permanent Driving Licence through Govt. ITI, Gajuwaka	0.92
7	Distribution of Fruit bearing trees to each house holds - 1000 Nos.	0.00
8	Tree Plantation around the Village	0.00
9	RO Water ATM for Pittavanipalem Village	0.00
2020-21		
1	Laying of Water Pipelines in Pittavanipalem and Marada Dasaripeta under CSR-CD Budget activities of 2019-20 as Depository works (Rs.11.50 Lakhs)	11.50
2	Regular Mobile Health Unit Services, Covid Kits to workers, Sodium Hypochlorite Fogging, etc., in Pittavanipalem, Chinnapalem, Maradadasaripeta & some parts of Devada	3.50
3	Supply of PPE Kits, Masks & other Infrastructure to PHC-Devada to fight Covid-19	10.00
2021-22		
1	Repair of RO Plant (Rs.2.10 Lakhs)	2.10
2	Specialist Health Camp through HELPAGE INDIA in December,2021	1.60
3	Construction of Community Hall in Marada Dasaripeta through PRI Dept. (PO shall be released by C&M soon)	17.00
PROPOSED ACTIVITIES		
1	Construction of CC Road at Pittavanipalem R&B Road to Bridge (2 Parts)	10.00
2	Renovation of Community Hall at Chinnapalem, near Pittavanipalem	10.00
TOTAL		148.79

Please find below the CSR Expenditure at NTPC Simhadri since FY 2004-2005.

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CSR Expenditure at NTPC Simhadri	
Financial Year	Amt. in Crore Rs.
2004-05	1.20
2005-06	0.44
2006-07	0.21
2007-08	0.24
2008-09	0.26
2009-10	0.66
2010-11	1.36
2011-12	1.45
2012-13	1.23
2013-14	2.12
2014-15	15.32
2015-16	27.65
2016-17	12.76
2017-18	24.62
2018-19	13.50
2019-20	8.25
2020-21	0.50
2021-22	2.71
	(as on 08.02.2022)
Total	114.48

Mail - PRADEEP X | Welcome to Sanyo X | Home X | MS Outlook - Mail X | Mail - PRADEEP X | X

Send file... | half yearly | Delete | Archive | Junk | Move to | Categorize

Results

- Seshagiri Rao Sattiraju સર્ગીર રાજુ...
APPCB permits for joint col... 6/18/2020
Dear Sir, Kindly find the end... [Sent items]
- Punyambhuda Ramalingeswara Ra...
Half yearly compliance June 20... 7/8/2020
Dear Sir, Kindly find the end... [Sent items]
- Pradeep M
Returns- category 6/22/2020
With Regards, Dr PRADEEP... [Sent items]
- Seshagiri Rao Sattiraju સર્ગીર રાજુ...
Half yearly compliance June 2... 6/18/2020
Dear Sir, Kindly find the end... [Sent items]
- Seshagiri Rao Sattiraju સર્ગીર રાજુ...
Environmental audit - Action... 6/17/2020
Dear Sir, Kindly find the end... [Sent items]

Conversation History

- Dr. PRADEEP M
NTPC Limited
Simhadri Super Thermal Power Station
Mobile 9445422004

Deleted Messages

- NTPC - Quote for half yearly co... 6/17/2020
Dear Sir, Kindly provide quo... [Sent items]

Type here to search

NTPC Simhadri Half yearly compliance report -reg

PRADDEEP M / પ્રદીપ ભા
30 June 2021 17:28

To: rovipappcb@gmail.com
Cc: rovipappcb, appcbrovsp, ro.msoel@ccc.gov.in

Dear Sir,
Kindly find the enclosed half yearly compliance report pertaining to Simhadri Super thermal power plant.
For your record please.

With Regds,
Dr.PRADEEP.M
Manager(EMG)
NTPC Limited
Simhadri Super Thermal Power Station
Mobile 9445422004

Reply Reply all Forward

All < simhadri half yearly
 Delete Archive Junk Move to Categorize
 New message
 Teams call
 Lunch Tomorrow 1:00 AM

Did you mean simhadri half yearly?
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 Top results

65
 Emig Simhadri
 Half yearly compliance
 Half yearly compliance submission
 Half yearly June... +4
 Filter

10
 Dr. PRADEEP
 Half yearly compliance snapshots
 Get Outlook for iOS
 Half yearly June... +4

63
 Dr. Pradeep M
 NTPC Limited Simhadri - SUBM...
 Dear Sir, Please find the Half-y...
 Simhadri Half Y...

24
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 Archive
 Notes
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Conversation History
 Deleted Messages
 RSS Subscriptions

NTPC Limited Simhadri - SUBMISSION OF HALF YEALRY COMPLIANCE REPORTS June 2021

DM
 Dr. Pradeep M
 Wed 6/30/2021 5:27 PM
 To: rovspapcb: apcbrowsp...ro.moe@ccc@gov.in
 Bcc: Dr Velayudhanpillai Jayan 3 887694Rite... + 1 other
 Simhadri Half Yearly Com...
 2 MS

Dear Sir,

Please find the Half-yearly compliance reports for the first Half of 2021 pertaining to NTPC-Simhadri.

With Regards,

Dr. PRADEEP M.
 Manager(EM/G)
 NTPC Limited
 Simhadri Super Thermal Power Station
 Mobile : 9445422004

Reply Reply all Forward

Results

NTPC Simhadri Half yearly compliance report -reg

With Regards, Dr.PRADEEP ...

DOP_2018.pdf

Seshagiri Rao Sattiraju शेवागिरी राव ... 3/2/2020

Simhadri Environmental audit ...

Dear Sir, Kindly find the enclose...

EMG Env. audit ...

VJayan

EMG audit points

Dear Pradeep, Pl find the doc. 8...

EMG Env. audit ...

VJayan

Simhadri EMG audit report...reg 1/7/2020

Dear Pradip, Draft PPT of EMG a...

Simhadri 19-21 ...

PRADEEP M / प्रदीप एम

NTPC Simhadri Half yearly com... 1/7/2020

Dear Sir, Kindly find the encl...

Simhadri Half Yearly Com...

PRADEEP M / प्रदीप एम

> Simhadri Half Yearly Com... 12/20/2019

No preview is available.

Half Yearly Com...

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Drafts 65

Sent Items

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Junk Email 26

Archive

Notes

b

Conversation History

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RSS Subscriptions

15 Oct 2021 16:28

To: rovspappcb; appcbrovsp; ro.moefrcc@gov.in

Cc: rosz bng-mef@nic.in

Simhadri Half Yearly Com... 2 MB

Dear Sir,

Kindly find the enclosed half yearly compliance report pertaining to Simhadri Super thermal power plant.

For your record please.

With Regards,

Dr.PRADEEP.M.
 Manager(EMG)
 NTPC Limited
 Simhadri Super Thermal Power Station
 Mobile : 9445422004

Reply Reply all Forward

By Speed Post

Ref: SIMHADRI/EMG/F-41/

Date:15-06-2017

TO
The Member Secretary,
A.P. Pollution Control Board,
Paryavaran Bhawan,
A-3, Industrial Estate,
Sanath Nagar, HYDERABAD -18

Dear Sir,

Sub: Submission of "Half yearly Environmental Reports- Reg.

Ref: 1) Ref : Consent order No.APPCB/SP/SP/12334/HO/CFO/2014-369 dtd 13.11.14.

Please find herewith enclosed copies of the following compliance reports of NTPC-Simhadri Super Thermal Power Project, Visakhapatnam for the period from Nov 2016 to Mar, 2017.

1. Compliance CRZ conditions.
2. Compliance of CFO conditions.
3. Compliance of CFE Stage-I conditions.
4. Compliance of CFE Stage -II conditions.
5. Compliance of EC Stage -I conditions.
6. Compliance of EC Stage -II conditions

Thanking you,
Yours faithfully,


S.S. Rao
AGM (EMG & AU)
Ssrao01@ntpc.co.in



Copy to:

01) The Chairman, CPCB
Parivesh Bhavan,
CBD-Cum-Office Complex,
East Arjun Nagar
Delhi 110032

0141

2)The Environmental Engineer,
Regional Office,
D.No.39/30/20/4/1, 3rd Floor,
A.P. Pollution Control Board,
VUDA Colony, Phase-I, Madhava Dhara,
VISAKHAPATNAM-530 008 424

सिम्हाद्री सुपर थर्मल पावर प्रोजेक्ट, पोस्ट: एनटीपीसी-सिम्हाद्री - 531 020. जिला : विशाखपट्टणम (अं.प्र.)
Simhadri Super Thermal Power Project Post : NTPC Simhadri - 531 020. Dist : Visakhapatnam (A.P.)
Phone No. : 08924-243858, Fax No. : 08924-243092

पंजीकृत कार्यालय : एन टी पी सी भवन, स्कोप कॉम्प्लेक्स 7, इन्स्टिट्यूशनल एरिया, लोदी रोड, नई दिल्ली - 110003
दूरभाष : 11-24360100, फैक्स : 11-24361018, वेबसाईट: www.ntpc.co.in

Regd Office : NTPC Bhawan, Scope Complex 7, Institutional Area, Lodi Road, New Delhi - 110003,
Tel : 011-243601000, Fax : 011-24361018, Website : www.ntpc.co.in

111



एनटीपीसी लिमिटेड

NTPC Limited

मिम्बे

Ref: SIMHADRI/EMG/

Date: 30.06.2018

To
A.P. Pollution Control Board,
Regional Office,
Plot No.14, Flat No.103 & 104, Journalist Colony,
Marripalem VUDA Colony, Opp: Spencers,
Visakhapatnam - 530009

Dear Sir,

Sub: Submission of "Half yearly Environmental Report- Reg.

Ref: 1) Ref: Consent order No.APPCB/VSP/12334/HO/CFO/2017

Please find herewith enclosed copies of the following compliance report of NTPC Simhadri super thermal power project, Visakhapatnam for the period from Oct 17 to March 2018

1. Compliance of CFO &HWA conditions.
2. Online monitoring systems Yearly Report.

Thanking you,
Yours Faithfully

V. Jayan
AGM (EMG & AU)



0067



एनटीपीसी लिमिटेड

(एन टी पी सी लि.)

NTPC Limited

(A Government of India Enterprise)

सिम्हाद्री / Simhadri

SIMHADRI/EMG/019/

Date: 15.11.2019

TO
The Member Secretary,
Paryavaran Bhawan,
A-3, Industrial Estate,
Sanath Nagar, HYDERABAD -18

Dear Sir,

Sub: Submission of "Half yearly Environmental Reports- Reg.

Please find herewith enclosed copies of the following compliance reports of NTPCSimhadri Super Thermal Power Project, Visakhapatnam as on Sept, 2019.

1. Compliance CRZ conditions.
2. Compliance of CFO conditions.
3. Compliance of CFE Stage-I conditions.
4. Compliance of CFE Stage -II conditions.
5. Compliance of EC Stage -I conditions.
6. Compliance of EC Stage -II conditions.

Thanking you,
Yours faithfully,

S.S Rao
AGM (EMG & AU)

Copy to:

01) The Chairman, CPCB
Parivesh Bhavan,
CBD-Cum-Office Complex,
East Arjun Nagar
Delhi 110032

2)The Environmental Engineer,
Regional Office,
D No 39/30/20/4/1, 3rd Floor,
A.P. Pollution Control Board,
VUDA Colony, Phase-I, MadhavaDhara,
VISAKHAPATNAM-530 008 424

सिम्हाद्री सुपर थर्मल पावर प्रोजेक्ट, पोस्ट: एनटीपीसी-सिम्हाद्री - 531 020, जिला : विशाखपट्टणम (अ.प्र.)

Simhadri Super Thermal Power Project Post: NTPC Simhadri - 531 020, Dist : Visakhapatnam (A.P.)
Phone No: 08924-243858, Fax No: 08924-243092

पंजीकृत कार्यालय : एन टी पी सी भवन, स्कोप कॉम्प्लेक्स 7, इन्स्टिट्यूशनल एरिया, लोदी रोड, नई दिल्ली - 110003
दूरभाष : 11-24360100, फैक्स : 11-24361018, वेबसाइट: www.ntpc.co.in

Head Office : NTPC Bhawan, Scope Complex 7, Institutional Area, Lodi Road, New Delhi - 110003.



A Maharatna Company



SIMHADRI/EMG/012/

Date: 26.06.2020

TO

The Member Secretary,
A.P. Pollution Control Board,
Door No 33-26-14 D/2, Near Sunrise Hospital,
Pushpa Hotel Centre, Chalmalavari Street, Kasturibaipet
Vijayawada – 520 010

Dear Sir,

Sub: Submission of Half Yearly Compliance Reports

Ref: Consent order No. APPCB/VSP/VSP/12334/HO/CFO/2017 dated 31.07.2017 valid up to 31.08.2022.

Please find herewith enclosed "Half Yearly Compliance" of NTPC-Simhadri Super Thermal Power Station, Visakhapatnam for the month of **June 2020**:

- 01) Compliance CRZ conditions
- 02) Compliance of CFO conditions
- 03) Compliance of CFE St-I conditions
- 04) Compliance of CFE St-II conditions
- 05) Compliance of EC St-I conditions
- 06) Compliance of EC St-II conditions

Thanking you,

Yours faithfully,

(S S Rao)
AGM (EMG & AU)

Copy to:

1) The Chairman ,CPCB
Parivesh Bhavan
CBD-CUM Office complex
East Arjun Nagar
New Delhi – 110032

2) The Environmental Engineer,
Regional Office,
D.No.39/30/20/4/1, 3rd Floor,
A.P. Pollution Control Board,
VUDA Colony, Phase-I, MadhavaDhara,
VISAKHAPATNAM-530 008

सिम्हाद्री सुपर थर्मल विद्युत परियोजना

पॉस्ट : एन.टी.पी.सी. - सिम्हाद्री - 531020, जिला : विशाखपट्टणम, आंध्रप्रदेश

SIMHADRI SUPER THERMAL POWER PROJECT

P.O. NTPC-SIMHADRI, PARAVADA MANDALAM, DISTT. VISAKHAPATNAM (AP) PIN: 531 010

Telephone: 08924 - 240029/30, FAX: 08924 - 241001

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A Maharatna Company

एनटीपीसी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Government of India Enterprise)

सिम्हाद्रि
SIMHADRI

SIMHADRI/EMG/012/

Date: 15.11.2020

TO
The Member Secretary,
A.P. Pollution Control Board,
Door No 33-26-14 D/2, Near Sunrise Hospital,
Pushpa Hotel Centre, Chalmalavari Street, Kasturibaipet
Vijayawada – 520 010

Dear Sir,

Sub: Submission of Half Yearly Compliance Reports

Ref: Consent order No. APPCB/VSP/VSP/12334/HO/CFO/2017 dated 31.07.2017 valid up to 31.08.2022.

Please find herewith enclosed "Half Yearly Compliance" of NTPC-Simhadri Super Thermal Power Station, Visakhapatnam for the month of **September 2020**:

- 01) Compliance CRZ conditions
- 02) Compliance of CFO conditions
- 03) Compliance of CFE St-I conditions
- 04) Compliance of CFE St-II conditions
- 05) Compliance of EC St-I conditions
- 06) Compliance of EC St-II conditions

Thanking you,

Yours faithfully,

(S S Rao)
AGM (EMG & AU)

Copy to:

1) The Chairman ,CPCB
Parivesh Bhavan
CBD-CUM Office complex
East Arjun Nagar
New Delhi – 110032

2) The Environmental Engineer,
Regional Office,
D.No.39/30/20/4/1, 3rd Floor,
A.P. Pollution Control Board,
VUDA Colony, Phase-I, MadhavaDhara,
VISAKHAPATNAM-530 008

सिम्हाद्रि सूपर थर्मल विद्युत परियोजना
पॉस्ट : एन.टी.पी.सी.- सिम्हाद्रि -531020, जीला : विशाखपट्टणम, आंध्रप्रदेश
SIMHADRI SUPER THERMAL POWER PROJECT
P.O. NTPC-SIMHADRI, PARAVADA MANDALAM, DISTT. VISAKHAPATNAM (AP) PIN: 531 020
Telephone: 08924-241029(O), FAX: 08924-243001



A Maharatna Company

एनटीपीसी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Government of India Enterprise)

सिम्हाद्री
SIMHADRI

SIMHADRI/EMG/012/

Date: 30.06.2021

TO
The Member Secretary,
A.P. Pollution Control Board,
Door No 33-26-14 D/2, Near Sunrise Hospital,
Pushpa Hotel Centre, Chalmalavari Street, Kasturibaipet
Vijayawada – 520 010

Dear Sir,

Sub: Submission of Half Yearly Compliance Reports

Ref: Consent order No. APPCB/VSP/VSP/12334/HO/CFO/2017 dated 31.07.2017 valid up to 31.08.2022.
Amendment order APPCB/VSP/VSP/12334/CFO/HO/2021 dated 09.03.2021

Please find herewith enclosed "Half Yearly Compliance" of NTPC-Simahadri Super Thermal Power Station, Visakhapatnam for the first half of 2021:

- 01) Compliance CRZ conditions
- 02) Compliance of CFO conditions
- 03) Compliance of CFE St-I conditions
- 04) Compliance of CFE St-II conditions
- 05) Compliance of EC St-I conditions
- 06) Compliance of EC St-II conditions

Thanking you,

Yours faithfully,

(S S Rao)
AGM (EMG & AU)

Copy to:

1) The Chairman, CPCB
Parivesh Bhavan
CBD-CUM Office complex
East Arjun Nagar
New Delhi – 110032

2) The Environmental Engineer,
Regional Office,
D.No.39/30/20/4/1, 3rd Floor,
A.P. Pollution Control Board,
VUDA Colony, Phase-
MadhavaDhara,
Visakhapatnam-530 008

सिम्हाद्री सुपर थर्मल विद्युत परियोजना
पॉस्ट : एन.टी.पी.सी. - सिम्हाद्री - 531020, जीला : विशाखपट्टणम, आंध्रप्रदेश
SIMHADRI SUPER THERMAL POWER PROJECT
P.O. NTPC-SIMHADRI, PARAVADA MANDALAM, DISTT. VISAKHAPATNAM (AP) PIN: 531 020
Telephone: 08924 - 343029(3), FAX: 08924 - 24 1061

116



A Maharatna Company

एनटीपीसी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Government of India Enterprise)

सिम्हाद्री
SIMHADRI

SIMHADRI/EMG/012/

Date: 15.10.2021

TO

The Member Secretary,
A.P. Pollution Control Board,
Door No 33-26-14 D/2, Near Sunrise Hospital,
Pushpa Hotel Centre, Chalmalavari Street, Kasturibaipet
Vijayawada – 520 010

Dear Sir,

Sub: Submission of Half Yearly Compliance Reports

Ref: Consent order No. APPCB/VSP/VSP/12334/HO/CFO/2017 dated 31.07.2017 valid up to 31.08.2022.

Amendment order APPCB/VSP/VSP/12334/CFO/HO/2021 dated 09.03.2021

Please find herewith enclosed "Half Yearly Compliance" of NTPC-Simhadri Super Thermal Power Station, Visakhapatnam for the second half of 2021:

- 01) Compliance CRZ conditions
- 02) Compliance of CFO conditions
- 03) Compliance of CFE St-I conditions
- 04) Compliance of CFE St-II conditions
- 05) Compliance of EC St-I conditions
- 06) Compliance of EC St-II conditions

Thanking you,

Yours faithfully,

(S S Rao)
AGM (EMG & AU)

Copy to:

1) The Chairman, CPCB
Parivesh Bhavan
CBD-CUM Office complex
East Arjun Nagar
New Delhi – 110032

2) The Environmental Engineer,
Regional Office,
D.No.39/30/20/4/1, 3rd Floor,
A.P. Pollution Control Board,
VUDA Colony, Phase-
MadhavaDhara,
Visakhapatnam-530 008

सिम्हाद्री सुपर थर्मल विद्युत परियोजना

पॉस्ट : एन.टी.पी.सी. - सिम्हाद्री - 531020, जीला : विशाखपट्टणम, आंध्रप्रदेश

SIMHADRI SUPER THERMAL POWER PROJECT

P.O. NTPC-SIMHADRI, PARAVADA MANDALAM, DISTT. VISAKHAPATNAM (AP) PIN: 531 020

Telephone: 08924 - 34029(U), FAX: 08924 - 21001

COST OF POLLUTION CONTROL MEASURES**Environment installation costs for Stage –I & II****(Rs. in Crores)**

Sr.no.	Description	Stage-I	Stage-II
01.	ESP	60.61	137.28
02.	CHIMNEY	22.50	47.65
03.	COOLING TOWER	45.00	187.33
04.	ASH DYKE & ASH HANDLING SYSTEM	141.20	190.12
05.	ASH WATER RECIRCULATION	5.65	22.32
06.	EFFLUENT TREATMENT SYSTEM	7.53	8.93
07.	DUST EXTRACTION & SUPPRESSION SYSTEM	5.64	2.67
08.	SEWAGE COLLECTION & TREATMENT	1.97	0.67
09.	ENVIRONMENT LABORATORY EQPT.	0.24	0.50
10.	DM PLANT WASTE TREATMENT	1.61	2.00
11.	CONTROL OF FIRE EXPLOSION HAZARDS	9.76	28.92
12	ON-LINE AIR/WATER QUALITY MONITORING SYSTEM (CEMS,EQMS,AAQMS)	2.09	7.54
	SUB TOTAL	303.80	635.93
13.	FLUE GAS DESULPHURISATION SYSTEM (In process)	435.50	435.50
14.	COMBUSTION MODIFICATION (De NOx) (In process)	-	16.6
	GRAND TOTAL	739.30	1088.03
As per EC conditions		St-I	St-II
		301.55	270.42

✓ R17
118

**NATIONAL THERMAL POWER CORPORATION LIMITED
SIMHADRI THERMAL POWER PROJECT
PARAVADA P.O VISAKHAPATNAM 531 021**

TECHNICAL SERVICES DEPARTMENT

Ref: SMPP/TS/ENV/CIR/001

DT:03/11/99

CIRCULAR

As per the condition of the Environmental clearance for the Simhadri thermal Power Project given by the Government of India, Ministry of Environment & Forest. an environment monitoring committee is to be constituted. A committee consisting of following members is constituted for this purpose.

1. Sri.Balasubramaniam
Environment Engineer, APPCB
Gandhi place, Siripuram Jn.
Visakhatnam 530 003
2. DR.V.Venkateswara Rao
Head of the Department
Geo -Engineering department
Andhra University
- 3.DR.S.Ramakrishna Rao
Secretary, People's Environment protection Society
Visakhapatnam

Sri I.Murugavel, Manager (safety & environment) will be functioning as a coordinator of the committee.

This has the approval of competent authority.

P.R.Iyer

P.R.IYER
Deputy General Manager(TS)

Distribution;

- 1.All committee members
- 2.APPCB,Visakhapatnam
3. ED(R&R and Envnt.)/ED(SR)/ED(Eng.)/AGM(I/C) for kind information
- 4.Sri.M.H.Rao, DGM(Env.Eng),corporate centre
- 5.All HODs , Simhadri

119

33/3/9531(F-99)/3/004/D

17.11.99

Dr. (Mrs.) Nalini Bhat,
Additional Director,
Ministry of Environment & Forests,
Paryavaran Bhawan,
CGO Complex, Lodi Road,
New Delhi – 110 003.

Sub: **Environmental Clearance regarding
Simhadri STPP (2x500 MW).**

Dear Madam,

In compliance of the stipulation number 2 (xviii) of the environmental clearance accorded vide letter dtd. 23.7.96, it is to inform that a Monitoring Committee has been constituted at the Simhadri site comprising of members from local NGO, Pollution Control Board and Institution. Representative of NTPC from Simhadri site will be the Co-ordinator.

A copy of the communication on the subject is enclosed for kind information.

Thanking you,

Yours sincerely,

M. H. Rao
17/11/99
(M. H. RAO)
DGM (ENV.ENGG.)

Dr. Bhat
18/11

Encl: As above.

CC: Shri A.C.Ray, AGM (I/C), Simhadri STPP.

57c ↑
AGM/I/C-ES

Saha
18/11/99

18/11/99

18/11/99

RECORD NOTES FOR THE ENVIRONMENT MONITORING COMMITTEE MEETING HELD ON 02/11/99 AT THE SIMHADRI THERMAL POWER PROJECT.

MEMBERS PRESENT

- 1. DR. V. VENKATESWARA RAO,
- 2. DR. S. RAMAKRISHNA RAO

Sri. Balasubramaniam of APPCB could not attend the meeting due to exigency.

Following officers of NTPC were present during the meeting.

Sri. A. C. Ray Additional General Manager (in chair)

Sri. P. R. Iyer, DGM(TS)

Sri. T. K. Dastidhar, DGM(ME)

Sri. G. Amudhan, DGM(ME)

Sri. T. Roy, DGM(EE)

Sri. Y. J. Rao, Sr. Manager(CC)

Sri. GSVV Prasada Rao, Senior Manager(R&R)

The members of the committee were introduced to all the Head of departments of NTPC, Simhadri.

The members appreciated the efforts of NTPC management for the afforestation measures taken and the interest taken for the Environmental measures in the initial stages of the project.

The members suggested that the NTPC shall take-up the monitoring of the Ambient Air quality around the project to record the base line data. AGM(I/C), NTPC requested the committee to identify suitable locations for the monitoring the same.

The committee also suggested NTPC to utilise the facilities available with the Environment Science departments of Andhra University and GITAM.

The committee also suggested to collect the rainwater and take up recharging of the ground water as an environment improvement measure.

The committee also felt that the committee meetings can be held at an interval of three months.

I. Murugavel
 I. MURUGAVEL

S. Ramakrishna Rao
 DR S RAMAKRISHNA RAO

V. Venkateswara Rao
 DR V VENKATESWARA RAO

Record notes on the Environment Committee meeting held on 24/10/2000 at Simhadri.

Members present:

1. **Sri.T.Anjaneya Prasad,
Environment Engineer,
Regional Office, APPCB
Visakhapatnam**
2. **DR.V.Venkateswaralu,
Department of Geo Engineering
Andhra University,
Visakhapatnam**
3. **DR. S.Ramakrishna Rao, Secretary,
Peoples Environment Protection Society
Visakhapatnam**

The committee members visited the chimney and ash pond area of the project.

The members elaborated the importance of green belt around the ash pond and advised NTPC to take up the greenbelt development immediately around the ash pond to control the fugitive emission. NTPC will explore the possibility considering the movement of construction machinery in ash pond construction.

The committee advised to continue the air quality study in and around the plant area. NTPC agreed to continue the study.

The committee stressed upon the importance of the continuous monitoring of water quality around the ash pond area from the beginning of construction stage. NTPC informed that already one sample of water from the wells is being analyzed by AU.

The committee members suggested having one more member from NTPC in the committee at a senior level.

The members suggested to obtain the consent order conditions of Ramagundam and make necessary arrangements in the beginning itself.

The members suggested to have longer duration meetings so that enough time will be available for discussions and visiting the various construction areas.



I. MURUGAVEL
MANAGER(EMG),NTPC

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33/3/4300(F-95-96)/3/001/A

09.12.96.

Dr. Nalini Bhat,
Additional Director,
Ministry of Environment & Forests,
Paryavaran Bhawan,
CGO Complex, Lodi Road,
NEW DELHI-110 003.

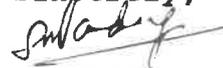
Sub: Environmental Clearance for Simhadari
Thermal Power Project (2x500 MW)

Dear Madam,

This has reference to your letter dtd. July 23, 1996 wherein environmental clearance for Simhadari TPP has been accorded. As stipulated at para no. (xi), an afforestation plan for the project has been prepared and is enclosed for your reference.

Thanking you,

Yours sincerely,



(S.N. PANDEY)

ADDL. GENERAL MANAGER
ENGINEERING SERVICES

Encl: As above.

CC:
→ To: MR. K.B. RAJENDRA PRASAD,
Manager (Const)
SRHA - Hyderabad

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A:\SIMDH\PLANTATION

AFFORESTATION PLAN FOR SIMHADARI STPP

INTRODUCTION

The plantation and green belt development in an industrial area not only serve as foreground and background landscape features resulting in harmonising and amalgamating the physical structures of thermal power station with surrounding environment but also act as pollutant sink. Plantation also contributes towards environmental improvement in the following areas:

- a) Prevent spreading of particulate and other atmospheric pollutants in the nearby areas,
- b) Provide vegetative cover,
- c) Increase aesthetics of the campus,
- d) Provide resting, feeding and breeding site to fauna.

NTPC as a policy implements afforestation programmes at their projects right from the construction stage. NTPC has today over 10 million tree wealth and hosts a network of horticulture experts at the project sites.

A green belt and afforestation plan has been formulated for the Simhadri STPP which includes (a) planting procedure,

- (b) soil preparation, (c) after care (d) space provision
- (e) phased planting programme (f) species for plantation
- (g) nursery development and (h) financial provision for the afforestation.

PROCEDURE FOR PLANTATION

The plantation procedure includes (i) Digging of pits with proper spacing (ii) Preparation of soil and filling pits with prepared soil (iii) Transplantation of seedling (iv) Watering and aftercare.

i) Digging of Pits:

The pits will be cubicle in size with dimension of 1m x 1m x 1m. The spacing between two pits will depend upon the area of plantation and species selected for plantation. The general spacing pattern to be followed is given below:

- a) Trees on outer boundary : 4 m
- b) Trees along internal wide road : 2 m
- c) Trees along internal small roads : 3 m
- d) Plantation on vacant and filled land : 2 m

The pits will be kept ready with soil mixture in summer. Planting of seedling will be undertaken with onset of rainy season.

ii) **Preparation of Soil:**

A mixture of soil with other ingredients will be prepared for filling pits in following proportion:

- a) Soil 1 part
- b) Commercial Fertiliser 1 part
- c) Cow dung/sheet dung 1 part
- d) B.H.C. powder if the soil has ants. 1 part

The pits will be filled with mixture of soil with a hole of 10 cm x 20 cm made in the center. The soil will be irrigated prior to placing of seedling.

iii) **Transplantation of Seedling:**

Transplantation of seedling will be undertaken with onset of monsoon. The polythene bag containing seedling will be torn and seedling along with attached ball of earth will be placed in the hole. Little extra soil will be placed at the base of the stem. If seedling is weak, support will be given by tying the stem half with a stake.

iv) **Watering and Aftercare:**

Light watering will be ensured after transplantation. However, frequent irrigation is required until the seedling establishes.

During first year irrigation will be at an interval of twice a week and during summer, it will be at an interval of two days. Generally the saplings get established themselves during first year. However, watering during subsequent years will be done at intervals during summer season, if required.

Fertilizer will be applied in regulated doses. The insecticides, fungicides will be applied according to requirements. If necessary, the diseased branches or leaves will be cut with fine scissors and destroyed. Diseased and dead seedling will be immediately replaced.

SPACE PROVISION:

Adequate space provision has been kept in the plant and township layout for plantation purpose. Besides, plantation will also be undertaken along wide and narrow internal roads, around buildings and all vacant spaces left after construction work is complete. In addition, afforestation activities would be undertaken around coal stock yard and coal handling plant area.

Plant Area

The plant areas proposed to be brought under plantation are given in Fig. I. It is proposed to provide a 100 m green belt around the plant boundary of the project which accounts for 99 Ha (246 acres).

The total plants in the green belt area of 99 Ha project site would work out to 1.48 lakhs @ 1,500 plants per Ha,. The green belt development would be completed over a period of 4 years. A plantation of 45,000 plants in the first year, 27,000 plants in the second year, 45,000 plants in the third year and 31,00 in the fourth year.

In addition, afforestation activities would be undertaken in all the vacant places of the plant areas during subsequent years.

The preference order of plantation area will be as follows:

- i) Along the outer boundary of campus,
- ii) Along wide and narrow internal roads,
- iii) Around buildings,
- iv) On vacant and filled-up land.

Township Area

The standard norm of 33% coverage will be adopted for afforestation activities in the township area. An area of about 18 Ha (46 acres) would be available considering the acquisition of about 56 Ha (140 acres) for township. The main afforestation activities in the township area will account for the avenue plantations, parks, community buildings (hospitals, guest houses, recreation centre, school,

field hostel and play grounds), vacant spaces and along boundary wall.

The total trees in green belt area of 18 Ha would work out to 27,000 @ 1,500 plants per Ha. The green belt development would be completed in the 2nd year. The estimated length of road (Plant road, Township road and approach road) works out to 50 Km. The number of trees works out to be 20,000. These would be planted in the 2nd, 3rd and 4th year respectively.]

Phased Planting Programme:

The extent of land to be brought under plantation per year at project site is enclosed is given below:

SIMHADRI TPP SCHEDULE FOR AFFORESTATION

Sl. No.	Description	Qty. in Ha. (approx.)	period			
			Year 1	Year 2	Year 3	Year 4
A.	Green Belt					
1.	Zone 1	40.00	30	10.00	Maintenance for 3 years	
2.	Zone 2	18.00	-	8.00	10.00	-
3.	Zone 3	30.00	-	-	20.00	10.00
4.	Zone 4	11.00	-	-	-	11.00
5.	Township	18.00	-	18.00	-	-
B.	Plantation along roads.					
C.	Plantation in vacant spaces in plant.					
D.	Plantation around Auxiliary installations.					

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However, plantation activity will be continued even during operation phase of the project and maximum possible land would be brought under green cover. The filled-in abandoned ash disposal area would be reclaimed with suitable ash resistant trees.

SPECIES PROPOSED FOR PLANTATION

The criteria for selection of species and species proposed for plantation are given below:

(A) Criteria for selection of Species:

- Availability of seed material and sapling;
- Wide adaptability to eco-physiological conditions;
- Habitat; growth habits, crown height and shape, foliar surfaces, nature of flower etc.
- Pleasing appearance;
- Capacity to selectively concentrate some materials from the surroundings;
- Providing shade;
- Large bio-mass and leaves number to provide fodder and fuel;
- Ability of fixing atmospheric nitrogen; and
- Improving waste lands.

(B) Selected plant species:

It is proposed to take up green belt with mixed species like fast growing trees with thick canopy to provide early tree coverage and simultaneously planting trees that are native, have higher longevity and have beneficial effect. In order to protect from stray cattle etc., fencing around the green belt is proposed.

Trees growing upto 10 mtrs. or more in height with thick canopy cover and perennial foliage are proposed to be planted around various auxillary installations. It is also proposed to develop low-height ornamental plants/shrubs in front of these trees to give effective screening from noise etc.

Following plant species have been selected for plantation in various areas of project site and township:

- ✓ a) On External Boundary:
- Anthocephalus cadamba Deciduous
 - Acacia auriculiformis Ever green, fast growing
 - Terminalia arjuna Ever green, fast growing
 - Pithocelobium dulce Ever green,
 - Phyllanthus distichus Deciduous
 - ^aGrevillea robusta Tall, rough leaves, fast growing.
 - Pongamia pinnata Large tree

- Eucalyptus globulus Tall, Fast growing.
- Dalbergia sissoo Timber, medium height.
- Polyalthia longifolia Tall, beautiful appearance
- Casuarina equisetifolia Rapid growth, tall

b) **Along Internal Roads:**

i) **Broad Roads**

- Cestrum aurantiacum Medium height
- Polyalthia longifolia Tall, beautiful appearances
- Callisteman sp. Medium size, flowering plant
- Millingtonia hortensis Tall, beautiful flowers
- Delonix regia Tall, rapid growth
- Nyctanthes arbortristis Flowering plant
- Saraca indica Beautiful flowers & shade
- Ixora coccinea Flowering plant
- Tamarindus indica Beautiful, shady, fruit bearing
- Hibiscus rosasinensis Medium size, flowering plant

ii) **Along narrow roads**

- Cassia fistula Beautiful shrub, flowering plant
- Bauhinia purpurea Beautiful, flowering plant
- Cestrum diurnum Flowering plant
- Putranjiva roxburghii Good branching
- Bougainvillea spectabilis. Ornamental
- Nerium odorum Ornamental
- Hibiscus rosasinensis Beautiful flowers

- Cassia siamea Hardy, medium height, ornamental
- Tecoma stans Flowering plant
- c) Other open areas:
- Parkinsonia aculeata Flowering
- Tamarindus indica Beautiful, shady, fruit bearing
- Delonix regia Medium size, beautiful plant
- Gmelina arborea Beautiful flower
- Mangifera indica Shady, fruit bearing
- Syzigium cumini Shady, fruit bearing
- Madhuca indica Shady, fruit bearing
- Erythrina indica Fast growing, deciduous, ornamental
- Anthocephalus indica Majestic tree
- Derris indica Good canopy, N2-fixing
- Jacararanda mimosaefolia Beautiful tree, blue flowers
- Casuarina equisetifolia Fast growing, tall
- Eucalyptus globulus Fast growing, tall

NOTE: Species for final plantation will be finalised in consultation with the local forest department.

Various State Government Agencies, NGOs, local labour co-operatives will be utilized for carrying out the afforestation works.

NURSERY DEVELOPMENT:

[A well developed nursery is essential for supply of healthy saplings for effective implementation of plantation programme. Therefore, it is planned to establish a nursery, ^{has been} equipped with all necessary implements and facilities for raising saplings.] Sufficient land required for nursery will be demarcated in township and water pipeline will be laid in the nursery for supply of adequate water for irrigation.

For overall supervision of nursery development and implementation of plantation plan programme, a horticulture expert with necessary supporting staff will be deployed.

FINANCIAL PROVISION:

Necessary financial provision has been made for green belt development and afforestation. However, if required, additional finances will be allocated/provided.

STATUS OF R&R FOR SIMHADRI

Status as on 29.06.2016

- Land for Simhadri project was acquired based on negotiated settlement inclusive of R&R benefits.

1.	Capacity	Stage-I Stage-II	1000 MW (2 X 500 MW) 1000 MW (2 X 500 MW)
2.	Land Acquired	Private Land Govt. Land Total Land	1920 Acres 1489 Acres 3309 Acres (No additional land acquired for Stage-II)*
3.	No of Land Oustee Families		2577
4.	No of HSOs		71 (all shifted to resettlement colony)
5.	Employment		51
6.	Socio Economic Study Main Plant MGR Corridor area (220 acres)		Awarded in 1996 and completed in 1999 Awarded to M/s. IDPS, Visakhapatnam on 9.10.01 and completed in March 2002.
7.	R&R Guidelines and Community development (CD) Plan for Stage-I		Budget approved in October 1999 for Rs. 505 Lakhs. Additional Budget approved in April'03 for Rs 100 Lakhs for MGR areas Implementation completed in June'05. Budget utilized-Rs. 605 lakh.
8.	CD Plan for Stage-II		Approved for Rs. 236 lakh in Sep'08. Major activity • Drinking water scheme • Construction of school building Rs 1.91 crore spent.
9.	Social Impact Evaluation (SIE)		Conducted by Andhra University, Waltair, Report submitted in June'07.

Note:

*400 acre of APGENCO land required for Stage-II ash dyke area provided to NTPC in exchange of 276 acre of surplus land of Simhadri Stage-I.

- Land acquired for Stage-I under consent award as per negotiated settlement @2.25 lakh per acre inclusive of R&R benefits.
- After Completion of R&R, CD activities are being continued as part of CSR-CD activities.

**COMPLIANCE STATUS
OF
ENVIRONMENTAL CLEARANCE
Stage-I (2x500 MW)**

**NTPC Limited
SIMHADRI SUPER THERMAL POWER STATION**

**ENVIRONMENT MANAGEMENT GROUP
NTPC-SIMHADRI (PO)
PIN: 531 020
Andhra Pradesh**

March, 2022

NTPC-SIMHADRI SUPER THERMAL POWER STATION
ENVIRONMENTAL CLEARENCE
Stage - I (2X500 MW)

Sl. No.	Conditions Stipulation	Status of Implementation as on 31.03.2022
1.	The Consent Order no. 20/PCB/C.Estt./RO-VSP/AEE-VIII/95 dated 13th November, 1995 of Andhra Pradesh Pollution Control Board for establishment of Simhadri Thermal Power Project should be got transferred in favour of NTPC Limited, the executing agency.	The consent orders for establishment of Simhadri TPP has been transferred vide order no. 20/PCB/C.Estt/RO-VSP/AEE-N/96-3828 dtd. 06.09.96 in the name of NTPC Limited by APPCB.
2.	A bi-flue of height 275 metres with continuous stack monitoring facility should be installed.	A bi-flue stack of height 275 meters was constructed and continuous monitoring facility is installed.
3.	The Electro Static Precipitator (ESP) having efficiency of not less than 99.8% shall be installed and it should be ensured that particulate emission would not exceed prescribed limit of 150 mg/Nm ³ .	Installed high efficiency Electrostatic Precipitators (ESPs) of efficiency 99.93% which are in operation to limit the particulate emission below 115. mg/ Nm ³
4.	A closed circuit cooling device should be provided. The water requirement should be limited to 600 cum/hr from the Yeleru Canal and 9100cum/hr from the sea. The proposed pipeline of 6.0 km. for Seawater intake should conform to the regulation of the Coastal Zone Notification of February 1991.	A closed circuit type Circulating Cooling Water System using Natural Draft Cooling Towers have been provided. There are two cooling towers each of 165 m height. The water requirement is limited to 600 m ³ /hr. from Yeleru canal. The sea water pumps are rated for 9000 m ³ /hr and sea water drawl is limited to below 9100 Cum/Hr Make-up water to CW system is drawn from the sea through underground pipelines and are as per the CRZ notification of Feb'1991.
5.	Adequate space should be provided for installation of FGD plant in future for control	Adequate space for FGD was provided in the initial design itself

	of sulphur dioxide.	and to control and limit SO ₂ emission as mandated to be around 200 mg/Nm ³ under all design conditions, Simhadri STPP had commenced the installation of FGD in 2019 for which the work is in progress. The completion of FGD is expected to be completed by December 2022. As per the latest notification of MoEF&CC dated 31.03.2021 Simhadri STPP is obligated to complete the FGD work by 31.12.2022.
6.	Acquisition of land should be restricted to 2381.00 acres including the area of 630 acres for ash disposal.	The land acquired for main plant, including ash disposal area is limited to 2381 acres. However, an additional land of about 1063 acres was acquired for diversion of a nalla, railway corridors etc.
7.	Only beneficiated coal to the tune of 14,844 tonnes/day should be used. Fly ash generated to the tune of 33.5 million CUM should be collected in dry form in silos and fully utilized in a phased manner. Presently, plan has been drawn for utilization of 20% ash. A detailed scheme for full utilization should be submitted to the ministry by 31st December 1996. For avoiding contamination of ground water, ash pond should be suitably lined and dyked.	<p>NTPC approached MOEF&CC vide letter dated 16.12.1997 and 16.01.1998 regarding beneficiated coal which was exempted by MOEF&CC vide letter dated 06.02.1998..</p> <p>Dry Ash Extraction and Collection Systems have been provided for supply of quality ash to entrepreneurs.</p> <p>Initially an ash utilization plan was submitted to MOEF&CC vide letter dated 09.06.1997 and is being revised as per the directions of MOEF&CC.</p> <p>MOEF&CC vide letter dated 20.05.2002 has exempted/waived the ash pond lining.</p> <p>As per MOEF&CC Notification NO S.O 1561 (E) Dated 21.05.2020 it stated that use of coal by thermal power plants, without stipulation as regards ash content or distance shall be permitted.</p>

8.	Noise level should be limited to 85 dB(A) and regular maintenance of equipment be undertaken. For people working in the area of generator halls and other high noise areas, earplugs should be provided.	Individual equipments have been designed with 85 dB (A) noise limits. Regular maintenance of equipments are undertaken to keep noise levels within limits. For people working in of generator halls and other high noise area are provided with appropriate ear protection devices at the site.
9.	A Rehabilitation Master Plan covering details of the provision made for rehabilitation of 150 families, compensation package, training facilities etc., should be submitted within four months i.e., by November 1996. The plan should specifically indicate the schedule and implementation.	<p>District Collector, Visakhapatnam during a meeting held on 12.10.1998 on R&R opined that, in view of the negotiated compensation, there is no need for a RAP as per R&R policy of NTPC for Simhadri TPP. Accordingly, NTPC vide letter dated 10.12.98 has communicated MoEF&CC the decision of District Collector, Visakhapatnam enclosing the MOM held on 12.10.1998.</p> <p>NTPC has undertaken community development activities in the nearby villages. Facilities like approach road to villages, drinking water, school building, hospital etc for the people of the villagers have been undertaken.</p> <p>Rehabilitation & Resettlement facilities are as the directions of District Collector of Vishakhapatnam, by which it is only required that the Simhadari STPP should engage in CSR activities and that there was no need for RAP as per the R&R policy of the respondent. Accordingly, the respondent herein vide letter dated 10.12.1998 has communicated the decision of District Collector, Visakhapatnam enclosing the Minutes of Meeting (MOM) held on 12.10.1998 to the MOEF&CC. Simhadari STPP has undertaken community development activities in the nearby villages. Approach road to villages, drinking water,</p>

		<p>school building, hospital and other such CSR activities were undertaken by Simhadari STPP. More than Rs.114 Crores was spent under CSR&CD head from FYs 2004-05 to 2021-2022 in the nearby 30 No of villages of Simhadari STPP and about Rs.1.48 Crores expenditure has been incurred by the Simhadari STPP for the Pittavanipalem village alone towards the CSR-CD activities.</p>
10.	<p>For controlling fugitive dust, regular sprinkling of water in coal handling and other vulnerable areas of the plant should be ensured.</p>	<p>The total coal stock area is spread in an area of 4 acres in which 8 coal piles are there and each coal pile is spread an area of 2000 Square meters (50mx400m). Each coal pile is having 11 mechanical sprinklers and 11 mist spray guns. Each mist spray gun can cover 50 m radius. At each 35 metres, one mist spray gun is provided. A total of 88 No's. of high pressure rotating water mist spray guns are installed currently. The number of mist gun spray provided are adequate for control of dust suppression in the coal stock area.</p> <p>Suitable dust suppression mechanisms are provided at all the dust prone areas of Coal Handling plant as also confirmed by the Joint Committee Report Page No's 11,15. The Coal from Rail wagons is unloaded in Track Hoppers / at Wagon Tipplers. While unloading at track hoppers, series of water spray nozzles beside track hoppers are used for dust control. At wagon tipplers water header mounted spray nozzles and fog cannons are deployed to control fugitive dust. From track hopper/wagon tipplers the coal is sent to Crushers, where</p>

		<p>Dust extraction system is provided. From the coal crushers, the coal is sent to coal bunkers through closed conveyor system through various Transfer points (TPs). At every TP, conflow type dust control is provided for dust suppression. The excess coal is sent to Coal stock yard. At the coal piles in stock yard, Mechanical and Mist spray guns (Rain guns) are provided for dust suppression.</p> <p>Simhadri STPP has installed high pressure dust suppression water spray system (Rain guns) in coal yard with mechanical rotators which are working effectively to control the fugitive dust emission from coal yard. Simhadri STPP has installed High pressure water spray guns in all the Stage-I coal piles. 11 No's high pressure rotating mist spray guns are in place each pile in both Stage-I&II. The total 88 no. of high pressure rotating water spray rain guns are installed for 8 No's of Coal piles in Stage-I &II. In addition, for Dust Suppression, water nozzle spray System is in place for coal handling area including for Track Hopper and Wagon Tipplers.</p>
11.	<p>Afforestation should be undertaken covering an area of 292 acres and should be implemented in a phased manner. After care, gap filling and monitoring should be ensured. A norm of 1500-2000 trees per ha should be followed. The afforestation plan may be submitted by November 1996 and the schedule given in it is adhered to strictly.</p>	<p>Afforestation was carried out in an area of 292 Acres as a part of EC was more than achieved by the Respondent No.1 and a detailed plan was submitted as early as on 09.12.1996. It is a matter of record that after establishment of the plant in the year 2002, Respondent No.1 has carried out aggressive afforestation by planting more than 12,00,000 lakh trees which are now fully grown. Over 6,60,000 No's of trees are planted in area covering 1470 acres of land in and around NTPC-</p>

		<p>Simhadri. In addition, 5,50,000 No's of plantation of trees under the Green Visakha Plantation programme, in and around city of Visakhapatnam was carried out by the Respondent No.1. It amounts to contribution of an afforestation area of about 2550 Acres in Total and an expenditure of around Rs.60 Crores.</p>
12.	<p>Continuous monitoring of ground water should be undertaken by establishing good network of observation wells in consultation with the Central Ground Water Board. Results and data collected should be analysed to ascertain the status of water quality and findings should be submitted for evaluation.</p>	<p>Monitoring of Ground Water in 10 Ground water locations in nearby villages around the plant and ash disposal area is being done regularly and the data is being submitted on monthly basis to Regional office, APPCB and to Regional Office of MoEF&CC, Bangalore on Half-yearly basis.</p> <p>As per the joint committee report in page no17 the quality of ground water is potable. It was held by the joint committee that the chemical analysis of water samples of last five years data reveals that quality of ground water in the area is potable.</p>
13.	<p>All effluents generated in various plant activities should be collected in the Central Effluent Treatment Plant and treated to ensure adherence to specified standards of discharge. The concept of zero discharge should be adapted to a maximum possible extent.</p>	<p>There are five (05) types of effluents generated in Simhadri STPP. 1) De-Mineralised Water regeneration effluents 2) Coal slurry effluents from Coal handling plant 3) Debris filter back wash water effluents 4) Ash decant water effluent from Ash dykes 5) Effluent from CW blow down at Central Monitoring basin. 6) Cooling water blow down which is sea water.</p> <p>As per specification, all the effluents generated are treated at the respective point of origin. The cooling water blow down which is seawater alone is sent to</p>

		<p>designated marine outfall. (System to let the treated water into the sea) are monitored in EQMS station before letting out through Marine outfall.</p> <p>Other process effluents are treated as detailed below:</p> <ol style="list-style-type: none"> 1) The DM Plant effluents are treated in Neutralization pits and recycled for Ash disposal. 2) The coal slurry collected from various water sprinkling points of Coal handling plant (CHP) is sent to Coal slurry settling pond(CSSP) thro' a network of intermediate settling pits. The settled and filtered water at CSSP is reused for dust suppression from Mist Spray guns, 3) The Debris filter back wash effluents are recycled to the Cooling water Circuit after due filtration. 4) Ash decant water from Ash dykes is recycled to Ash water make up circuit through Ash water recirculation System (AWRS) Pre Treatment Sludges are recycled to Ash water slurry system. <p>The concept of zero discharge, though not mandated by MOEF&CC vide Notification dated 28.06.2018 for sea water-based power plant, every effort is made to recycle all the plant effluents; The concept of ZLD has been adopted to the maximum possible and all plant effluents are recycled to the plant processes.</p>
<p>14.</p>	<p>Keeping in view that 2x520MW Thermal Power Plant by M/s. Hinduja National Power Corporation Ltd. (HNPCL) is proposed in the vicinity of</p>	<p>NTPC has created facilities for coal transportation by laying of rail line etc., to cater the needs of Simhadri TPP.</p>

	Simhadri project, common facilities for coal transportation, laying of rail line etc. should be worked out in mutual consultation to avoid duplication of the facilities and acquisition of additional area.	
15.	Financial provision of Rs. 301.55 crores should be provided for implementation of environmental mitigative measures with adequate scope for its enhancement, if required, in future	As per the Environmental Clearance an amount of 301.55 crores must be spent towards environmental control measures. However, Simhadri STPP has spent Rs.739.30 crores for Stage-I units which include Rs. 435.5 Cr towards FGD and environmental mitigation measures as per the Environmental compliance requirement. Simhadari STPP has spent Rs.739.30 crores for Stage-I and Rs.1088.03 crores for Stage-II units a total of Rs. 1,827.33 Cr for environmental mitigation measures as per the Environmental compliance requirement.
16.	Regular monitoring for SPM, SO ₂ and NO _x around the power plant may be carried out and records maintained. The data so collected should be properly analysed and submitted to the Ministry every six months	The monitoring for SPM, SO ₂ and NO _x is being continued around the power plant and the data is being submitted to Regional MoEF&CC on every six months after analysis.
17.	Full cooperation should be extended to Scientists / Officers from the Regional Office of the Ministry at Bangalore who would be monitoring the compliance of environmental status. Complete set of impact assessment report and the Management Plans should be forwarded to the Regional Office for their use during monitoring.	Full cooperation is being extended to the Scientists and officers of Regional Office of MOEF&CC by site. NOC, EIA report and EMP have been submitted to Regional Office of MOEF&CC, on 07.01.1997.

18.	<p>Monitoring Committee should be constituted for reviewing the compliance to various safeguard measures by involving recognized local NGOs, Pollution Control Boards, Institutions, Experts etc.,</p>	<p>A Monitoring Committee has been constituted on 03.11.1999 as per stipulation and subsequently MoEF has been informed vide letter dated 17.11.1999.</p> <p>A Monitoring Committee has been constituted on 03.11.1999 as per requirement and subsequently MoEF&CC has been informed about the same vide letter dated 17.11.1999. The following are the committee members:</p> <p>(a) Environment Engineer from APPCB</p> <p>(b) Head of Department from Geo-Engineering Department from Andhra University</p> <p>(c) Secretary, People's Environment Protection Society.</p> <p>The Committee in place conducts meetings regularly to review the Environmental safeguards and compliance measures to ensure that necessary actions have been taken up by Simhadri STPP for development of the nearby villages. Committee is regularly meeting to review the Environment safeguards and compliance to measures.</p>
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RESPONDENT NO.1 NTPC SIMHADRI VOLUNTARY CONTRIBUTIONS TO THE SOCIETY / ENVIRONMENT BEYOND STIPULATIONS AND CONSENT

Sl	Activity	Budget (Rs. Lakhs)	Area of Contribution
1.	Conservation of Olive Ridley Turtles : Respondent No.1 NTPC Simhadri has established Olive Ridley conservation by way of establishing Protected hatching facilities all along the coast of AndhraPradesh under MoU with Chief Conservator of Forests, AP, for a project spanning 6 years from 2017-21.	600	Bio-Diversity Conservation
2.	Hillock Rain water Harvesting Project: With Greater Visakhapatnam Municipal Corporation and United Nations Development Programme at Swambhuvaram village the Respondent No.1 NTPC Simhadri has carried out DGPS (Digital Global Positioning Survey) of Swambhuvaram village Hillock and detailed plan for Rainwater harvesting of surface water from Hillock is taken up. The Project is being implemented in two Phases and first phase is in progress now.	150	Natural resources and Water Conservation
3.	Mobile Health Unit (Fully equipped) with Doctor : In association with HelpAge India, Respondent No.1 NTPC-Simhadri has started the services of Mobile health and Medicine dispensing unit in which a Doctor and Nursing staff, are visiting near by villages in regular frequency and conducting health check-ups and medicines are dispensed then and there itself; The project has started in the year 2019 and still is continuing.	15 Lakhs being initial cost; 22 lakhs /annum running expenses	Enhanced reaching out to Society
4.	Girl Empowerment Mission : Every year about 125 girls of 5 th standard from nearby villages are selected for attending a Comprehensive orientation programme spanning 45 days covering the aspects of Yoga, English Classes, Mathematics & Cultural prog training is being organised by NTPC-Simhadri since 2019 onwards. During the programme all 125 girls are provided with Boarding, Accommodation and training in NTPC Simhadri Campus	50 Lakhs per year	Enhanced enablement of nearby Society

5.	<p>Green cover loss compensation after Cyclone HUDHUD : Respondent No.1 NTPC Simhadri has distributed 3,50,000 fully grown Fruit bearing trees of 2 years old sapling in nearby 6 mandals viz Parawada, Achyutapurama, Pendurthi, Narsipatnam, Anakapalli and Yelamanchili Mandals of NTPC Simhadri to compensate for the Green cover and livelihood loss due to HUDHUD cyclone</p>	50 Lakhs	Contribution to society and Green belt development
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Conservation of Olive Ridley Sea Turtles to preserve biodiversity of eastern coast



सिमहाद्री



NTPC Simhadri had contributed towards Bio diversity conservation by entering a MoU with A.P forest department for Conservation of Olive Ridley turtles .

As a part of MoU ,NTPC Simhadri enabled AP forest dept to construct turtle hatcheries along the eastern coast of Bay of Bengal at a cost of Rs. 6 Crores.

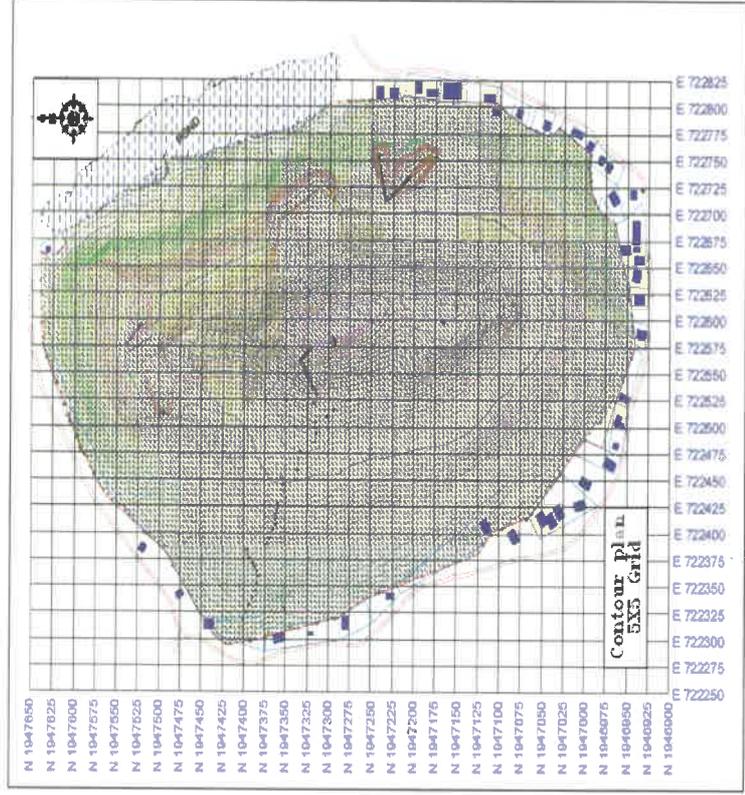


Hillock Rain water Harvesting Project –Swyambhuvaram



Hillock Rainwater harvesting at Swyambhuvaram Village beside plant was taken up in collaboration with GMC-UNDP using Differential Global positioning System (DGPS).

The recommendations of the study are being implemented at an expenditure of Rs. 50 lakhs



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ING FOR SOCIETY IN COVID TIMES



Running of Mobile healthcare Unit



Distribution of Ration kits to migrant workers



COVID equipment for frontline workers and 3 PHCs



Sanitization in nearby villages





EMPOWERMENT MISSION

0 Girl students from nearby villages trained for 4
eks in NTPC-Township school to impart different

Is

Music

Dance

Painting

Yoga

Carate

PROGRAM



**BEFORE THE NATIONAL GREEN
TRIBUNAL (SZ) CHENNAI
ORIGINAL APPLICATION No. 227 of
2021 (SZ)
IN THE MATTER OF**

Battu Satish Reddy Applicant

Versus

National Thermal Power Corporation Ltd
& others Respondents

TYPED SET OF PAPERS

**M/s. King & Partridge
Counsel for 1st Respondent**