

ADHUNIK POWER AND NATURAL RESOURCES LIMITED



WORKS : Village - Padampur, Behind P.G.C.I.L Substation,
Adityapur Kandra Road, Sarakela - Kharwan : 832402, Jharkhand
Phone: + 91-657-6628400, Fax: + 91-657-6688440

Ref: MOEF, BBS/HYC/PS/25112014 /02 Dated: 25.11.2014

To,

The Regional Officer (East)
Plot No -A/3, Chandrashekarapur
Bhubaneswar
Orissa-751023

Sub:- Submission of Half yearly compliance status report (Unit II) for the period -
April 2014 to September 2014,-Reg.

Ref:- MOEF EC letter No.J-13012/8/2009-IA.II(T), Dated 09th May 2011.

Sir,

With reference to the above referred Environmental Clearance, we are pleased to submit
herewith the half yearly compliance status report (Unit II) for the period of April 2014 to
September 2014

This is for your reference and record, please.

Thanking you,

For Adhunik Power & Natural resources Limited

[Signature]
25/11/2014
Dr. Vijai Pal Singh
(Authorized Signatory)

Encl: As Above

Copy to:
i) The Chairman, Jharkhand State Pollution Control Board, Jharkhand
ii) Regional Officer, JSRCB, Jamshedpur

M. Tanaji
Private Secretary
Ministry of Env., Forests & CC
Govt. of India
ERO, Bhubaneswar-751023

[Signature]
Received

Ministry of Env., Forests & J.C.
Private Secretary
M. Tanaji
ERC, Bhubaneswar-751025

Jharkhand

Kandra Chouka Road, Saraikela-Kharsawan
Village: Padampur, Behind PGCIL Substation
Adhunik Power & Natural Resources Limited

APRIL 2014 – SEPTEMBER 2014



(Unit II)

PLANT

ENVIRONMENTAL COMPLIANCE STATUS REPORT
FOR
EXPANSION OF 1X270 MW COAL BASED POWER

REPORT

Ministry of Env., Forests & CC
 Govt. of India
 Private Secretary
 M. Tanal
 ERG, Bhuvaneshwar-751023

Sl No	Period Of Compliances: April,14-September,14	Status as on 30th September 2014	A. Specific Conditions:
i.	Environmental clearance for the proposed	Noted	<p>expansion shall be applicable only for addition of 1x270 MW out of proposed addition of 3x270. However at a later stage when firm coal linkage for second and third units of 270 MW are also available, the project proponent may request the Ministry for inclusion of second and third units i.e. 2x270 MW, which the Ministry shall consider appropriately.</p>
ii.	As per notification date 29 th March 2012 project	boundary are not in 300 meter from the boundary of the protected area of Dalma Wildlife Sanctuary in the State of Jharkhand as the Eco-sensitive Zone.	<p>The Ministry had issued a draft Notification on 30th March, 2011 vide S.O. 691(E) under the Environment (Protection) Act, 1986 notifying the areas upto 5 km from the boundary of the protected area of Dalma Wildlife Sanctuary in the State of Jharkhand as the Eco-sensitive Zone. The necessity of obtaining environmental clearance from the National Board for Wild life would arise only if the proposed project area falls within the boundary of the finally notified eco-sensitive zone.</p>
iii.	The Wild Life Management Plan (WLMP) has	prepared already been approved by PCCF, Ranchi on May'10,2010.	<p>Wildlife conservation plan shall be implemented during the development of project itself and the status of implementation shall be submitted to the Ministry from time to time.</p>
iv.	Vision document specifying prospective plan	for the site shall be formulated and submitted to the Ministry within six months.	<p>Vision document specifying prospective plan for the site shall be formulated and submitted to the Ministry within six months.</p>
v.	Possibility for harnessing solar power within	the premises of the plant (particularly at available roof tops) shall be examined and status of implementation shall be submitted.	<p>Possibility for harnessing solar power within the premises of the plant (particularly at available roof tops) shall be examined and status of implementation shall be submitted to the Regional Office of the Ministry from time to time.</p>
vii.	Transport of coal shall be by rail only. The	project proponent shall accordingly take up the matter with the Railways. Status of implementation shall be submitted to the Regional Office of the Ministry from time to	<p>A study shall be undertaken by an organization of repute such as RIT, Kharagpur. Report was already submitted by BBS dated 11.11.11. Complied</p>
viii.	Water sustainability report has been	submitted by the project proponent to the Ministry of Env., Forests & CC, Govt. of India.	<p>Water sustainability report has been submitted by the project proponent to the Ministry of Env., Forests & CC, Govt. of India.</p>

VIII: Padampur, Behind PGCL Substation, Kandra Chouka Road, Saraikela-Kharsawan, Jharkhand
 Adhunik Power & Natural Resources Limited
 Environmental Clearance Letter No: J13012/8/2009-IA .II (T) dtd 9th May 2011.

M. Tanaji
 Private Secretary
 Govt. of India
 Ministry of Env., Forests & CC
 ERU, Bhuvaneshwar-751023

viii.	Water usage shall be restricted to 30 MCM.	We ensure.
ix.	The project proponent shall seriously undertake rain water harvesting measures and shall develop water storage capacity for a larger period not less than 30 days storage before commissioning of the plant. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology/design within a period of three months from the date of this clearance and details shall be furnished. The design of rain water harvesting shall comprise of rain water collection from the built up and open area in the plant premises. Action plan and road map for implementation shall be submitted to the Ministry within six months.	The Rain water harvesting report has already been submitted and approved from CGA Ranchi. Rain water harvesting structures has constructed in accordance with the approved rain water harvesting plan.
x.	Existing de-generated water bodies (if any) in the study area shall be regenerated at the project proponents expenses in consultation with the state govt.	Noted
xi.	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 and 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.	The baseline ground water quality of ash pond area is already available with APNRL as part of EIA and ESIA study undertaken. However regular monitoring of ground water in and around ash pond area including heavy metals is being carried out periodically. Monthly monitoring of Water, is being undertaken by APNRL engaging Therman & for 3 rd party Monitoring APNRL engaging NABL accredited M/s Cleenviron Pvt Ltd (for the month of July 2014). Surface Water Analysis report and Ground water analysis report of upstream & Downstream of Ash pond from April, 14 to Sep, 14 Attached as Annexure I & Annexure II respectively
xii.	Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional Office of the Ministry within three months.	Lean season data has already submitted To MOEF BBS on 19th aug 2011. Complied
xiii.	No ground water shall be extracted for use in operation of the power plant even in lean season.	We ensure.
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.	Noted.
xv.	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
xvi.	COC of 5.0 shall be adopted.	COC 5.0 has been considered for cooling tower design.

Ministry of Env., Forests & CC
 Govt. of India
 Private Secretary
 M. Tahaaj
 ERG, Bhubaneswar-751025

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.	xvii.
Surface Water Analysis report and Ground water analysis report of upstream & Downstream of Ash pond from April,14 to Sep,14 Attached as Annexure I & Annexure II respectively	xviii.
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. The leveling in plant area should be minimum with no or minimal disturbance to the natural drainage of the area.	xix.
Provision for installation of FGD shall be provided for future use	xx.
The project proponent shall undertake measures and ensure that no fugitive fly ash emissions take place at any point of time.	xxi.
Stacks of 275 m height shall be installed and provided with continuous online monitoring equipments for SO ₂ , NO _x and PM _{2.5} & PM ₁₀ . Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also monitored on periodic basis.	xxii.
Stacks of 275 m height shall be installed and High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm ³ .	xxiii.
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.	xxiv.
Utilization of 100% fly Ash generated shall be made from 4 th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	xxv.

Necessary mitigation measures in accordance with EIP and EC conditions has taken to control fugitive emissions from ash storage/transfer and coal handling plant such as installation and operation of bag filters collectors, use of water spray systems and enclosed conveyors with well designed, extraction and filtration equipment on transfer points.

Agreements made with cement plants, brick plants, etc to ensure 100% utilization of fly ash from plants, year onwards.

Twin flue chimney of 275m height has constructed for proper dispersion of flue gases. Online monitoring equipment has installed at chimney. Stack Monitoring report and Ambient Air Monitoring report from April,14 to Sep,14 Attached as Annexure III & Annexure IV respectively

High efficient ESPs of 32 fields have installed to ensure control PM emission in flue gas.

Stack Monitoring report from April,14 to Sep,14 Attached as Annexure III.

