

**SIX MONTHLY COMPLIANCE REPORT OF  
ENVIRONMENT CLEARANCE (EC)**

**1320 (2×660) MW THERMAL POWER PLANT**

**At**

**CHHATAI, MAJHTOLIYA & UMARDA VILLAGE,  
KOTMA TEHSIL, ANUPPUR DISTRICT,  
MADHYA PRADESH**

**Submitted to:**

**Western Regional Office  
Ministry of Environment, Forest & Climate Change  
Central Pollution Control Board, New Delhi &  
Madhya Pradesh Pollution Control Board, Bhopal**

***Submitted By:***

**Environment Management Department  
Anuppur Thermal Energy Pvt. Ltd.  
Chhatai, Majhtoliya & Umarda Village,  
Kotma Tehsil, Anuppur District,  
Madhya Pradesh**

**PERIOD: October'2019 – March'2020**

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## **Introduction:**

**Anuppur Thermal Energy (MP) Pvt. Ltd. – ATE(MP)PL (formerly known as Welspun Energy Anuppur Pvt. Ltd.)** a subsidiary of Adani Infra (India) Limited, is developing 1320 (2x660) MW Coal-based Ultra Supercritical Thermal Power Plant at village Chhatai, Majhtoliya & Umarda in Kotma Taluka, District Anuppur, Madhya Pradesh. The Power Project is based on Ultra Supercritical, energy efficient & environment friendly technology.

Welspun Energy Anuppur Pvt. Ltd. was granted Environment Clearance & Consent to Establish from MoEF&CC vide letter no. J-13012/144/2010-IA.II (T) dated 27.11.2012 and Madhya Pradesh Pollution Control Board vide letter dated 18.07.2013 respectively. The name of the company was changed to ATE(MP)PL after it was acquired by AIL. ATE(MP)PL also obtained all necessary statutory / mandatory clearance respectively. Land is already in possession of the company.

The total requirement of land for the power project is around 900 Acre. Coal requirement is estimated at 5.27 MTPA in case of Imported Coal & 6.74 MTPA for indigenous coal will be made available as interim arrangement for generating Power. Coal from Indonesia will be brought to Dhamra Port, from where in will be transported to site.

Water will be drawn from the Kewai River which is located at a distance of about 01 km from project site. Water will be brought to the site through a dedicated pipeline. Water allocation of 40 MCM has been received from Water Resource Department, Govt. of Madhya Pradesh.

**ATE(MP)PL has completed infrastructure development and enabling works for the Power Plant, such as: Boundary wall, stores, office, & Transmission line ROW/ROU, Power Project pre-construction activities etc.**

MoEF&CC has issued the letter for the transfer of EC From Welspun Energy Anuppur Pvt. Ltd to Anuppur Thermal Energy (MP) Pvt. Ltd.

Anuppur Thermal Energy (MP) Pvt. Ltd. has also been granted Extension in validity of EC vide letter no. J-13012/144/2010-IA.II (T) dated 27.11.2012 and amendment dated 07.01.2020.

## Compliance status on Environment Clearance

### (2x660 MW Anuppur Thermal Power Plant)

Ref. Environmental Clearance Letter No. J13012/144/2010-IA.II (T) dated 27/11/2012 & 07.01.2020.

| Sr. No.                       | Stipulated Clearance Conditions  | Compliance status  |
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| <b>A. Specific Conditions</b> |  |  |
| (i)                           | In case source of fuel supply is to be changed at a later stage (Now proposed through imported coal from Indonesia), the project proponent shall intimate the ministry well in advance along with necessary requisite documents for its concurrence for allowing the change. In such a case the necessity for re-conducting public hearing may be decided by the Ministry in consultation with the Expert Appraisal Committee. | Noted & Compliance assured<br>Change in the source of fuel supply will be intimated to the Ministry well in advance with necessary requisite documents.  |
| (ii)                          | No further expansion beyond 2x660 MW shall be allowed in the proposed site.  | Noted.<br>If further expansion is needed it will be intimated to the Ministry well in advance along with necessary requisite documents.  |
| (iii)                         | 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 to the Regional office of the Ministry from time to time.  | Noted.<br>Feasibility for harnessing Solar power will be explored and accordingly action plan will be made for implementation.   |
| (iv)                          | A study shall be undertaken through a reputed Govt. Organization/Agriculture University on the impact on vegetation within 10km. radius of the plant due to fly ash generated and action taken shall be submitted to the Ministry. The study shall be completed within one year of operation of the proposed power station.  | Noted.<br>Compliance assured, study will be completed within one year of start of operation.   |
| (v)                           | A wildlife conservation plan shall be prepared / formulated in consultation with the office of the Chief Wildlife Warden and duly vetted by the concerned Chief Wildlife Warden for immediate implementation. The plan shall have an in-built monitoring mechanism.  | Wild life conservation plan has been prepared and submitted to DFO Anuppur on 3/01/2012.<br>A copy of forwarding letter is already submitted along with compliance report.   |
| (vi)                          | Provision for installation of FGD shall be provided for future use.  | Noted.<br>Space provision for FGD has been incorporated in to the project layout.<br>As per MoEF&CC's Notification dated 07.12.2015, to comply SO <sub>2</sub> and NO <sub>x</sub> emission standard, FGD and De-NO <sub>x</sub> system will be installed. |
| (vii)                         | Coal transportation to plant site shall be undertaken by rail and no road transportation shall be permitted.   | Noted & Compliance assured,  |

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| (viii) | A detailed study on chemical composition of coal used particularly heavy metal and radio activity contents shall be carried out through a reputed institute and report shall be submitted to Regional Office of the Ministry. Only after ascertaining its radioactive level shall fly ash be utilized for brick manufacturing or supplied to brick manufacturers.                   | Noted & Compliance assured, once the project takes off.  |
| (ix)   | Fly ash shall not be used for mine void filling or agricultural purpose.  | Compliance assured, once the project takes off.  |
| (x)    | The project proponent shall carry out a long term R&D on Boiler efficiency vis-a-vis large variation on ash content of coal and submit its findings to the ministry at a later stage.   | Compliance assured, once the project takes off.  |
| (xi)   | One bi-flue stack 275 m height with flue gas velocity not less than 22m/s shall be installed and provided with continuous online monitoring equipments for SO <sub>x</sub> , NO <sub>x</sub> and PM <sub>2.5</sub> & PM <sub>10</sub> . Mercury emissions from stack may also be monitored on periodic basis.   | Stack height of 275 m proposed. Online monitoring system is also proposed including Mercury emissions will be monitored periodically.  |
| (xii)  | High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50mg/Nm <sup>3</sup> . Dry Low NO <sub>x</sub> Burners shall be installed.  | Electro Static Precipitator (ESPs) with 99.93% removal efficiency proposed to ensure that particulate emission does not exceed 50 mg/Nm <sup>3</sup> . Low NO <sub>x</sub> burners will be provided.   |
| (xiii) | 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.   | Noted,<br>Compliance assured, once the project takes off.  |
| (xiv)  | Utilization of 100% Fly Ash generated shall be made from 4 <sup>th</sup> year of operation. Status of implementation shall be reported to the Regional Office to the Ministry from time to time.  | Ash utilization plan/schedule has been incorporated in the EIA report. Status of implementation shall be reported to the Regional office, MoEF&CC regularly during plant operation.<br>In this context MOU with M/s ABG Cement for supply of fly ash has been already submitted. |
| (xv)   | 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.) will 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. | Noted,<br>Compliance assured, once the project takes off.  |
| (xvi)  | The project proponent shall ensure that no drinking water shortage due to drawl of water from Kewai River for agricultural and drinking   | Noted & Compliance assured,  |

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|         | purpose shall prevail.  |  |
| (xvii)  | Ash pond shall be located far away from the low lying area and as submitted by the project proponent at revised location in between latitude 23°21'51.022" N to 23°22'20.442"N and Longitude 82°2'35.101"E to 82°3'12.783"E. Ash pond water shall be reticulated and utilized.  | Noted & Compliance assured,  |
| (xviii) | 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.   | Noted & Compliance assured,<br>A suitable lining with permeability coefficient of 10 <sup>-6</sup> cm/s or less will be provided in the ash pond / dyke.   |
| (xix)   | Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 0.34% 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 & Compliance assured,<br>Change in the source of fuel (Coal Quality) supply will be intimated to the Ministry well in advance.   |
| (xx)    | 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. | Noted & Compliance assured,  |
| (xxi)   | No ground water shall be extracted for use in operation of the power plant even in lean season.   | Noted & Compliance assured,<br>Water will be sourced from the Kewai River.   |
| (xxii)  | 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.   | Noted & Compliance assured,  |
| (xxiii) | 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 & Compliance assured,  |
| (xxiv)  | Land and water requirement shall be restricted as per latest CEA norms issued.  | Noted & Compliance assured,<br>Land requirement will be 900 acers and water requirement will be 40 MCM per Year.   |
| (xxv)   | COC of 5.0 shall be adopted.  | Noted & Compliance assured,  |
| (xxvi)  | 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  | Noted & Compliance assured,<br>Piezometers will be installed and ground water samples will be collected and analyzed as well as results shall be furnished to MOEF along with compliance report once the plant is operational. |

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|          | 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.   |   |
| (xxvii)  | Monitoring surface water quality and quantity 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. | Compliance assured, once the project takes off. |
| (xxviii) | Waste water generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB.   | Compliance assured, once the project takes off. |
| (xxix)   | 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.         | Compliance assured, once the project takes off. |
| (xxx)    | It shall be ensured that the area drainage is not disturbed due to the proposed project.  | Noted & Compliance assured,                     |
| (xxxi)   | Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.   | Noted & Compliance assured,                     |
| (xxxii)  | At least three nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health center primary school etc shall be developed in co-ordination with the district administration.  | Noted.  |
| (xxxiii) | A special scheme for up-liftment of SC & ST population in the study area shall be formulated and implemented in a time bound manner. The project proponent shall also identify the rights to tribal under existing Laws and ensure its protection and implementation thereof.   | Noted.  |
| (xxxiv)  | In addition marginalized farmers indirectly affected by the project shall be identified and special scheme for sustainable livelihood for these marginalized section of the poor villagers whose sustenance are dependent on the land owned by them but now proposed to be acquired for the proposed project shall be formulated and implemented.   | Noted & Compliance assured,                     |
| (xxxv)   | R&R PAPs shall be completed in a time bound   | Noted & Compliance assured,                     |

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|                              | manner and before commissioning of the proposed plant.   | R&R plan is being implemented as approved by M.P. govt.  |
| (xxxvi)                      | The project proponent shall also adequately contribute in the development of the neighboring village. Special package with implementation schedule for providing potable drinking water supply in the nearby village and schools shall be undertaken in a time bound manner.   | Noted & Compliance assured,  |
| (xxxvii)                     | 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.   | Noted & Compliance assured,<br>A separate budget is already earmarked for CSR activities as per Need based Assessment study Report.                                      |
| (xxxviii)                    | An amount of Rs. 28.00 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent. Subsequently a recurring expenditure of Rs. 5.60 Crores per annum till the life of the plant shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within six month along with road map for implementation. | Compliance assured, once the project takes off & plant operation period.   |
| (xxxix)                      | 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 to time. The achievements should be put on company's website.  | Noted & Compliance assured,  |
| (xl)                         | Green Belt consisting of 3 tiers of plantations of native species around plant and 100m width shall be raised. The density of trees shall not less than 2500 per ha with survival rate not less than 80%.  | Compliance assured, once the project takes off.  |
| (xli)                        | An Environmental Cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and directly report to the Head of the Organization.  | We have established Environment Management Department with Senior Management at Corporate level. Site Environment Cell will be created once project construction starts. |
| <b>B. General Conditions</b> |  |  |
| (i)                          | The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that the effluents and storm water do not get mixed.  | Noted & Compliance assured,  |
| (ii)                         | A sewage treatment plant shall be provided (as   | Noted & Compliance assured,  |



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|        | applicable) and the treated sewage shall be used for raising greenbelt/plantation.  |   |
| (iii)  | 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.   | Compliance assured,<br>Adequate safety measures will be provide during construction as well as operation.   |
| (iv)   | 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 will 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.   | Noted, Compliance assured, once the project takes off.  |
| (v)    | First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.   | Compliance assured, once the project takes off. First Aid Center / facility will be made available during construction phase.   |
| (vi)   | Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from source. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. 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.   | Compliance assured, once the project takes off.<br>Necessary provision has been taken care in designed to maintain noise levels within 85 dB(A). The working personnel will be provided with personal protective equipment (PPE's) & periodic audiometric check-up will be carried out. |
| (vii)  | Regular monitoring of ambient air ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>2.5</sub> & PM <sub>10</sub> and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location o 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. | Compliance assured, once the project takes off.   |
| (viii) | Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure 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 structures to be removed after the completion of the project.   | Noted.<br>Local manpower will be hired for construction, so no need for provision of their Housing.   |

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| (ix)   | The project proponent shall advertise in at least two local newspapers 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 also be seen at Website of the Ministry Of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .                      | Complied.<br><br>An advertisement for obtaining of EC published in 2 local newspapers – Dainik Kirti - Kranti and Dainik Aksharshah dated 4 December 2012 which is widely circulated in the region.<br><br>A copy of the same is already submitted.   |
| (x)    | A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representation, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.   | Complied.<br>We have already submitted EC Letter to Gram Panchayat – Umarda, Chhatai, Janpad Panchayat, Kotma, Zila Panchyat Anuppur, Land aqsition & Revanue office Kotma & Anuppur, Tehsil office -Kotma and 2 local NGOs vide letter dated 3.12.2012.<br>A copy of the same is already submitted along with compliance report.   |
| (xi)   | 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 SPCB. The criteria pollutant levels namely; SPM, RSPM (PM <sub>2.5</sub> & PM <sub>10</sub> ), SO <sub>2</sub> , NO <sub>x</sub> (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. | Compliance status report is regularly being submitted to MoEF&CC, CPCB & MPPCB. The same is sent by email also.<br>Last compliance report for the period of April '2019 to September '2019 had been submitted our vide letter no. ATPP/ENV/EMD/EC/MoEF/183/11/19<br>Dated: 20/11/2019<br>Compliance report uploaded on the company website<br><a href="https://adaniinfra.com/">https://adaniinfra.com/</a> |
| (xii)  | The environment statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.  | Noted & Compliance assured,   |
| (xiii) | The Project proponent shall submit six month reports on the status of the implementation 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   | Six monthly compliance status report is regularly submitted to MoEF&CC, CPCB & MPPCB. The same is sent by email also.<br>Last compliance report for the period of April '2019 to September '2019 had been submitted our vide letter no. ATPP/ENV/   |

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|                                  | compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.   | EMD/EC/MoEF/183/11/19<br>Dated: 20/11/2019<br>Compliance report uploaded on the company website<br><a href="https://adaniinfra.com/">https://adaniinfra.com/</a>                |
| (xiv)                            | Regional Office of the Ministry of Environment and Forests will monitor the implementation of the stipulated conditions. A Complete set of documents including Environmental Impact Assessment Report and Environmental 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 will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NO <sub>x</sub> (from stack & ambient air) shall be displayed at the main gate of the power plant. | Noted & Compliance assured,   |
| (xv)                             | 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 purposes and year-wise expenditure should be reported to the Ministry.   | Rs 441.00 crore has been allocated for implementation of environmental protection measures.<br><br>Recurring Cost Rs. 9.14 Crores is Proposed.                                  |
| (xvi)                            | 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 by the concerned authorities and the dates of start of land development work and commissioning of plant.   | Noted & Compliance assured,<br><b>Financial Closure yet to be achieved and Thermal Power Construction work yet to start.</b>  |
| (xvii)                           | Full cooperation shall be extended to the Scientists/Offices from the Ministry/Regional Office of the Ministry/CPCB/SPCB who would be monitoring the compliance of environmental status.  | Noted & Compliance assured,<br><br>Full co-operation shall be extended all time.  |
| <b>Conditions of Extended EC</b> |   |   |
| (i)                              | The details regarding Financial Closure, and copy of Power Purchase Agreement shall be submitted. Accordingly, the zero date of construction shall be informed to the Ministry.   | Compliance assured.<br>Power Purchase Agreement (PPA) is yet to be signed<br>Zero date of construction & Progress of construction will be intimated once the project takes off. |

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| (ii)  | The physical and financial progress of implementation of pollution control equipment (ESP, FGD and De-NOx systems) to meet new emission norms dated 7. 12.2015 shall be submitted to the Ministry, its Regional Office and CPCB. | Noted & Agreed<br>Zero date of construction & Progress of construction including installation of ESP, FGD, De-NOx will be intimated once the project takes off. |
| (iii) | Progress of construction of power plant with detailed report on physical activities and financial expenditure shall be submitted till the plant is commissioned.   | Noted & Compliance assured<br>Detailed report on physical activities along with expenditure will be submitted, once the project takes off.                      |