



एक महारत्न कंपनी

एन टी पी सी लिमिटेड

(भारत सरकार का उद्यम)

NTPC Limited

(A Govt. of India Enterprise)

गाडरवारा/ GADARWARA

To,
Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ),
E-5, Kendriya Paryavaran Bhawan,
E-5 Arera Colony, Link Road-3,
Ravishankar Nagar, Bhopal – 462016

22.05.2018

Subject: Half Yearly Environment Compliance report of NTPC-Gadarwara,
Reference: Environment Clearance J-13012/125/2009-IA.II (T) dated 22/03/2013.

Dear Sir,

Please find enclosed Half Yearly Compliance (HYC) report of NTPC-Gadarwara for the period October 2017 to March 2018, in line with the guidelines as stipulated by MoEF&CC for your perusal please.

Thanking you,

(D. Shrikhande)

Additional General Manager
(Environment Management Group)

गाडरवारा सुपर थर्मल पावर प्रोजेक्ट / GADARWARA SUPER THERMAL POWER PROJECT

पो : गंगई, थाना : चीचली, तहसील : गाडरवारा, जिला : नरसिंहपुर (म प्र) - 487770

PO : Gangai, Thana : Chichli, Tehsil : Gadawara, Distt : Narsinghpur (MP) - 487770

पंजीकृत कार्यालय : एनटीपीसी भवन, इंस्टीट्यूशनल एरिया, स्कोप कॉम्प्लेक्स, नई दिल्ली - 110003

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GADARWARA SUPER THERMAL POWER PROJECT, **STAGE-I (2X800 MW)**

Compliance status of Environmental Clearance Vide Letter No: J-13012/125/2009-IA,II(T) Dt:22/03/13
Period of Compliance Report – (01.10.2017 to 31.03.2018)

| SL.NO. | MOEF STIPULATION | STATUS AS ON 31.03.2018 |
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| <u>A. Specific Conditions:</u> | | |
| i | The project proponent shall set up the power project as a model plant demonstrating that ecology and development can co-exists in harmony and set examples for others to emulate similar practice. | Noted and will be complied. |
| ii | Sulphur and ash contents in the coal to be use in the project shall not exceed 0.5 % and 34 % respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made to the Ministry for suitable amendments to environmental clearance condition wherever necessary. | Noted and will be complied. |
| iii | Bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipment's for SO _x , NO _x and PM _{2.5} & PM ₁₀ . Mercury emissions from stack may also be monitored on periodic basis. | A bi-flue stack of 275 meters height constructed and minimum flue gas velocity of 22 m/sec will be ensured during operation phase of the project. Continuous stack monitoring facility for online measurement of SO ₂ , NO _x , Particulate Matter (PM) and Mercury level has been provided. |
| iv | No mine void filling or filling up of low lying areas with fly ash shall be undertaken. | The said stipulation will be complied during operation phase of the project. |
| v | COC of 5.0 shall be adopted | Closed cycle cooling system has been designed with COC of 5.0 for optimisation of water requirement. |
| vi | Continuous monitoring of Narmada River water quality in its upstream and downstream of water tapping point shall be undertaken regularly and records maintained. | Continuous monitoring of Narmada River water quality in its upstream and downstream of water tapping point shall be undertaken regularly during operation phase of the project. |
| vii | The project proponent shall explore possibility for storage of excess monsoon water for use during lean season. The same could be by construction of barrage at appropriate location which could be carried out in close consultation with the WRD, Govt. of Madhya Pradesh. | In order to meet the said stipulation, Gadarwara project has already constructed weir on Narmada River in consultation with WRD, Government of Madhya Pradesh. In addition to this, Hiran WRD, Jabalpur (MP) has been approached and requested to suggest water storage scheme for Shakkar River & Sita Reva River which are tributaries of Narmada. |
| viii | The ash pond design shall be such that no breach takes place even in the worst case of natural calamity. Since the geology of the area indicates sandy loam and loamy soil, the ash pond need to be appropriately lined with appropriate impermeable media. | The structure of ash dykes shall be designed, constructed and operated as per State of the Art engineering practices for the design and construction of earth dams with adequate factor of Safety. The design of ash dyke shall also take into consideration the seismic parameters. |

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| | | <p>Regular monitoring and inspection of ash dykes and an emergency response system will ensure that there are no risks of failure as apprehended.</p> <p>In addition ash pond shall be lined with suitable impermeable material like Bentonite blended clay.</p> <p>Moreover, the Fly Ash Disposal System for the project envisages the use of High Concentration Slurry Disposal (HCSD) System, which leads to solidification of the layers of ash slurry within 1-2 days. The solidified layers of ash shall be self-supporting and there will be no risk of ash flowing in the surrounding areas. For disposal of bottom ash, a conventional slurry disposal system with ash water recirculation has been envisaged.</p> |
| ix | <p>Ash pond for Stage-II (400 acres) can be considered only after the first ash pond is dispensed with by filling up of bottom ash and demonstration of 100% fly ash utilization established within four years of commissioning of the plant.</p> <p>The 2nd ash pond for Stage-II (400 acres) requirement should not arise and land earmarked can be converted for green belt and or water storage.</p> | <p>Noted and shall be complied.</p> <p>The said stipulation shall be complied during operation phase of the project.</p> |
| x | <p>Long term study shall be carried to assess impact on the ecology of the river Narmada downstream of the present project site at a different location especially at tapping points for drinking water supply and irrigation. The study shall be carried out by an institute of repute like IIT, Roorkee preferably within six months and report submitted to the Ministry. Thereafter the study shall be repeated after commissioning of both units of 2x800 MW and report subsequently submitted to the Ministry.</p> | <p>Study on impact of water intake and effluent discharge for the project on ecology of River Narmada has been awarded to Centre of Advanced Study in Marine Biology, Annamalai University, Chennai vide LOA dated 17.03.2015.</p> <p>Field work completed and final report is under preparation. Final report shall be submitted to Regional Office (Western Zone) of MOEF&CC.</p> <p>Also, NTPC shall conduct the same study repeatedly as per the stipulations after commissioning of the project.</p> |
| xi | <p>The project proponent shall explore setting up of R.O System to treat cooling tower blow down discharge of about 5 cusecs and the R.O system shall be so designed so as to take care of drinking water supply for the nearest few villages.</p> | <p>Possibility shall be explored for setting up of RO System to treat cooling tower blow down discharge of about 5 cusecs to take care of drinking water supply for nearby villages.</p> |
| xii | <p>The village ponds / surface water bodies located within 5 kms radius of the project site shall be regenerated in the as part of its social welfare activities.</p> | <p>Under Various community CSR-CD works following initiatives were undertaken:</p> <ol style="list-style-type: none"> 1. Five ponds in project affected villages (PAVs) have been identified for deepening. |

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| | | <p>Work shall be carried out under Community Development works.</p> <p>2. Two new ponds shall be constructed in another two PAVs under Community Development works.</p> |
| xiii | <p>An amount of Rs 45.60 Crores as one time investment shall be earmarked for activities to be taken up under CSR during construction phase of the Project. A detailed CSR Action Plan be furnished to the Ministry within 3 months. Recurring expenditure for CSR thereafter shall be Rs 9.2Crores per annum till the life of the plant. Social Audit by a reputed University or an Institute shall be carried out annually and details to be submitted to MOEF besides putting it on Company's website.</p> | <p>A requisite fund of Rs 45.60 Crore has been earmarked for Community Development works for Gadarwara project and out of which expenditure of Rs 20.566 crore has been already done regarding Community Development works in the neighboring villages. Detail and Status of CD-CSR work is enclosed as Annexure-I.</p> <p>Thereafter, an amount of Rs. 9.2 Crores per annum will be earmarked as recurring expenditure for CSR activities till the life of the plant and its expense details will be submitted to the Ministry.</p> <p>In addition the social audit will be carried out as per the stipulations and its report will be submitted to MOEF&CC besides putting it on Company's website</p> |
| B. General Conditions | | |
| (i) | <p>Vision document specifying prospective plan for the site shall be formulated and submitted to the Regional Office of the Ministry within six months.</p> | <p>NTPC vide letter dated 08.04.2013 has submitted a Project Vision Document to the Regional Office (Western Zone) of the Ministry of Environment and Forest & Climate Change (MOEF&CC), Bhopal.</p> |
| (ii) | <p>Scheme for implementation for harnessing solar power within the premises of the plant particularly at available roof tops shall be formulated and status of implementation shall be submitted periodically to the Regional Office of the Ministry.</p> | <p>Projects as well as township are in construction phase. Scheme for harnessing solar power within the premises of the plant particularly at available roof tops has been formulated and incorporated in the engineering layout of the project and same shall be implemented after completion of building works at project.</p> |
| (iii) | <p>Provision for installation of FGD shall be provided for future use.</p> | <p>Adequate space has been kept in the general layout plan of the project for installation of FGD plant for both the units.</p> <p>However, NTPC has already initiated an action for installing FGD Plant for controlling SOx concentration in flue gas in compliance to latest MOEF&CC emission norms for TPP dated 07.12.2015.</p> |
| (iv) | <p>Coal transportation to plant site shall be undertaken by rail and no road transportation shall be permitted.</p> | <p>As the MGR system for transportation of coal from Gadarwara Railway Station to the plant site is not ready and it will take some time for completion. Hence, initially it has been</p> |

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| | | <p>proposed to transport the coal through road route as an interim arrangement.</p> <p>The required amendment in Environment Clearance (EC) condition for permitting the coal transportation by road for Gadarwara has been accorded vide MOEF&CC letter J-13012/125/2009-IA.II(T) dated 01.09.2017. The compliance of the same is attached as Annexure-II.</p> |
| (v) | <p>A long term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Thereafter mechanism for an in-built continuous monitoring for Radio activity and heavy metals in coal and fly ash (including bottom ash) be put in place.</p> | <p>A detailed study on chemical composition of coal used, for particularly heavy metal and radio activity contents, shall be carried out through a reputed institute once the project starts receiving the coal during operation phase.</p> <p>Consultancy Work for undertaking long term study of radio activity was awarded to 'BARC' for analyzing natural background radiation monitoring at Gadarwara project.</p> <p>'BARC' has done all initial sampling and report is under preparation.</p> |
| (vi) | <p>Utilization of 100% Fly Ash generated shall be made from 4th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.</p> | <p>Ash Utilization Plan has been prepared and shall be implemented in compliance to fly ash gazette notification dated 03.11.2009 and its amendment dated 25.01.2016 during the operation phase of the project.</p> <p>Expression of Interest was published, and efforts are being made for maximum utilization of fly ash from this project. ACC cement Kymore, and Prism cement Satna have shown their interest.</p> <p>Further, its status of implementation shall be also submitted to the Regional Office (Western Zone), MOEF&CC at Bhopal at regular interval.</p> |
| (vii) | <p>High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.</p> | <p>The High Efficiency Electrostatic Precipitators (ESP) are designed and installed for achieving guaranteed efficiency of 99.99 %.</p> <p>However, NTPC has already initiated an action to ensure that particulate emission will be in compliance to latest MOEF&CC emission norms for TPP dated 07.12.2015.</p> |
| (viii) | <p>Adequate dust extraction system such as cyclones / bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.</p> | <p>Dust extraction system at Coal crusher house and adequate no. of dust suppression systems are being provided in coal handling area including coal stock yard area, ash handling points, transfer points and other vulnerable</p> |

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| | | <p>dusty areas for control of fugitive dust Emissions.</p> <p>Dry fog dust suppression system is being provided at coal conveyor system.</p> <p>Water sprinklers will also be installed at dust prone sites in order to attenuate fugitive dust emission.</p> |
| (ix) | <p>Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As,Hg,Cr,Pb etc.) shall be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.</p> | <p>An ash management scheme shall be implemented consisting of dry ash extraction system (DAES) for dry collection of fly ash with storage facility (silos). Supply of ash to entrepreneurs for utilization and promoting ash utilization to maximum possible extent and safe disposal of unused ash in the ash pond area.</p> <p>The plant shall have two different systems for ash disposal- conventional wet slurry disposal with ash water re-circulation for bottom ash and High Concentration Slurry Disposal (HCSD) for disposal of unused fly ash.</p> <p>Periodic monitoring for mercury & heavy metals in the bottom ash and water emanating from ash pond shall be done during the operation phase of the project.</p> <p>No ash shall be disposed off in low lying area.</p> |
| (x) | <p>Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached. Ash pond water shall be re-circulated and utilized.</p> | <p>To avoid the ground water contamination from bottom ash slurry, one of the bottom ash lagoons is separated by a small temporary bund and the small area shall be lined with impervious liner of 300 MM thickness.</p> <p>Ash pond is lined with suitable impermeable material like Bentonite blended clay or HCSD layer.</p> <p>The structure of ash dykes is designed, constructed and operated as per the State of the Art engineering practices for the design and construction of earth dams with adequate factor of Safety. The design of ash dyke shall also take into consideration the seismic parameters.</p> <p>AWRS system has been also envisaged.</p> |
| (xi) | <p>Fugitive emissions shall be controlled to prevent impact on such that no agricultural/non-agricultural land. Impact to any land shall be</p> | <p>Adequate no. of dust suppression and extraction system shall be provided in coal handling area including coal stock yard area, ash handling points, transfer areas and other</p> |

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| | mitigated and suitable compensation provided in consultation with the local Panchayat. | vulnerable dusty areas for control of fugitive dust Emissions. Extensive plantation shall be undertaken in all available areas, selectively with Air Pollution Tolerant Index (APTI) plant species. |
| (xii) | Hydrogeology of the area shall be reviewed annually from an institute / organization of repute to assess impact of surface water and ground regime (especially around ash dyke). In case any deterioration is observed specific mitigation measures shall be undertaken and reports / data of water quality monitored regularly and maintained shall be submitted to the Regional Office of the Ministry. | During operation phase of the project the Hydrogeology of the area shall be reviewed annually from an institute/ organization of repute to assess impact of surface water and ground regime (especially around ash dyke) and reports of water quality monitored shall be submitted to the Regional Office of the Ministry. Hydro-geological study for Gadarwara project has been carried out by National Institute of Hydrology (NIH) Roorkee. A copy of the report shall be submitted to the Regional Office of the Ministry. |
| (xiii) | No ground water shall be extracted for use in operation of the power plant even in lean season. | As per the said stipulation, no ground water will be extracted for use during operation of the power plant. |
| (xiv) | No water bodies (including natural drainage system) in the area shall be disturbed due to activities associated with the setting up/operation of the power plant. | No water body including natural drainage system of the area has been disturbed due to activities associated with the setting up of the power plant. Moreover, the said stipulation will also be complied during the operation phase of the project. |
| (xv) | Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project. | Adequate nos. of piezometers will be installed for regular monitoring of ground water level in and around ash pond area as per stipulation and report will be submitted to Regional Office (Western Zone) of MOEF&CC at Bhopal at regular interval during operation phase of the project. |
| (xvi) | Monitoring surface water quality in the area shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken. | Monitoring of Surface water quality shall be carried out regularly as per stipulations and reports shall be submitted to Regional Office of MOEF&CC (Western Zone) at Bhopal. Monitoring for heavy metals in ground water will be also done and its record will be maintained during operation phase of the project. |
| (xvii) | Minimum required environmental flow suggested by the Competent Authority of the state Govt. shall be maintained in the Channel/ Rivers (as applicable) even in lean season. | Noted. |

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| (xviii) | The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed. | <p>The project shall have an integrated scheme for treatment, re-cycle and re use of effluents. Provision is being kept to recirculate cooling water and ash pond effluent. The cooling tower blow down shall be used fully/partially for ash handling, service water system, coal handling & firefighting etc. Provision is being kept for treatment, recirculation & reuse of entire quantity of coal handling plant effluents & service water effluents.</p> <p>The effluent treatment system comprising of neutralization pit for DM plant regeneration waste, oil separator/skimmers for oily waste, coal slurry settling pond for coal handling plant effluents, lamella clarifier for service water effluents and cooling towers for hot water etc are being provided.</p> <p>The effluents shall be treated adequately conforming to the stipulated regulatory standards.</p> <p>An independent plant effluent drainage system shall be constructed to ensure that plant effluents do not mix with storm water drainage.</p> |
| (xix) | Waste water generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB/CPCB. | <p>It is submitted that during normal course of project operation Zero Liquid Discharge (ZLD) system shall be adopted based on maximum recycle/reuse of waste water for various plant usage thereby reducing and optimizing the quantities of water requirement and effluent generation to the extent feasible.</p> <p>However, NTPC has already revised its water requirement in order to comply with the latest emission notification by MOEF&CC for TPP dated 07.12.2015.</p> |
| (xx) | A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising green belt/plantation. | All domestic sewage emanating from plant and township shall be treated in a sewage treatment plant. The treated sewage conforming to prescribed standards and shall be utilized for plantation & raising greenbelt to the extent possible. |
| (xxi) | The project proponent shall undertake rain water harvesting measures and shall develop water storage for use in operation of the plant. Rain water harvesting system shall be put in place which shall comprise of rain water collection from the built up and open area in the plant premises. Action plan for implementation shall be submitted to the Regional Office of the Ministry. | <p>Rain water harvesting shall be practiced as per recommendation/stipulations of Central Groundwater Authority/Board.</p> <p>A study was conducted by NIH Roorkee for rain water harvesting at plant area and for township. Proposal for implementation plan has been submitted to CGWB-Bhopal for their approval.</p> |

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| (xxii) | Additional soil for leveling of the proposed site shall be generated within the sited (to the extent possible) so that natural drainage system of the area is protected and improved. | All additional soil levelling of the project site will be done from within the sites only with all necessary precautions will be taken to protect natural drainage system of the area. |
| (xxiii) | Common property resource falling in the vicinity of the project area shall be identified and if any common property resource (such as grazing land, pond etc.) is falling within the plant area and is developed and handed over to the community. | There is no common property resource falling within the plant area. |
| (xxiv) | Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry. | <p>Adequate no. of fire Spray & Hydrant system for covering the entire power station including all the auxiliaries and buildings in the plant area are being implemented. The system is completed with piping, hydrants, valves, instrumentation, hoses, nozzles, hose boxes/stations etc.</p> <p>Copy of Safety measures with full details will be submitted to RO (Western Zone), MOEF&CC at Bhopal after detailed Engineering Completion.</p> |
| (xxv) | Well-designed acoustic enclosures for the DG sets and noise emitting equipment's to achieve the desirable insertion loss viz. 25 dB (A) should be provided. | <p>Well-designed acoustic enclosures meeting the latest statutory norms for DG sets are being provided.</p> <p>Further, the compliance of latest norms on noise standard will be ensured.</p> |
| (xxvi) | Storage facilities for auxiliary liquid fuel such as LDO/HFO/LSHS shall be made in the plant area in consultation with department of Explosives, Nagpur; Sulphur content in the liquid fuel shall not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil. | <p>Storage facilities for auxiliary liquid fuel LDO/HFO are designed conforming to the safety standards and where risk is minimal.</p> <p>A detailed Disaster Management Plan & Risk assessment including fire and explosion issues prepared and finalized in consultation with Department of Explosives, Nagpur and regular mock drills are being conducted as per plan in order to address any eventuality in case of an accident.</p> |
| (xxvii) | First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase. | <p>All arrangements related to first aid, health & safety and sanitation for workers during construction phase of the project have been kept under the scope of EPC contractor. However, NTPC shall ensure effective compliance of the said stipulations.</p> <p>Various measures implemented during construction phase through contractor are:</p> <ul style="list-style-type: none"> • Adequate infrastructure facilities, such as sanitation, fuel, restroom, medical facilities, safety, and suitable water supply are being provided at various stages of project construction to the labor colonies |

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| | | <p>housing the work force during construction phase of the project. The sanitary waste from these areas shall be accorded suitable treatment.</p> <ul style="list-style-type: none"> • Safety equipment such as earplugs and earmuffs, helmets, face shields, safety goggles etc. is being provided to workers engaged in high risk areas. <p>A first aid center & ambulance have been established to provide immediate medical aid to the workers and their Family members. An ambulance service is available at site to transport injured workers to nearby hospitals.</p> |
| (xxviii) | <p>Noise levels emanating from turbines shall be limited to 85 dB (A) from source. For people working in the high noise area, requisite PPEs shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.</p> | <p>Design specification for the equipment's has been made to comply with the stipulation. Personal protective equipment has been arranged through contractors during construction phase. Periodic examination of workers during operation phase shall be done as stipulated.</p> <p>The workers of generator halls and other high noise area shall be provided with appropriate ear protection devices.</p> |
| xxix | <p>Regular monitoring of ambient air ground level concentration of SO₂, NO_x, PM_{2.5} & PM₁₀ and Hg shall be carried out in the impact zone and record maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provide immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional office of this Ministry. The data shall also be put on the website of the company.</p> | <p>Regular monitoring of AAQ shall be done during the operation of the plant. The four locations of AAQMS have been finalized in consultation with MPPCB.</p> <p>Four (4) no. of AAQMS equipment's shall be installed at site and the infra-structure requirements for the stations are being established. Data shall be submitted to the Regional Office (Western Zone) of the MOEF&CC at Bhopal.</p> <p>The data shall also be put up on the website of the company during the operation phase of the project.</p> |
| xxx | <p>Green Belt consisting of 3 tiers of plantations of native species around plant not less than 100m width shall be raised (except in areas not feasible). The density of trees shall not less than 2500per ha with survival rate not less than 80%.</p> | <ul style="list-style-type: none"> • Green Belt around the Main Plant area except transmission corridor shall be planted. • Around 100 acres of land has been envisaged for the green belt development. • Green Belt around the Township area shall be planted. • Extensive afforestation has been undertaken at all available spaces in and around project. • Avenue Plantation along the Road is being done. |

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| | | <ul style="list-style-type: none"> • The density of trees shall not less than 2500 per ha with all efforts to maintain the survival rate not less than 80%. • Under development of green belt work 30,000 trees have been planted at project in 2017. • MoU is likely to be signed for green belt development for this monsoon season-2018 by MP Van Rajya Vikash Nigam limited (MPRVVN). <p>Details attached in Annexure- III</p> |
| xxxii | <p>An Environmental Cell comprising of at-least one expert in environmental science / engineering, occupational health and a social scientist, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the head of the organization who would be accountable for implementation of environmental regulations and social impact improvement / mitigation measures.</p> | <p>An Environment Management Group (EMG) has been set up at Gadarwara STPP.</p> <p>The EMG will be responsible for implementing and monitoring the stipulations/ issues / statutory norms.</p> <p>EMG will have sufficient trained manpower and equipment for environmental monitoring and other environmental related activities to ensure compliance with statutory requirements. It shall interact regularly with the State Pollution Control Board.</p> <p>A laboratory at Gadarwara STPP will be well equipped for monitoring of ambient air quality, stack emission water/effluent quality, etc.</p> |
| xxxiii | <p>The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for providing potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.</p> | <p>Expenditure of Rs 20.566 crore has been done regarding Community Development works in the neighboring villages. List of CD works executed in PAVs enclosed as Annexure-I</p> <p>Separate budget has been earmarked for implementing CSR-CD activities for the project and shall be utilized in accordance with the said stipulations.</p> |
| xxxiiii | <p>CSR scheme shall be undertaken based on need based assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District Administration. As part of CSR employment of local youth after imparting relevant training as may be necessary shall be undertaken as committed.</p> | <p>Various CSR schemes have been implemented and will be continued based on need based survey in and around the villages within 5 km of the site and in consultation with the village Panchayat and the District Administration.</p> <p>Infrastructure works in Project Affected Villages (PAVs):</p> <ul style="list-style-type: none"> • CC road constructed in Village Dongargaon. • Road side plantation was done in all PAVs. • CC road construction in Village Chorbarheta. <p>Drinking water:</p> <ul style="list-style-type: none"> • Hand pumps installed in all 7 PAVs. |

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| | | <ul style="list-style-type: none"> • Payment disbursed for supply of water to each household in PAVs. <p>Sanitation:</p> <ul style="list-style-type: none"> • Ghat Pipariya is now open defecation free. • Payment disbursed for toilet construction in each house for Gangai & Umaria villages. • Toilets worth 29 lacs constructed in Village Chorbarheta. <p>Education:</p> <ul style="list-style-type: none"> • Boundary wall of schools under construction in all PAVs. • Scholarship distributed to meritorious students of Government schools of class V, VIII & X. <p>Health:</p> <ul style="list-style-type: none"> • 6 medical camps and one family planning camp organized for PAVs. • Upgradation of District hospital was done. • Upgradation of Red Cross hospital was done. <p>Other welfare measures:</p> <ul style="list-style-type: none"> • Contribution made towards 2 camps for upliftment of weaker sections and one cultural program. <p>Infrastructure works in Vicinities:</p> <ul style="list-style-type: none"> • Two CC road constructed in Narsinghpur. • Solar system installed in remotely located Village Badgaon. • Community Centres constructed in various villages, Gadarwara & villages, Gadarwara & Narsinghpur. <p>Detail and Status of CD works is attached as Annexure -I</p> |
| xxxiv | It shall be ensured that an in-built monitoring mechanism for the CSR schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time. The achievements should be put on company's website. | The said stipulation shall be complied during operation phase of the project. |

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| xxxv | Provision shall be made for the housing of construction labor (as applicable) within the site with all necessary infrastructures and facilities such as fuel for cooking ,mobile toilets, mobile STP, safe drinking water, medical health care , crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. | All construction agencies working at NTPC Gadarwara Project are providing temporary accommodation for their workers near to work site. The engaged contractors are responsible for providing facilities for housing of construction labor (as applicable) within the site with all necessary infrastructures and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care etc. |
| xxxvi | The project proponent shall advertise in at least two local news papers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . | The information of Environmental Clearance was published in Two newspapers widely circulated in the region; <ol style="list-style-type: none"> 1. Dainik Bhaskar on 27.03.2013 (Hindi) 2. Nayi Duniya on 23.03.2013 (Hindi) |
| xxxvii | A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila parishad/ Municipal Corporation, urban local body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent. | The copy Environmental Clearance has been submitted to the following concerned offices. <ol style="list-style-type: none"> (1) Collector, Narsinghpur. (2) General Manager, District Trade & Industries Centre, Narsinghpur. (3) CEO, Zila Panchayat (4) Secretary, Gram Panchayat Gangai. (5) Secretary, Gram Panchayat Kudari. (6) Secretary, Gram Panchayat Chor Barheta. The Environmental Clearance has also been uploaded on the NTPC website. |
| xxxviii | The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM,RSPM (PM2.5&PM10), SO2, NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain | The latest HYC report of EC conditions is regularly being submitted to the Regional Office (Western Zone) of MOEF&CC at Bhopal and at the same time it is also uploaded on the NTPC website which is periodically being replaced with updated HYC report. Online continuous Stack Emission Monitoring System (CSEMS) for the parameters like particulate matter (PM) NO _x , SO ₂ , Mercury are being installed. Once the pollution control equipment are in operation the data shall be uploaded to the online emission to MPPCB and CPCB server during operation phase of the project. |
| xxxix | The environment statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with | The environment statement for each financial year ending 31 st March in Form-V shall be submitted once the plant becomes operational to Madhya Pradesh Pollution Control Board (MPPCB). |

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| | the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail. | |
| xl | The project proponent shall submit six monthly reports on the status of the implementations of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by email to Regional office, Ministry of Environment and Forests. | Latest Six monthly reports on the status of the implementations of the stipulated environmental safeguards is regularly being submitted to the MOEF&CC/MPPCB/Regional Office (Western Zone, Bhopal) and at the same time and it is also uploaded on the NTPC website which is periodically being replaced with updated HYC report. |
| xli | Regional office of the Environment & Forests shall monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent shall upload the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant. | A complete set of documents including Environmental Impact Assessment (EIA) Report and Environment Management Plan (EMP) along with the additional information / clarifications were forwarded on 10.03.2014 to the Regional Office (Western Region) of MOEF&CC at Bhopal. |
| (xlii) | Separate funds shall be allocated for implementation of environmental protection measures along with item - wise break -up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purpose and year-wise expenditure should be reported to the ministry. | The requisite funds for environmental mitigation measures have been included in the project cost. Financial provision stipulated towards environmental mitigate measures shall not be diverted for other purposes. |
| (xliii) | The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant. | Shall be complied. |
| (xliv) | Full cooperation shall be extended to the Scientists/officers from the Ministry / Regional Office of the Ministry/ CPCB /SPCB who would be monitoring the compliance of environmental status. | Full cooperation shall be extended to the Scientists / officers from the Ministry / Regional Office of the Ministry at Bhopal (Western Region) / the CPCB / the MPPCB during monitoring of the project. |
| (xlv) | The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may | Noted. |

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| | also impose additional environmental conditions of modify the existing ones, if necessary. | |
| (xlvi) | The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant | Noted. |
| (xlvii) | Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986. | Noted. |
| (xlviii) | In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any. | Noted. |

| DETAILS REGARDING R&R PALN EXECUTION | | | | | | | | | | | |
|---|------------------|-------------------------|---|-----------------|-----------------|---|---------------|--------------------|----------------------|-------------------|--------|
| CUMULATIVE EXPENSES ON APPROVED CD WORK FOR GADARWARA SUPER THERMAL POWER PROJECT | | | | | | | | | | | |
| B | COMMUNITY | | | | | | | | | | |
| B.1 | CD works in PAVs | | | | | | | | | | |
| Head | Sub-Head | Area | Description | Activities | Name of village | Subject | RAP (in Lacs) | Approved (in Lacs) | Disburshed (in Lacs) | Balance (in Lacs) | Agency |
| B.1 | B.1.1 | Infrastructure works ** | Construction of cement concrete (CC) roads & drainage, community halls, Panchayat bhawan, weekly market places (02), passenger shelter, welcome gates, playgrounds, river bank ghat, public orchard, tree plantation, solar lights, etc | CC ROAD | Chorbarheta | Construction of CC road | | 10.00 | 10.00 | - | NTPC |
| | | | | | Chorbarheta | Construction of CC road | | 5.53 | 5.53 | - | CEO JP |
| | | | | | Chorbarheta | Construction of CC road | | 17.35 | 17.35 | - | NTPC |
| | | | | | Chorbarheta | Construction of Cement Concrete Road / Pathway in Chorbarehta village | | 19.34 | 19.34 | - | NTPC |
| | | | | | Chorbarheta | Raising of Road Chowk at Chorbarehta | | 1.91 | 1.91 | - | NTPC |
| | | | | | Dongargaon | Construction of CC road | | 13.50 | 13.50 | - | CEO JP |
| | | | | | Dongargaon | Construction of CC road | | 0.51 | 0.51 | - | NTPC |
| | | | | | Dongargaon | Construction of CC pathway in Dongargaon | | 6.30 | 6.30 | - | NTPC |
| | | | | | Dongargaon | Construction of Cement Concrete Road / Pathway in Dongargaon Village | | 23.13 | 23.13 | - | CEOJP |
| | | | | | Gangai | Construction of CC road and drain at Gangai | | 10.00 | 10.00 | - | |
| | | | | | Ghat pipariya | Construction of CC road | | 10.00 | 10.00 | - | CEO JP |
| | | | | | Kudari | Construction of CC road and drain at Kudari | | 10.00 | 10.00 | - | CEO JP |
| | | | | | Kudari | Construction of CC road in Mehrakheda,Chorbarheta,Kudari | | 6.30 | 6.30 | - | CEO JP |
| | | | | | Mehrakheda | Construction of CC road in Mehrakheda,Chorbarheta,Kudari | | 10.00 | 10.00 | - | NTPC |
| | | | | | Mehrakheda | Construction of CC road in Mehrakheda, | | 13.12 | 13.12 | - | NTPC |
| | | | | | Mehrakheda | Construction of CC road/pathway Mehrakheda | | 4.00 | 4.00 | - | RES |
| | | | | | Mehrakheda | Construction of Repair of Road Chorbarheta to Mehrakheda | | 2.45 | 2.45 | - | NTPC |
| | | | | | Mehrakheda | Construction of Road- Plant Boundary to Mehrakheda | | 49.61 | 49.61 | - | NTPC |
| | | | | | Mehrakheda | Construction of Temporary road across Shakkar | | 0.37 | 0.37 | - | RES |
| | | | | | Umariya | Construction of CC road and drain at Umariya | | 10.00 | 10.00 | - | CEO JP |
| | | | | | Umariya | Construction of Road from NTPC link Road to Umariya | | 104.51 | 52.25 | 52.26 | NTPC |
| | | | | | | | | | | | |
| | | | | | | Sub Total | | 327.92 | 275.66 | 52.26 | |
| B.1 | B.1.1 | Infrastructure works ** | Construction of cement concrete (CC) roads & drainage, community halls, | Construction of | Chorbarheta | Construction of Community Halls | | 24.84 | 12.42 | 12.42 | RES |

Panchayat bhawan, weekly market places (02), passenger shelter, welcome gates, playgrounds, river bank ghat, public orchard, tree plantation, solar lights, etc

| | | | | | | |
|-------------------------|---------------|---|---------------|---------------|--------------|--------|
| Community hall | Dongargaon | Construction of Community Halls | 24.84 | 24.84 | - | RES |
| | Ghat Pipariya | Construction of Community Halls | 24.84 | 24.84 | - | RES |
| | Kudari | Construction of Community Halls | 24.84 | 24.84 | - | RES |
| | Mehrakheda | Construction of Community Halls | 24.84 | 24.84 | - | RES |
| | Umariya | Construction of Community Halls | 24.84 | 24.84 | - | RES |
| | Gangai | Construction of Community Halls | 40.00 | - | 40.00 | NTPC |
| | | Sub Total | 189.04 | 136.62 | 52.42 | |
| Entrance Gate | Chorbarheta | Construction of Entrance gate | 2.60 | 2.60 | - | CEOJP |
| | Dongargaon | Construction of Entrance gate | 2.60 | | 2.60 | CEOJP |
| | Ghat Pipariya | Entrance gate at Ghat pipariya | 2.60 | 2.60 | - | CEOJP |
| | Gangai | Entrance gate in Gangai villages | 2.60 | 2.60 | - | CEOJP |
| | Kudari | Entrance gate in Kudari villages | 2.60 | 2.60 | - | CEOJP |
| | Mehrakheda | Construction of Entrance gate | 2.60 | 2.60 | - | CEOJP |
| | Umariya | Entrance gate in 3 villages | 2.60 | 2.60 | - | CEOJP |
| | | Sub Total | 18.20 | 15.60 | 2.60 | |
| Passenger shed | Dongargaon | Passenger shed | 2.00 | 2.00 | - | CEOJP |
| | Kudari | Construction of passenger shed | 2.00 | 2.00 | - | CEOJP |
| | Ghat Pipariya | Construction of Ghat /Steps,Passenger Shed & Pond | 12.00 | 12.00 | - | CEOJP |
| | | Sub Total | 16.00 | 16.00 | - | |
| Cemetry | Ghat Pipariya | cemetery at villages Ghat Pipariya | 4.44 | 4.44 | - | CEOJP |
| | Kudari | Cemetery in villages Kudari | 1.71 | 1.71 | - | CEOJP |
| | Dongargaon | Cemetery villages Dongargaon | 4.85 | 4.85 | - | CEO JP |
| | Gangai | Cemetery villages Gangai | 4.85 | 4.85 | - | CEO JP |
| | | Sub Total | 15.84 | 15.84 | - | |
| Prantation | Chorbarheta | Tree Plantation | 3.15 | 3.15 | - | CEO JP |
| | Dongargaon | Tree Plantation | 1.97 | 1.97 | - | CEO JP |
| | Gangai | Tree Plantation | 4.72 | 4.72 | - | |
| | Umariya | Tree Plantation | 1.18 | 1.18 | | |
| | Ghat Pipariya | Tree Plantation | 1.97 | 1.97 | - | |
| | Mehrakheda | Tree Plantation | 2.75 | 2.75 | - | |
| | Kudari | Tree Plantation | 1.97 | 1.97 | - | CEOJP |
| | | Sub Total | 17.71 | 17.71 | - | |
| Panchayat Bhawan | Chorbarheta | Panchayat Bhawan | 15.35 | 7.78 | 7.57 | |
| | Gangai | Panchayat Bhawan | 15.35 | 7.78 | 7.57 | |
| | | Sub Total | 30.70 | 15.56 | 15.14 | |
| Ghat/Step | Kudari | Construction of ghat /steps | 5.00 | 5.00 | - | |
| | | Sub Total | 5.00 | 5.00 | - | |

| | | | | | | | | | | | |
|-----|-------|-------------------------|---|-----------------------------|-----------------------------|---|-----------------|---------------|---------------|---------------|---------------|
| | | | | RIPTA | Mehrakheda to Ghat Pipariya | Construction of Ripta | | 5.56 | 5.56 | - | PWD BRIDGE |
| | | | | | | Sub Total | | 5.56 | 5.56 | - | |
| B.1 | B.1.1 | Infrastructure works ** | Construction of cement concrete (CC) roads & drainage, community halls, Panchayat bhawan, weekly market places (02), passenger shelter, welcome gates, playgrounds, river bank ghat, public orchard, tree plantation, solar lights, etc | Public chabutra in Villages | Chorbarheta | Construction of public chabutra in Villages | | 0.35 | 0.35 | - | CEO JP |
| | | | | | Dongargaon | Construction of public chabutra in Villages | | 0.35 | 0.35 | - | CEO JP |
| | | | | | Gangai | Construction of public chabutra in Villages(out of 1.4lacs) | | 0.35 | 0.35 | - | CEOJP |
| | | | | | Umariya | Construction of public chabutra in Villages(out of 1.4lacs) | | 0.35 | 0.35 | - | CEOJP |
| | | | | | Ghat Pipariya | Construction of public chabutra in Villages(out of 1.4lacs) | | 0.35 | 0.35 | - | CEOJP |
| | | | | | Mehrakheda | Construction of public chabutra in Villages | | 0.35 | 0.35 | - | CEOJP |
| | | | | | Kudari | Construction of public chabutra in Villages(out of 1.4lacs) | | 0.35 | 0.35 | - | CEOJP |
| | | | | | | Sub Total | | 2.45 | 2.45 | - | |
| | | | | Electrical works in PAVs | Dongargaon | Electrical works in PAVs' (out of 40 lacs) | | 8.00 | 8.00 | - | NTPC |
| | | | | | Kudari | Electrical works in PAVs' (out of 40 lacs) | | 8.00 | 8.00 | - | NTPC |
| | | | | | Mehrakheda | Electrical works in PAVs' (out of 40 lacs) | | 8.00 | 8.00 | - | NTPC |
| | | | | | Chorbarheta | Electrical works in PAVs' (out of 40 lacs) | | 8.00 | 8.00 | - | NTPC |
| | | | | | Umariya | Electrical works in PAVs' (out of 40 lacs) | | 8.00 | 8.00 | - | NTPC |
| | | | | | | Sub Total | | 40.00 | 40.00 | - | |
| | | | | Uchit Mulya Dukan | Gangai | Construction of shed for Uchit Mulya Dukan toiletGangai | | 4.19 | 4.19 | | |
| | | | | | Gangai | Construction of shed for Uchit Mulya Dukan Gangai | | 3.40 | 3.40 | - | RES |
| | | | | | | Sub Total | | 7.59 | 7.59 | - | |
| | | | | | | TOTAL B1.1(Infrastructure) | 1,080.75 | 676.01 | 573.59 | 122.42 | 404.74 |
| B.1 | B.1.2 | Drinking water | Overhead tanks & pipelines, hand-pumps, deepening of pond. | Installation of Hand pumps | Chorbarheta | Installation of Hand pumps in PAVs | | 2.52 | 2.52 | - | PHE |
| | | | | | Dongargaon | Installation of Hand pumps in PAVs | | 2.52 | 2.52 | - | PHE |
| | | | | | Gangai | Installation of Hand pumps in PAVs | | 2.52 | 2.52 | - | PHE |
| | | | | | Ghat pipariya | Installation of Hand pumps in PAVs | | 2.52 | 2.52 | - | PHE |
| | | | | | Kudari | Installation of Hand pumps in PAVs | | 2.52 | 2.52 | - | PHE |
| | | | | | Mehrakheda | Installation of Hand pumps in PAVs | | 2.52 | 2.52 | - | PHE |
| | | | | | Umariya | Installation of Hand pumps in PAVs | | 1.02 | 1.02 | - | PHE |
| | | | | | | Sub Total | | 16.14 | 16.14 | - | |
| | | | | Water | Chorbarheta | Water supply pipeline | | 20.00 | 20.00 | - | PHE |

| | | | | | | | | | | | |
|-----|-------|------------|---|---|---------------|---|---------------|---------------|---------------|---|---------------|
| | | | | supply pipeline | Dongargaon | Water supply pipeline | | 18.55 | 18.55 | - | PHE |
| | | | | | Gangai | Water supply pipeline | | 20.00 | 20.00 | - | PHE |
| | | | | | Ghat pipariya | Water supply pipeline | | 9.62 | 9.62 | - | PHE |
| | | | | | Kudari | Water supply pipeline | | 19.62 | 19.62 | - | PHE |
| | | | | | Mehrakheda | Water supply pipeline | | 16.20 | 16.20 | - | PHE |
| | | | | | Umariya | Water supply pipeline | | 15.62 | 15.62 | - | PHE |
| | | | | | | Sub Total | | 119.61 | 119.61 | - | |
| | | | | Deepening and widening of existing pond | Chorbarheta | Deepening and widening of existing pond | | 5.00 | 5.00 | - | NTPC |
| | | | | | Gangai | Deepening and widening of existing pond | | 5.00 | 5.00 | - | NTPC |
| | | | | | Dongargaon | Deepening and widening of existing pond | | 5.00 | 5.00 | - | NTPC |
| | | | | | Kudari | Construction of ghat /steps | | 5.00 | 5.00 | - | CEO JP |
| | | | | | Gangai | Deepening and widening of existing pond | | 5.00 | 5.00 | - | NTPC |
| | | | | | | Sub Total | | 25.00 | 25.00 | - | |
| | | | | | | TOTAL B1.2 (Drinking Water) | 303.30 | 160.75 | 160.75 | - | 142.55 |
| B.1 | B.1.3 | Sanitation | Individual toilets in all households, common urinal, public garbage dumping place. | Toilts | Dongargaon | Toilets in each house | | 15.30 | 15.30 | - | CEOJP |
| | | | | | Gangai | Toilets in Every house hold in PAVs | | 80.69 | 80.69 | - | CEOJP |
| | | | | | Ghat Pipariya | Toilets in Every house hold in PAVs | | 44.31 | 44.31 | - | CEOJP |
| | | | | | Kudari | Toilet construction in each house in Kudari | | 28.05 | 28.05 | - | CEOJP |
| | | | | | Umariya | Toilet in each house Umariya | | 4.68 | 4.68 | - | CEOJP |
| | | | | | Mehrakheda | Toilet construction in each house | | 10.32 | 10.32 | - | CEOJP |
| | | | | | Gangai | toilet block in govt high school | | 2.45 | 2.45 | - | CEOJP |
| | | | | | Chorbarheta | Toilets in Every house hold in PAVs | | 28.34 | 28.34 | - | RES |
| | | | | | | Sub Total | | 214.14 | 214.14 | - | |
| | | | | | | TOTAL B1.2(Sanitation) | 294.35 | 214.14 | 214.14 | - | 80.21 |
| B.1 | B.1.4 | Education | Construction of Anganwadi, additional rooms in schools, kitchen sheds, study material, computers, books, sports item, etc | Boundary Walls | Dongargaon | Boundary Walls in PAV Schools | | 4.06 | 4.06 | - | CEOJP |
| | | | | | | Boundary Walls in PAV Schools | | 2.44 | 2.44 | - | CEOJP |
| | | | | | Gangai | Entrance gate of middle school Gangai | | 0.76 | 0.76 | - | CEOJP |
| | | | | | Gangai | Toilet construction in high school | | 2.45 | 2.45 | - | CEOJP |
| | | | | | Ghat Pipariya | Boundary wall at Ghat Pipariya | | 2.03 | 2.03 | - | CEOJP |
| | | | | | Kudari | Boundary Walls in PAV Schools(out of 18.65lacs) | | 8.09 | 8.09 | - | CEOJP |
| | | | | | Umariya | Boundary Walls in PAV Schools(out of 18.65lacs) | | 4.06 | 4.06 | - | CEOJP |
| | | | | | Umariya | Addl school Boundary wall (55m) | | 2.23 | 2.23 | - | NTPC |
| | | | | | | Sub Total | | 26.12 | 26.12 | - | NTPC |
| B.1 | B.1.4 | Education | Construction of Anganwadi, additional rooms in schools, kitchen sheds, study | Sports kit | Chorbarheta | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |
| | | | | | Dongargaon | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |

| | | | | | | | | | | | |
|------------|--------------|------------------|--|--------------------------------------|---------------|---|---------------|--------------|--------------|-------------|--------|
| | | | material, computers, books, sports item, etc | | Gangai | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |
| | | | | | Ghat pipariya | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |
| | | | | | Kudari | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |
| | | | | | Mehrakheda | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |
| | | | | | Umariya | Sports kit(0.49815 lacs) | | 0.07 | 0.07 | - | NTPC |
| | | | | | | Sub Total | | 0.50 | 0.50 | - | |
| | | | | Stationery to students | Kudari | Stationery to students | | 0.14 | 0.14 | - | NTPC |
| | | | | | Chorbarheta | Stationery to students | | 0.14 | 0.14 | - | NTPC |
| | | | | | Dongargaon | Stationery to students | | 0.14 | 0.14 | - | NTPC |
| | | | | | Gangai | Stationery to students | | 0.14 | 0.14 | - | NTPC |
| | | | | | Chorbarheta | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Dongargaon | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Gangai | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Ghat pipariya | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Kudari | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Mehrakheda | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Umariya | Scholarship to Students in PAVs | | 0.27 | 0.27 | - | NTPC |
| | | | | | Ghat pipariya | Scholarship to Students in PAVs | | 0.14 | 0.14 | - | NTPC |
| | | | | | Mehrakheda | Scholarship to Students in PAVs | | 0.14 | 0.14 | - | NTPC |
| | | | | | Umariya | Scholarship to Students in PAVs | | 0.14 | 0.14 | - | NTPC |
| | | | | | | Sub Total | | 2.90 | 2.90 | - | |
| B.1 | B.1.4 | Education | Construction of Anganwadi, additional rooms in schools, kitchen sheds, study material, computers, books, sports item, etc | Merit scholarship to students | Chorbarheta | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | Dongargaon | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | Gangai | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | Ghat pipariya | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | Kudari | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | Mehrakheda | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | Umariya | Merit scholarship to students | | 0.29 | 0.29 | - | NTPC |
| | | | | | | Merit scholarship to students All PAV | | 2.20 | 2.20 | - | |
| | | | | | | Sub Total | | 4.25 | 2.05 | 2.20 | |
| | | | | Skill Development | All PAV's | Driving Training to 55 beneficiaires PAV's | | 2.43 | 2.35 | | |
| | | | | | | | | 2.43 | 2.35 | | |
| | | | | LED bulbs | Mehrakheda | LED bulbs in Mehrakheda | | 0.52 | 0.52 | - | CEO JP |
| | | | | | | Sub Total | | 0.52 | 0.52 | - | |
| | | | | | | TOTAL B1.4(EDucation) | 367.00 | 36.71 | 34.43 | 2.20 | |
| B.1 | B.1.5 | Health | Providing Ambulance, medical camps, additional room in Govt dispensary | Family planning | Chorbarheta | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |

| | | | | | | | | | | | |
|-----|-------|------------------------|--|---|---------------|---------------------------------------|--------------|-------------|-------------|----------|--------|
| | | | | | Dongargaon | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |
| | | | | | Gangai | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |
| | | | | | Ghat pipariya | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |
| | | | | | Kudari | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |
| | | | | | Mehrakheda | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |
| | | | | | Umariya | Family planning incentive to PAPs | | 0.04 | 0.04 | - | NTPC |
| | | | | | | Sub Total | | 0.28 | 0.28 | - | |
| | | | | Medical Camps | Chorbarheta | Medical Camps in Pav's | | 0.43 | 0.43 | - | NTPC |
| | | | | | Ghat Pipariya | Medical Camps in Pav's | | 0.43 | 0.43 | - | NTPC |
| | | | | | Kudari | Medical clamp Kudari | | 0.63 | 0.63 | - | NTPC |
| | | | | | Chorbarheta | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | NTPC |
| | | | | | Gangai | Medical clamp | | 0.43 | 0.43 | - | NTPC |
| | | | | | Dongargaon | Medical Camps | | 0.43 | 0.43 | - | NTPC |
| | | | | | Umariya | Medical Camps | | 0.43 | 0.43 | - | NTPC |
| | | | | | Kudari | Medical clamp Kudari | | 0.43 | 0.43 | - | |
| | | | | Medical Camps | Chorbarheta | Tricycle and hearing aid distribution | | 0.87 | 0.87 | - | NTPC |
| | | | | | Mehrakheda | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | |
| | | | | | Umariya | Deferantly Able PPL Camp | | 0.03 | | | |
| | | | | | Ghat Pipariya | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | |
| | | | | | Kudari | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | |
| | | | | | Chorbarheta | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | |
| | | | | | Gangai | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | |
| | | | | | Dongargaon | Deferantly Able PPL Camp | | 0.03 | 0.03 | - | |
| | | | | | | Sub Total | | 4.32 | 4.56 | - | |
| | | | | | | TOTAL B1.5(Health) | 88.02 | 4.59 | 4.84 | - | |
| B.1 | B.1.6 | Other Welfare measures | Providing water tanker, utensils, support to Indira Awaas Scheme of Govt for BPL's, Rural Sports, PAPs ID card, Cooperative societies formation, Empowerment, etc. | Legal awareness camp (Upliftment of weaker section) | Chorbarheta | Legal awareness camp, Chorbarhata | | 4.00 | 4.00 | - | CEO JP |
| | | | | | Chorbarheta | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | CEO JP |
| | | | | | Dongargaon | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | CEO JP |
| | | | | | Gangai | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | CEO JP |
| | | | | | Ghat Pipariya | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | CEO JP |
| | | | | | Kudari | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | CEO JP |
| | | | | | Mehrakheda | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | CEO JP |
| | | | | | Umariya | Legal awareness camp at Chichli | | 0.51 | 0.51 | - | |
| | | | | | | Sub Total | | 7.54 | 7.54 | - | |

| | | | | | | | | | | | | |
|-----|----------------|------------------------|--|--|----------------------------|---|---------------------------------------|---------------|-------------|-------------|-----------|-------------|
| B.1 | B.1.6 | Other Welfare measures | Providing water tanker, utensils, support to Indira Awaas Scheme of Govt for BPL's, Rural Sports, PAPs ID card, Cooperative societies formation, Empowerment, etc. | Differanly Able Camp screening Camp & Aids | Chorbarheta | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Dongargaon | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Gangai | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Ghat Pipariya | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Kudari | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Mehrakheda | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Umariya | Medical screening Camp screening Camp | | 0.23 | 0.23 | - | | |
| | | | | | Blanket dist, | Gadarwara | Blanket distribution | | 0.50 | 0.50 | - | Dist REO |
| | | | | | | | Sub Total | | 2.10 | 2.10 | - | NTPC |
| | | | | | Cultural Program | Chorbarheta | Cultural Program Chorbarehta | | 0.51 | 0.51 | - | NTPC |
| | | | | | | Mehrakheda | Contribution towards cultural program | | 0.25 | 0.25 | - | |
| | | | | | | | Sub Total | | 0.76 | 0.76 | - | NTPC |
| | | | | | Water tanker And water ATM | Mehrakheda | Water tanker | | 0.78 | 0.78 | - | NTPC |
| | | | | | | Dongargaon | Water tanker | | 0.78 | 0.78 | - | NTPC |
| | | | | | | Gangai | Water ATM shed and Elec.conection | | 1.70 | 1.70 | - | NTPC |
| | | | | | | Chorbarheta | Water tanker | | 1.00 | 1.00 | - | NTPC |
| | | | | | | Gangai | Water tanker | | 1.00 | 1.00 | - | NTPC |
| | | | | | | Ghat Pipariya | Water tanker | | 1.00 | 1.00 | - | NTPC |
| | | | | | | Umariya | Water tanker | | 1.00 | 1.00 | - | NTPC |
| | | | | | | Kudari | Water tanker | | 1.00 | 1.00 | - | NTPC |
| | | | | | | | Sub Total | | 8.26 | 8.26 | - | |
| | SUM B.1 | | | | | | | | | | | |
| | | | | TOTAL B1.6 (Other Welfare) | 255.00 | 18.65 | 18.65 | - | | | | |
| | | | | CUMMULATIVE B.1 | 2,388.42 | 1,110.85 | 1,006.40 | 124.62 | | | | |
| B.2 | CD in vicinity | Vill.Tehsil,town/Dist. | | | | | | | | | | |
| B.2 | B.2.1 | Infrastructure works* | Construction of CC roads & drainage, community halls, public orchard, facilities at railway station , solarlights, Indoor stadium with Auditorium^ & swimming pool at Narsinghpur, Outdoor stadium with Auditorium at Gadarwara, etc | CC roads Narsinghpur | Narsinghpur | Paver blocks in Collector Office | | 7.09 | 7.09 | - | Collector | |
| | | | | | Narsinghpur | Petrol engine for fibre boat | | 3.75 | 3.75 | - | NTPC | |
| | | | | | Narsinghpur | Renovation works at Govt quarters at Narsinghpur-fencing | | 2.45 | 2.45 | - | | |
| | | | | | Gadarwara | Construction of CC Road, Drain and Levelling in New Tahsil office complex | | 15.91 | 15.91 | - | | |
| | | | | | Barman | Fair at Barman Ghat | | 1.50 | 1.50 | - | | |
| | | | | | Bhatera | Construction of Road grom Bhatera to Narmada River | | 52.00 | 26.34 | 25.66 | RES | |
| | | | | | Khakariya | Construction of Ghat at Kakraghat | | 70.00 | 35.00 | 35.00 | RES | |
| | | | | | Kakraghat | Visarjan kund at Kakraghat | | 70.00 | 35.00 | 35.00 | | |
| | | | | | Gadarwara | Solar system in Badagaon tah | | 2.50 | 2.50 | - | NTPC | |

| | | | | | | | | | | | |
|------------|--------------|----------------|--|--------------------------|----------------|---|-----------------|-----------------|-----------------|---------------|-----------|
| | | | | | Chichli Block | Boundry wall In Govt. School Shinhpur Chhota (SMDC HIGH SCHOOL) | | 5.00 | 5.00 | - | |
| | | | | | Chichli Block | Boundry wall In Govt. School Kahargoan (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | - | |
| | | | | | Chichli Block | Boundry wall In Govt. School Khairua (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | - | |
| | | | | | Chichli Block | Boundry wall In Govt. School Kathotiya (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | - | |
| | | | | | Chichli Block | Boundry wall In Govt. School Shiregaon (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | - | |
| | | | | | Chichli Block | Boundry wall In Govt. School Pachama (SMDC HIGH SCHOOL) | | 5.00 | 5.00 | - | |
| | | | | | Saikheda Block | Boundry wall In Govt. School Bhidwani (SMDC HIGH SCHOOL) | | 3.00 | 3.00 | | |
| | | | | | Saikheda Block | Boundry wall In Govt. School Piparpani (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | | |
| | | | | | Saikheda Block | Boundry wall In Govt. School Adegaon kala (SMDC HIGH SCHOOL) | | 3.00 | 3.00 | | |
| | | | | | Saikheda Block | Boundry wall In Govt. School Dungariya (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | | |
| | | | | | Saikheda Block | Boundry wall In Govt. School Surshipar (SMDC HIGH SCHOOL) | | 4.00 | 4.00 | | |
| | | | | | Saikheda Block | Boundry wall In Govt. School Saikheda (SMDC HIGH SCHOOL) | | 5.00 | 5.00 | | |
| | | | | | Saikheda Block | Boundry wall In High School Kathotiya. | | 18.83 | 9.42 | 9.42 | |
| | | | | | | Sub Total | | 216.54 | 196.01 | 41.68 | |
| | | | | | | TOTAL B.2.3 (Education) | 267.50 | 216.54 | 196.01 | | |
| B.2 | B.2.4 | Health | Ambulance, health centre up-gradation, medical camps, awareness camps, etc. | Health Facilities | Narsinghpur | Financial assistance to Sh Vivek Kaurav for kidney transplant | | 1.50 | 1.50 | - | Collector |
| | | | | | Narsinghpur | Providing Health Facilities at Narsinghpur | | 14.90 | 14.90 | - | NTPC |
| | | | | | Gadarwara | Providing Multi para monitor at Gadarwara Hosp | | 2.10 | 2.10 | - | NTPC |
| | | | | | Gadarwara | Medical clamp | | 0.50 | 0.50 | - | |
| | | | | | Gadarwara | Addl wards in Hospital at gadarwara | | 32.00 | 32.00 | - | RES |
| | | | | | Gadarwara | Construction of drain in Govt Hospital at Gadarwara | | 18.60 | 18.60 | - | RES |
| | | | | | | Sub Total | | 69.60 | 69.60 | - | |
| | | SUM B.2 | | | | TOTAL B.2.1 (Health) | 306.25 | 69.60 | 69.60 | - | |
| | | | | | | CUMMULATIVE B.2 | 2,171.37 | 1,467.50 | 1,050.21 | 396.76 | |
| | | | | | | CUMMULATIVE B1+B2 | 4,559.79 | 2,578.35 | 2,056.61 | 521.38 | - |

EC Amendment Compliance report of :- 2x800 MW (Stage-I) Gadawara Super Thermal Power Project near villages Gangai, Umaraiya, Mehrakheda, Chorbarheta, Dongergaon and Kudari, in Gadawara Tehsil, Narsinghpur Distt. in Madhya Pradesh by M/s NTPC Ltd.-reg. amendment in EC. (File No: J-13012/125/2009-IA.II(T))

The proposal has been considered by the E A C (Thermal) in its 8th meeting held on 24.7.2017. In acceptance of recommendations of the EAC (Thermal) in its 8th meeting held on 24.7.2017, the *Ministry hereby amends the EC dated 22.3.2013 for change in coal source from Talaipalli coal block to Pakri Barwadih coal block and for transportation of 8 MTPA coal by road for a distance of 15 km till December, 2018* subject to following additional conditions:

| S.no. | Compliance | Status |
|-------|--|---|
| 1 | Road repair and maintenance is to be carried out by NTPC. | Shall be complied, whereas required |
| 2 | Trucks shall be covered with tarpaulin and properly stamped to ensure that tarpaulin is properly tied with the help of rope and truck shall be fully covered so that there is no spillage of coal and/or emission of dust during transportation. | Shall be complied. This condition has been incorporated in letter of award to the transporter / contract |
| 3 | Continuous water sprinkling, sweeping and dust control measures shall be carried out through out the road for minimising the air pollution. | Shall be complied, during the transportation of Coal from coal siding to plant. |
| 4 | Plantation shall be carried out along side of the road for noise attenuation and control of air borne dust. | It is being complied and in progress. |
| 5 | Plantation shall also be carried out on the banks of Sangam confluence of Shakkar nadi and Narmada nadi. | In compliance to the said stipulation the plantation activity will be carried out; <ul style="list-style-type: none"> • In and around the proposed site is agricultural land and greenery already exists • In consultation with Revenue department for availability of land for plantation. • Discussion for MOU with forest department to carry out plantation once land available to us. |

Tree Plantation Status:-

| | Tree Plantation Scheme | Plantation area | No. of Trees Planted | Status |
|---|---|---|---|---|
| 1 | Under Accelerated afforestation drive with the State Forest Departments of Madhya Pradesh, Bihar, Assam, Karnataka, Andhra Pradesh, Telengana and Maharashtra to plant 10 million trees.. | In seven divisions of M.P. – 2016-17 (One time program) | Total 1 crore tree planted. Out of which 50 Lakhs tree plantation in MP. (Rest in other states) | Completed |
| 2 | Under the scheme Intended Nationally Determined Contribution (INDC-2030) creating additional Carbon Sink (10 years program) | MOU for 50 thousand tree plantation per year, through MPRVVNL in Seoni District -2016 and 2017 target completed | 1 lakh tree planted | For 2018 |
| 3 | Mass tree plantation under – Namami Devi Narmade program driven by honorable CM of MP On 2 nd July'2017 | Near Project | 30000 trees | Completed |
| 4 | Environment day 5 th June 2017 | Tree planted by employees and villagers | 1000 trees | Completed |
| | | Saplings distributed to project affected villagers | 10000 trees | Completed |
| 5 | Green Belt Development | Near Project | 20000 trees | Completed |
| | | Inside Project | 10500 trees | (likely to be done in this mansoon-2018) through MPRVVN |