



Monnet Power Company Limited

At : Malibramahani, P. O. : Nisa, Via : Koshla, Dist : Angul - 759 130, Odisha
Phone : 06764-224000, 224014, Fax : 06764-224006
E-mail : angul@monnetgroup.com

o/c

Ref: MPCL/Ang/Env/MoEF/Jan-01

Date: 22.01.2014

Regional Head (Eastern Zone)
Ministry of Environment and Forests
A/3, Chandrasekharpur, Bhubaneswar - 751023
Ph. No-0674-2301213, Fax-0674-2302432

Subject: Six Monthly Status of Compliance for Environmental clearance granted to 2x525 MW power project located in village: Malibramahani, P.O.: Nisha, Dist-Angul, Odisha by M/S Monnet Power Company Limited, - reg.

Ref: - Ministry's letter no. J-13011/79/2007-IA.II (T) date 29.06.2010

Dear Sir,

With reference to the subject above, please find enclosed herewith our Status of Compliance to Environmental Clearance up to December 2013.

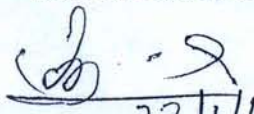
The soft copy of this compliance report is also being sent to you through e-mail (mef.or@nic.in).

We hope that you will find the attached reports satisfactory and in compliance to Environmental Clearance and Post Environmental Clearance Monitoring requirements as per Notification S.O. 1533 for EIA dt.14.09.2006.

Thanking You.

Yours sincerely

For Monnet Power Company Limited


GM-Land 22/1/14
(Authorized Signatory)



CC: (1) Member Secretary, SPCB, Bhubaneswar, Odisha
(2) Regional Officer, SPCB, Angul, Odisha



Received
PS to
GOI, MoEF (Central)
Eastern Regional Office
Bhubaneswar-751023

Corporate Office : MONNET HOUSE, 11 Masjid Moh, Greater Kailash Part II,
New Delhi-110 048 (INDIA) Ph. : 011-2921 8542/43/44/45/46
Fax : 011-2921 8541 E-mail : monnet@monnetgroup.com

Regd. Office & Works : Monnet Marg, Mandir Hasaud, Raipur-492 101 (Chhatisgarh)



MONNET ISPAT & ENERGY LTD.
20001947 ISO 9001 : 2008



Monnet Power Company Limited

At : Malibramahani, P. O. : Nisa, Via : Koshla, Dist : Angul - 759 130, Odisha
Phone : 06764-224000, 224014, Fax : 06764-224006
E-mail : angul@monnetgroup.com

Ref: MPCL/Ang/Env/MoEF/Jan-01

Date: 22.01.2014

Regional Head (Eastern Zone)
Ministry of Environment and Forests
A/3, Chandrasekharpur, Bhubaneswar - 751023
Ph. No-0674-2301213, Fax-0674-2302432

Sub:- Six Monthly Status of Compliance for Environmental clearance granted to 2x525 MW power project located in village: Malibramahani, P.O.: Nisha, Dist-Angul, Odisha by M/S Monnet Power Company Limited, - reg.

Ref: - Ministry's letter no. J-13011/79/2007-IA.II (T) date 29.06.2010

Dear Sir,

With reference to the subject above, please find enclosed herewith our Status of Compliance to Environmental Clearance up to December 2013.

The soft copy of this compliance report is also being sent to you through e-mail (mef.or@nic.in).

We hope that you will find the attached reports satisfactory and in compliance to Environmental Clearance and Post Environmental Clearance Monitoring requirements as per Notification S.O. 1533 for EIA dt.14.09.2006.

Thanking You.

Yours sincerely

For Monnet Power Company Limited

GM- Land 22/1/14
(Authorized Signatory)

Zhang

CC: (1) Member Secretary, SPCB, Bhubaneswar, Odisha
(2) Regional Officer, SPCB, Angul, Odisha

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

Sr. No.		Particulars of Environmental Clearance	Compliance Status up to Dec-2013
4	A	Special Conditions:	
	i	Prior permission under Forest Conservation Act 1980 for diversion of forest land of 18.281 ha shall be obtained before starting construction activity in forest land.	Noted and complying.
	ii	In case of revised coal consumption requirement for running the power plant is proposed to be changed, the project proponent shall apply for such change in environmental clearance with necessary documents as per EIA notification 2006 and its amendments. In such case the necessity for holding the public hearing again or otherwise will be determined by the Ministry in consultation with Expert Appraisal Committee.	Noted and Complying.
	iii	Company shall pay compensation for acquisition of private land as per the central Government / state Government norms. The compensation to be paid to the land losers and displaced families shall not be less than the norms/packages as per the Policy on National Resettlement and Rehabilitation Rules 2007 and amended subsequently. Action plan for R&R with package for project affected persons shall be submitted within 3 months from date of issue of this letter.	Compensation for acquisition of private land is kept as per applicable Resettlement and Rehabilitation Rules. Copy of Action Plan for R&R with Package for project affected persons submitted to The Director, Rehabilitation and Resettlement, Collectorate at Angul on 30 th Dec 2008 is attached (Annexure A)
	iv	No additional land in excess of 400 ha shall be acquired for any activity or facility of this project.	Complying.
	v	Sulphur and ash content in the coal to be used in the project shall not exceed 0.6% and 34% respectively at any given time.	Plan and design in line with requirement for operational phase. Regular monitoring shall be done and reported in operational phase of the plant.
	vi	A bi-flue stack of 275 m height shall be provided with continuous online monitoring equipment for Sox, Nox, and particulate matter. Exit velocity of flue gas not less than 25 m/sec. Mercury emission from stack may also be monitored on periodic basis.	Plan and design in line with requirement. Construction of Bi-flue stack of 275 mtr height has been completed. (Annexure B: Stack Height Drawing) . Continuous online monitoring devices shall be provided. System has been designed to maintain exit velocity of flue gases in stack not less than 25

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

			m/sec. Mercury emission shall be monitored on periodic basis in operational phase.
vii	<p>Provision for installation of FGD shall be provided for future use.</p> <p>High efficiency ESP shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.</p> <p>Adequate dust extraction system such as cyclones and bag filters and water spray system in dusty area such as in coal handling and ash handling points, transfer area and other vulnerable dusty area shall be provided.</p>	<p>Plan and design in line with requirement. Provision for installation of FGD is kept in layout plan.</p> <p>ESP is designed to achieve the emission as per condition. ESP erection work under progress.</p> <p>Suitable dust suppression and dust extraction system shall be provided in coal handling and ash handling points.</p>	
viii	<p>Project proponent shall upload the status of compliance of EC conditions, including results of monitored data on their website and shall update the same periodically. It shall be simultaneously be sent to Regional Office MOEF, Zonal Office of CPCB and SPCB.</p> <p>The criteria pollutant level namely SPM, RSPM (PM 10 and PM 2.5), SO₂, NO_x for ambient air as well as stack emission shall be displayed at a convenient location near main gate of company in public domain.</p>	<p>Noted. Status of compliance of EC conditions including results of monitored data is being updated on company website periodically. It is being sent to Regional Office MOEF, Zonal Office of CPCB and SPCB also.</p> <p>Environmental monitoring is conducted through laboratory empanelled and recognised by SPCB, Odisha. Reports attached (Annexure C).</p> <p>The criteria pollutant level namely SPM, RSPM (PM 10 and PM 2.5), SO₂, NO_x for ambient air as well as stack emission has been displayed and manually updated at main gate of company in public domain.</p>	
ix	No ground water shall be extracted in operation of power plant even in lean season.	For operation of power plant water shall be sourced out from river Brahmani Samal Dam as per permission from water resources authority.	
x	<p>COC of 5 shall be adopted. The treated effluents confirming to the prescribed standards only shall be recirculated and reused within the power plant.</p> <p>There shall be no discharge outside the plant boundary except in monsoon. Arrangement shall be made that effluents and storm water do not get mixed.</p> <p>Sewage treatment plant shall be provided and treated sewage shall be used for greenbelt.</p>	<p>Plan and design in line with requirement. Construction of cooling towers in progress.</p> <p>There shall be no effluent discharge outside the plant boundary except the storm water in monsoon.</p> <p>Sewage treatment plant shall be provided and treated sewage shall be used for greenbelt. Work is under progress.</p>	

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

xi	<p>Regular monitoring of ground water shall be carried out by establishing a network of existing wells and new piezo meters.</p> <p>Monitoring around ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records shall be maintained and submitted to the Regional office of this Ministry. The data would be compared with base line data to ensure that ground water quality is not affected by the project.</p>	<p>Environmental monitoring is conducted through laboratory empanelled and recognised by SPCB, Odisha.</p> <p>Groundwater monitoring is being done as per guidelines. Latest reports are attached (Annexure C).</p> <p>Power Plant is expected to come in operation phase in FY 2015-16. Monitoring around ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records shall be maintained and submitted to the Regional office of this Ministry in operational phase of the power plant. The data would be compared with base line data to ensure that ground water quality is not affected by the project.</p>
xii	<p>Monitoring of surface water quantity shall also be regularly conducted and data shall be submitted to the ministry regularly. Monitoring points shall be located between the plant and drainage in the direction of flow of ground water.</p>	<p>Power Plant is expected to come in operation phase in FY 2015-16. Power plant is designed for zero discharge. Surface water in the direction of flow of ground water from the plant shall be monitored regularly.</p>
xiii	<p>Measures for rain water harvesting shall be undertaken. Central Ground Water Authority shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the EC and details shall be furnished.</p>	<p>Detailed study is done and plan for rainwater harvesting is prepared. As per plan, total 550499 m³ of rain water per year shall be received and harvested on building's roof top, paved area, green belt and reservoir area. All harvested water shall be utilized. (Annexure D: Rain Water Harvesting Plan Communication).</p> <p>Rainwater harvesting pond is included in layout plan of the power plant. Project construction work is under progress.</p>
xiv	<p>Additional soil for levelling of the proposed site shall be generated within the site so that natural drainage system of the area is protected.</p>	<p>Plan and design in line with requirement. Additional soil for levelling of the site is being generated within the site</p>
xv	<p>Utilization of 100% fly ash generated shall be made from 4th year of operation of power plant. Status of implementation MOEF time to time.</p>	<p>Plan and design in line with requirement. System for dry fly ash collection shall be installed. Dry fly ash shall be utilised as per fly ash utilization notification. (Photograph of fly ash silos are attached in Annexure E)</p>

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

	<p>xvi Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilised flyash shall be disposed in the ash pond in the slurry form.</p> <p>Mercury and other heavy metals (including As, Hg, Cr, Pb) shall be monitored in the bottom ash and effluents from ash ponds.</p> <p>No ash shall be disposed off in any low laying area.</p>	<p>Plan and design in line with requirement. Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilised flyash shall be disposed in the ash pond in the slurry form.</p> <p>Mercury and other heavy metals (including As, Hg, Cr, Pb) shall be monitored in the bottom ash and effluents from ash ponds in operation phase of the power plant.</p> <p>No ash shall be disposed in the low laying area.</p>
	<p>xvii Ash pond shall be lined with HDP/LDP or any other impermeable media so that no leachate takes place at any point of time. Adequate safety measures shall be implemented to protect ash dyke getting breached.</p>	<p>Plan and design in line with requirement.</p>
	<p>xviii For disposal of bottom ash in abandoned mines (if proposed), it shall be insured that bottom and sides of the mined out area are adequately lined with clay before bottom ash is filled. Proponent shall inform SPCB well in advance before undertaking this activity.</p>	<p>Noted. Shall be complied.</p>
	<p>xix Green belt consisting of 3 tiers of plantation of native species around plant and atleast 100 m width shall be raised. Wherever 100 m width is not possible a 50 m width shall be raised and adequate justification shall be submitted to Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 75%.</p>	<p>Plantation under progress with tree density on minimum 2500 per hectare (Annexure F: Greenbelt Development Photographs).</p>
	<p>xx For the tribal families affected directly or indirectly by the project, specific scheme for uplifting of their sustainable livelihood shall be prepared with time bound implementation and in-built monitoring programme. This shall be submitted within 6 month to this Ministry.</p>	<p>Complied. Need based identified CSR activities include health; education and sustainable livelihood generation is being taken up for project affected families. Self Help Groups (SHGs) has been formed and ladies from project affected families have been trained for stitching, cooking and other alternative livelihood generation activities.</p> <p>(Annexure A- Executive summary of impact assessment study conducted through expert external agency for CSR activities taken up by M/s MPCL. Copy of initial RR Plan submitted to the Director, R&R, Collectorate, Angul in 2008)</p>

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

	xxi	Project proponent shall also adequately contribute in the development of neighbouring villages. Special package with implementation schedule for providing fluoride free potable drinking water supply in the near by villages and schools shall be undertaken in time bound manner.	CSR activities also includes infrastructure development component that covers installation of new hand pumps in schools, repairing of defunct hand pumps in villages, drinking water supply by tankers in villages during summers.
	xxii	While identifying CSR plan, company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor sections of society. Income generating projects consistent with traditional skills of the people besides development of the fodder farm, fruit bearing orchards, vocational training etc can form a part of such programme. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.	Systematic study of need based assessment has been done. An action plan has been made focusing on uplifting of the poor sections of society. Apart from vocational training, income generation activities have been included in the action plan with respect to the available resources and their living conditions.
	xxiii	It shall be ensured that inbuilt monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the government institute of repute in the region. The proponent shall also submit the status of implementation of scheme time to time.	Annual social audit for impact assessment is done internally as well as through government institute of repute. Latest audit report is being submitted.
	B	General Conditions:	
	i	Adequate safety measures shall be provided in the plant area to check and minimise spontaneous fire in coal yard. Copy of these measures with full details along with location plant layout shall be submitted to Regional Office of Ministry and SPCB.	Location plant layout has been submitted and approved by State Pollution Control Board. Designing and mapping of fire fighting system in under progress and shall be submitted to Regional Office of Ministry and SPCB very soon.
	ii	Treated effluents conforming to prescribed standard only shall be recirculated and reused in the plant. There shall be no discharge outside the plant boundary except monsoon. Arrangement shall be made that effluents and storm water do not get mixed.	Plan and design is in line with requirement. Treated effluents conforming to prescribe standard shall be recirculated and reused for suitable purpose. There shall be no discharge outside the plant boundary except monsoon. Project is under construction stage. Arrangement is being made that effluents and storm water do not get mixed.

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

iii	<p>Storage facility for auxiliary liquid fuel such as LDO / HFO / LSH shall be made in the plant area in consultation with Dept of Explosives, Nagpur. Sulphur content in liquid fuel will not exceed 0.5%.</p> <p>Emergency Preparedness / Disaster Management Plan shall be prepared to meet any eventuality in case of accident taking place due to storage of oil.</p>	<p>Permission for storage of liquid fuel is taken from Dept of Explosives (Annexure G).</p> <p>Emergency Preparedness and Disaster Management Plan is prepared and implemented covering all major risk scenarios.</p>
iv	<p>First aid and sanitation arrangement shall be made for contract workers during construction phase.</p>	<p>Fully equipped first aid center and ambulance has been provided at site. Photograph attached (Annexure-H)</p>
v	<p>Noise level emanating from turbines shall be so controlled such that noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, PPE like ear plugs / ear muff shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric records and for treatment for any hearing loss including shifting to non-noisy area.</p>	<p>Plan and design is in line with requirement. Suitable hearing protection PPE are provided in project phase. Effective measures and regular monitoring is being done.</p>
vi	<p>Regular monitoring of ground level concentration of SO₂, Nox, PM_{2.5}, PM₁₀, and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to be exceeding prescribed limit, necessary control measures shall be provided.</p> <p>The location of monitoring stations and the frequency of monitoring shall be decided in consultation with SPCB.</p> <p>Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on website.</p>	<p>Regular monitoring of applicable parameters shall be done in impact zone in operational phase of the plant. Environmental monitoring is conducted through laboratory empanelled and recognised by SPCB, Odisha. Reports attached (Annexure C).</p> <p>The frequency and location of monitoring stations is selected as per guidelines and submitted to regional office of Board.</p> <p>Construction phase ambient air monitoring results is being put on website also along with six monthly EC compliance status.</p>
vii	<p>Provision shall be made for housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structure to be removed after completion of the project.</p>	<p>Housing and facilities are provided for construction labour within the site in line with the condition.</p>

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

	viii The project proponent shall advertise in at least two local news papers widely circulated in the region, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this EC, informing that the project has been accorded environmental clearance and copies of clearance letter are available with State Pollution Control Board and may also be seen at website of MOEF at www.envfor.nic.in	Complied.
	ix A copy of clearance letter shall be sent by proponent to concerned Panchayats, Zila Parisad / Municipal Corporation, Urban Local Body and local NGO, if any, from whom suggestions / representations, if any, received while processing the proposal. The clearance letter shall also be put on website of the company by the proponent.	Copy of clearance letter has also been put on company website monnetgroup.com (Link http://www.monnetgroup.com/power-generation-clearances.php).
	x A separate environmental management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguard.	Separate environmental management cell has been set up.
	xi The environment statement for each financial year ending 31st March in Form V to be submitted by the project proponent to the concerned state pollution control board as prescribed under Environment (Protection) Rules 1986 and amendments time to time.	Power plant is under construction and expected to come in operational phase in FY 2015-16 . Consent to Establish has been received in Feb 2011. Environmental Statement shall be submitted regularly as per Rule 14 of EPA 1986.
	xi Environmental Statement along with status of compliance of EC conditions shall also be put on company website and shall also be sent to Regional Office of Ministry.	Status of compliance of EC conditions is kept on company website. It shall be submitted on 6 monthly to Regional Office of Ministry.
	xii The project proponent shall submit six monthly report on status of implementation of stipulated environmental safeguards to the Ministry of Environment and Forest, its Regional office, Central Pollution Control Board and State Pollution Control Board. Project proponent shall upload the status of compliance of EC conditions on their website and update the same periodically and simultaneously send the same by e-mail to Regional Office of Ministry by e-mail.	Six monthly report on status of implementation of stipulated environmental safeguards (environment management plan) is uploaded on website along with status of compliance of EC conditions. Report is also submitted to the Ministry of Environment and Forest, its Regional office, Central Pollution Control Board and State Pollution Control Board on six monthly basis.

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

	xiii	Regional office of MOEF will monitor implementation of the stipulated conditions. A complete set of documents including EIA report and EMP along with additional information submitted from time to time shall be forwarded to Regional Office for their use during monitoring. Project proponent will upload the compliance status in their website and update time to time at least six monthly basis.	Noted. Complied
	xiv	Separate fund 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 environmental protection measures shall not be diverted for other purpose and year wise expenditure should be reported to ministry.	Separate funds are allocated for environmental protection measures with item wise break-up and included as part of project cost. Funds are not diverted for any other purpose. Expenditure status is attached (Annexure I)
	xv	Project authorities shall inform the regional office as well as Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work and commissioning of the plant.	Financial closure was booked in Aug 2010. Land development work is started soon after receipt of consent to establish in Feb 2011. Commissioning date of the plant shall be reported soon after the commissioning.
	xvi	Full cooperation shall be extended to the Scientist / Officers from the Ministry / Regional Office of the Ministry / CPCB / SPCB who would be monitoring the compliance of the environmental status.	Noted. Complying.
5		The MOEF reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the ministry. The Ministry may also impose additional environmental condition or modify the existing ones, if necessary.	Noted
6		The EC accorded shall be valid for a period of 5 years to start operations by the power plant.	Noted. Complying. Work has been started on site in FY 2011-12
7		Concealing factual data or submission of false / fabricated data and failure to comply with any of these condition mentioned may result in withdrawal of this clearance and attract action under provisions of EPA 1986.	Noted

Six Monthly Status of Compliance of Environmental Clearance (EC) No J-13011/79/2007-IA.II(T) dated 29th June 2010 from MoEF, Government of India for setting up of 2X525 MW Power Plant by M/s Monnet Power Company Limited at Village Malibarhamni, PO-Nisha, Angul, Odisha

8	In case of any deviation or alteration in the project proposed including coal transportation system, a fresh reference should be made to the Ministry to assess the adequacy of the conditions imposed and to add additional environmental protection measures, if required.	Noted.
9	The above stipulation would be enforced among others under the Water (P&CP) Act 1974, The Air (P&CP) Act 1981, The Environment (Protection) Act 1986 and rules there under. Hazardous Waste (M&H) Rules 2008 and its amendments, The Public Liability Insurance Act 1991 and its amendments.	Noted. Complying.
10	Any appeal against this EC shall lie with the National Environmental Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of National Environment Appellate Act 1997	Noted

(Praveen Anant)
DGM – Environment
MPCL, Angul

Annexure-A

***Report on Impact Assessment of CSR Activities
in Project Affected Villages of Monnet Power
Company Limited (MPCL), Angul, Odisha***

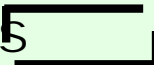
(Impact Study Period - FY-2013-14)



Submitted to :

***Head – CSR Departemnt
Monnet Power Company Limited (MPCL)
Angul, Orissa***

Prepared by :

AMCS 

Atlas Management Consultancy Services Private Limited (AMCS)

Executive Summary

1. Introduction

Monnet Power Company Limited (MPCL) is setting up a 1050 mw (2 x 525 mw) coal based thermal power plant backed with captive coal mines (Utkal B2 and Mandakini coal blocks) in village Malibrahmani in district Angul. For setting up the plant and other essential activities, MPCL has acquired land in village Malibrahmani. There are total 4 villages people of which would be affected by the activities of the company — Malibrahmani, Nisa, Kaliakata and Balichandrapur.

The Company being a responsible corporate citizen supports the families in the 4 villages by addressing their economic and social developmental needs through various activities under corporate social responsibility (CSR). Divergent initiatives have been implemented by the CSR team of MPCL in areas of safe drinking water, community health & sanitation, women empowerment & livelihood, school education, social & cultural issues and humanitarian causes. The initiatives of the company are an ongoing process and efforts are continuously made to identify the needs of the people so as to fulfill those needs in collaboration with the government machinery in place.

2. Scope of the Study

The proposed site of the captive power plant would affect the population of four villages, namely, Malibrahmani, Nisa, Balichandrapur and Kaliakata in block Chhendipada in district Angul of Odisha. As part of its corporate social responsibility (CSR) activity, the company has undertaken various development initiatives in these four villages. In order to streamline its CSR activities with the aspirations of the local people in the area, the company intends to get an impact assessment study done of the various activities it has undertaken over the past 3 years.

3. Objectives

The objective of undertaking this impact assessment study is to outline the effectiveness of the various interventions being undertaken by the company for the holistic development of the people of the area. It would provide an insight to the company regarding what has been successful in achieving the desired objectives and what has failed. It would also help in understanding the changes that might have occurred due to the various interventions. This in turn would help the company in designing better and more appropriate interventions which would be in sync with the needs of the local people.

4. Approach

All necessary information related to implementation of various interventions was elicited from the program managers of MPCL through indepth discussions. In order to assess the impacts

of the interventions by the company in the area, all such sites were visited and the responses of the people concerned were recorded through discussions. All community level services and support currently available in the villages have been also recorded.

After the field work, the issues discussed in the FGDs were thoroughly studied and inferences were drawn. To facilitate easy comprehension of the report by the reader, simple language and standard terminologies have been used. Tables and charts have been provided at various places to make the reading simple, interesting and detailed.

5. Impacts of the Interventions

1. Safe Drinking Water

The repair of defunct hand pumps and installation of new ones had provided the much needed respite to the people, as they have access to assured source of safe drinking water for use. It had resulted in reduced drudgery for the women who had to fetch water from far off places earlier. It had also reduced the traveling time and the waiting time at the hand pumps by the villagers as the number of families dependent on one hand pump in the area had reduced considerably.

Providing water through mobile tankers and furnishing water storage drums to the households shows the ingenuity of the CSR team and reflects that they genuinely empathize with the local people. As such, the summers in the area was very severe as large number of hand pumps and wells dry up every year. In such a situation, getting safe drinking water at the door step in the villages provided much relief to the inhabitants.

2. Community Health & Sanitation

The ambulance service to the villagers and the regular health homeopathic camps had been a popular and effective intervention. Access to free medical services had been a boon to the poor villagers which was hitherto difficult to access besides being a paid service. The people of these villages were happy to get their preferred type of medical facility at their door steps which apart from being extremely convenient also helped save time and money for them. Similarly, the turn out at the eye camps shows the need of such initiatives and the smiles and blessings of those served depict its success.

The timely and multi-pronged approach to prevent the menace of vector borne diseases saved precious lives in the villages. The counseling on health and hygiene had created enhanced awareness among the people of the villages, especially the women, who were more sensitive to these issues both at the personal/family level and at the community level. Also, perceptible change had occurred in the food habits of the people of the area. Now, several households have a small kitchen garden which was a source of some vegetables and fruits for the family as additional supplement food.

3. Women Empowerment

Organizing regular community functions for the women have been instrumental in developing the confidence of the rural women in the area. They were more forthcoming and had an enhanced say in the decision making both at the household level and at the community level. Celebration of Women's Day, carrying out Women Literacy Campaign, organizing Health Kitchen Program for women and the like, were the initiatives which had contributed to the development of the society and was perceptible in the area.

The formation of Mahila Mandal and initiation of income generation activity by the group was an effort towards financial self dependence of the women. The society where majority of the adult males were habitual alcoholics, working towards the enlightenment and independence of women was a landmark initiative by the CSR team. This would contribute towards the emancipation of women from the thankless routine household work and give them an equal opportunity to augment their family income and improve the standard of life of their families. The Stitching Training Institute was also one such endeavour.

4. Sports & Culture

Supporting sports events and encouraging young talents had got immediate takers especially among the youths. The financial support by way of sponsorship of sport events and acknowledgement of their achievements by rewarding the winners had made sports a vibrant activity in the area. The block level and district level tournaments have witnessed genuine talents in rural youths which augur well for the future of sports like badminton, cricket, volleyball, etc.

Participation in community worship of Gods and providing financial support on such occasions has added flavour and grandeur to such celebrations by the local populace. The villagers were happy to receive support from MPCL as it was associated with their religious and cultural sentiments. Similarly, organizing social events like Van Mahotsav, Baal Mela, Utkal Diwas Celebration, etc. with inherent developmental messages for the society and the environment had created awareness, social harmony and further integrated the society.

5. Infrastructure Development

As such the basic infrastructure like electricity, pucca roads, drainage system, community bathrooms and toilets were either non-existent or were in a poor shape in the rural areas. By providing support for infrastructure development in the area, the company had provided the launch pad for economic development of the people of the area. With enhanced hygiene practices, better connectivity to the outside world and fortified community infrastructure, the people of the area would progress faster with lesser effort and hardships than before.

6. Humanitarian Support

The humanitarian support like supporting Blood Donation Camp, Distribution of Blankets to Senior Citizens, Support during Calamities like Floods and Fire, Facilitating Technical Education to Youth, Supporting Higher Education to the needy, Support to Destitute were the building blocks of goodwill and parity in the society. Such actions immediately connect the organization with the community and build a long term bonding of faith, respect and healing. As such, a more equitable, secure, contented and happy society is much more conducive for carrying out business rather than an impoverished, suspicious, unfriendly and turbulent society.

7. School Education

Infrastructure support like construction of boundary wall, repair of the school building, electricity connection, etc, was a welcome support which was acknowledged by all the stakeholders of the school. The school management and the parents were particularly happy to get this support. Provision of additional teachers in the school had made a positive impact on the overall functioning of the school. With the addition of teachers, the functioning of the day to day activities of the schools had smoothened. The parents and their children were particularly happy with the distribution of school uniform to the children.

The encouragement provided to the students excelling in academics had galvanized the learning atmosphere in the area among the students and the parents alike. The support like providing school uniform, school bags, pencil boxes, water filters in schools, etc. had brought in a positive approach towards studies by the children which was a good sign during the formative stage of learning of these young children. This will ensure continued inclination of the children towards education and encourage regular schooling. However, the quality of education was required to be monitored and continuous efforts were required to upgrade the quality of education in the schools with the support of the teachers and the education department.

6. Conclusion

All activities of periphery development in the area under CSR by MPCL have been done strictly adhering to the RPDAC guidelines for the purpose. As such all the displaced persons have been rehabilitated by MPCL in the R&R colony which is in the vicinity of their original habitation, which is within the same gram panchayat — Nisa. All periphery development work by MPCL has been primarily carried out in the four villages — Malibrahmani, Balichandrapur, Kaliakata & Nisa. Hence almost cent percent periphery development fund allocated for periphery development activities have been spent in the villages and concerned gram panchayats in which the project is situated.

With the objective to improve the physical quality of life of the people of the peripheral area, interventions in such areas as specified in the guidelines of RPDAC have been taken up by the company which includes sectors like – school education, safe drinking water, public health,

pre-school education, electrification, vocational training, sanitation & sewerage, roads, plantation of trees, etc.

The CSR interventions by MPCL in the area have been diverse and have tried to touch several aspects of the lives of the local community. Nevertheless, all scope and timings of the interventions have been identified, finalized and implemented by the CSR team at their discretion without assessing the needs of the people. There did not exist a plan of action with definite implementation strategy and targets. A proper need assessment provides a road map for the activities and help to quantify the baseline levels and the progress and thus monitor the performance, thereby ensuring better results.

The success or failure of any developmental intervention cannot be assessed by the quantum of money spent on them. They have to be assessed by the fact that whether the interventions have been undertaken with the consent and participation of the persons for whom they were intended for. By ensuring this, the positive impacts could be enhanced and the negative impacts could be mitigated in the planning stage of the intervention itself.

Development interventions have social ramifications and it was imperative that decision makers understand the consequences of their decisions before they act and people affected get the opportunity to participate in designing their future. Social assessment helps to make the project responsive to social development concerns. Developmental initiatives formed by community participation were prone to address genuine issues with priority, alleviate poverty, enhance inclusion and build ownership.

Nevertheless, the perseverance and diligence of the CSR team of MPCL Angul and their past experience & capacity to gauge the pulse of the society had been able to provide value addition to the lives of the people through their interventions. By undertaking such supportive interventions, MPCL had done public service with genuine social responsibility. All such supportive interventions had established a place for MPCL in the hearts of the local people.

* * * * *



Major Activities under Corporate Social Responsibility (CSR) by Monnet, Angul

1. Health camp – Samal for all labours



2. Support National Volley ball tournament



3. Eye Camp for all villagers and children



4. Inter village Volley ball tournament, R&R colony Malibrahmani



5. Republic day celebration in peripheral villages



6. Support Cricket tournament, Khalari



7. Celebration of World Aids Day



8. 2 day Training course to Self Help Group (SHG)



9. Support to children in deaf and dumb school, Tentuloi





Monnet Power Company Limited

Plot No 707/B, Amalapada, Angul - 759 122, Orissa

Ph. : 06764-234815, 232926, Fax : 06764-233712

E-mail : angul@monnetgroup.com

MPCL/Angul/08-09/ 73

30th Dec 2008

The Director
Rehabilitation & Resettlement
Collectorate
Angul

**Sub : Approval of Detail Rehabilitation & Resettlement (R&R)
Plan for our proposed 1005 MW Power Plant in Village
Malibrahmani, Tahasil Chhendipada, Angul District**

Dear sir,

You are aware that we are establishing our 1005 MW Coal based Thermal Power Plant in village Malibrahmani of Chhendipada Tahasil. The Socio-Economic Survey has already been completed and the location of Resettlement site has already been approved by RPDAC with consent of the villagers, i.e.; village Malibrahmani.

We have prepared a detail Rehabilitation & Resettlement Plan in line with approved R & R Policy 2006 of the Govt of Orissa and further updated during the last RPDAC meeting. The same is enclosed for your kind approval.

You are kindly requested to accord your approval at the earliest so that this plan is implemented in the village. However, this is to confirm that any changes / modifications suggested by the District Authority, in line with the approved R&R Policy 2006 of Govt of Orissa, in our R&R Plan will be acceptable to us.

Thanking you,

Yours faithfully,
for **Monnet Power Company Ltd**

(**P. C. AGRAWAL**)
Asst. Vice President - Power

cc : The Collector & District Magistrate
Angul - for kind consideration

Encl : as above

Received
4/13/09

L. A. Saha



DRAFT POLICY OF RR MICROPLAN OF MPCL – MALIBRAHMANI

SL.NO	RR BENEFITS AS PER APPROVAL OF RR PLAN	COMPLIANCE
1	Land requirement for RR of PAF	The RR plan is in line with the Orissa RR policy 2006. Each individual is entitled to get 10 decimal of land. The company has made the RR township in 23.73acres ensuring all facilities which includes roads, community centre, nursery, school, market complex, kothaghar and pidha. This common facility covers 8.03acres.
2	Construction of houses at RR site	46 houses have been constructed as per the request of the DPs of which 39 houses have been occupied. 97 have been allotted with plots as per their consent and they are constructing their own houses on it.
3	Electrification of the RR habitat	The entire colony has been provided with complete infrastructure facilities of electrification and wiring along with bulbs and fan provided to all houses built by the company. A 11KV line has been supplied for regular power supply.
4	Cutting of trees and area grading of RR site	RR colony was constructed after leveling and grading so as to have a natural flow of the rain water during the rainy season. The RR site has a Nursery coming up and trees and shrubs have been provided around the boundary, school garden, play ground and all houses supported for Kitchen garden.
5	Roads, Drain & water supply	The 23.73 acre land has been provided with 4 tube-wells and each house is provided with storage tanks. Non stop drinking Water is supplied through pipes. Septic tank has been provided to each house and Drain made along all houses and roads for a proper drainage & sewerage system.
CSR PROPOSED ACTIVITY		
1	Technical training	84 eligible youth have been provided with vocational training (1-diploma, 1 – Engineering, 14- 2yr course and 64 for 1yr course in Adarsh ITI and 4 went to palakamindi)
2	Health centre construction	A health centre has been constructed in RR

		colony for the benefit of the people and a doctor with pharmacist is present full time.
3	School Construction	A huge school with 6 rooms along with a separate kitchen with storage space has been constructed in the RR colony. The place has been approved by the DI, Angul district. A beautiful garden and kitchen garden also has been created.
4	Temple	A Pidha has been shifted and worship place ensured in the same campus.
5	Community Centre	For the social gatherings and cultural programs, a community hall has been constructed in the same site.
6	Market complex	The market complex is under construction and should be ready in a month
7	Vocational Training	A SHG group has been organized and stitching buttons, hooks to young girls and sewing machines placed for training of interested women.
8	National Level events in sports	The company takes active participation in all national and inter-national level sports program in the district and nation.
9	Corpus for the scholarship for the children	Company felicitates all the meritorious children of nearby schools. Regular visit of CSR team to schools, regular monitoring and 2 teachers have been provided to schools.
10	ITI Training school	ITI training school has been planned in Deogarh and work is in progress.

You are kindly requested to send your approval of the above so that the plan is implemented in the village. However, this is to confirm that any changes / modifications suggested by the District Authority, in line with the approved R&R policy 2006 of Govt of Orissa, in the R&R Plan will be considered.

Thanking you,

Yours faithfully,
for Mohan Power Company Ltd

(P. D. CRAWAL)
Asst. Vice President - Power

cc: The Collector & District Magistrate
Angul - for kind consideration

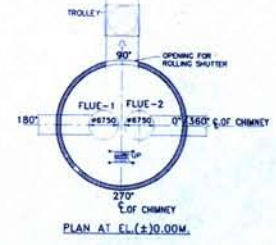
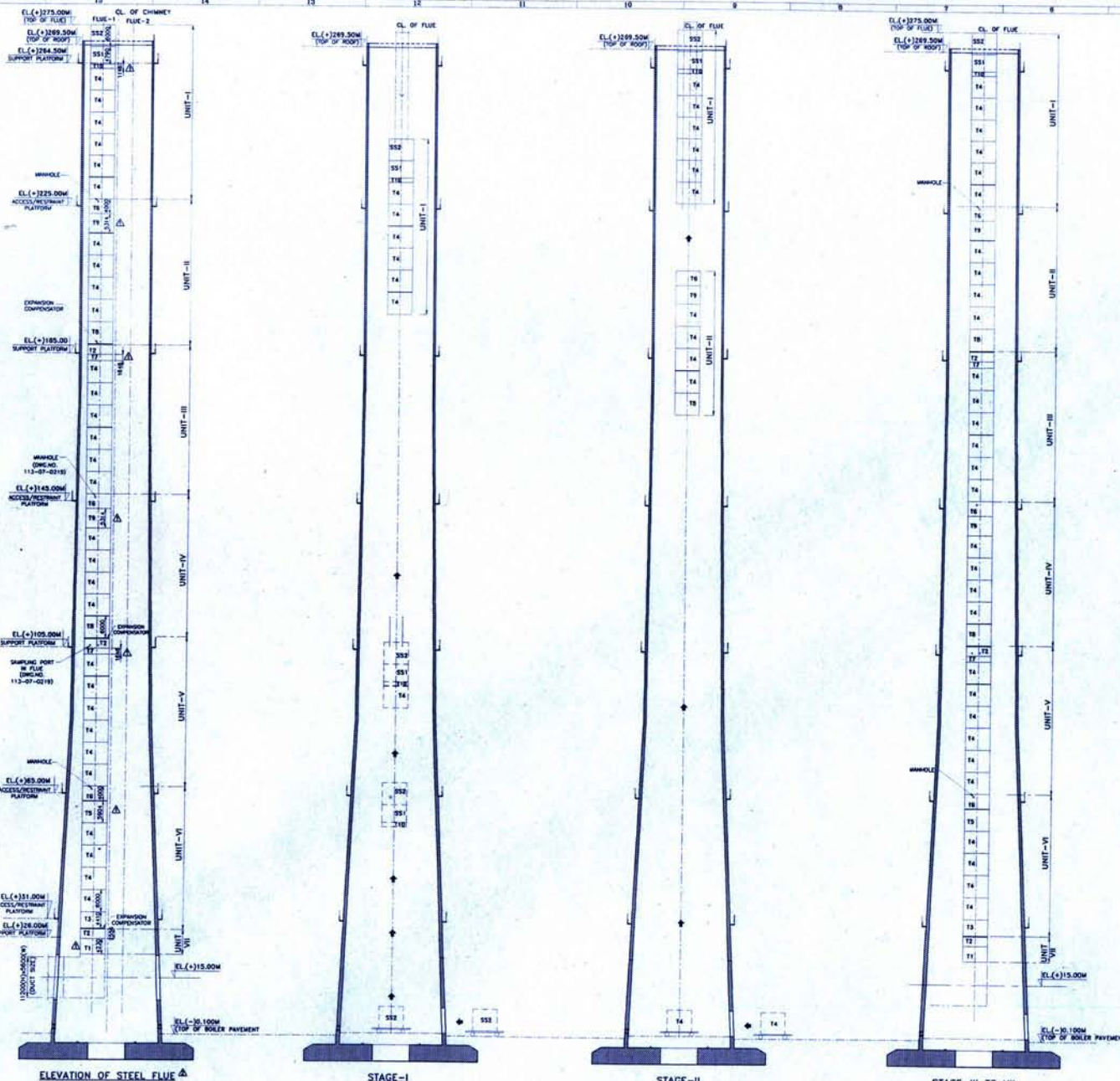
End : as above

Joshi

2017



Annexure-B



- METHODOLOGY FOR ERECTION OF STEEL FLUES**
- STAGE-I**
1. ERECT THE ROOF CRACK AT EL(+) 269.50M.
 2. ERECT THE FLUE SUPPORTING PLATFORMS AS PER THE CORRESPONDING DRAWINGS.
 3. CAST ROOF SLAB AT EL(+) 269.50M & ERECT THE LIFTING FRAMES AND JACK ASSEMBLY OVER THE ROOF SLAB GRIDDERS.
 4. BRING THE TOP MOST CAN-352 INSIDE CHIMNEY ON TROLLEY AND ALIGN IT PROPERLY.
 5. ANCHOR THE HT STRINGS COMING FROM THE LIFTING JACK TO THE LIFTING BRACKET ON THE CAN.
 6. LIFT THE CAN SS-3 TO A HEIGHT JUST SUFFICIENT TO ACCOMMODATE NEXT CAN SS-1 UNDER IT.
 7. BRING CAN SS-1 INSIDE THE CHIMNEY AND ALIGN IN POSITION. CONNECT CAN SS-2 AND CAN SS-1 BY BOLTING/WELDING AS PER APPROVED DRAWING & SPECIFICATION.
 8. LIFT THE ASSEMBLY OF CAN SS-2 & SS-1 TO ACCOMMODATE CAN-T8 UNDER IT.
 9. CONNECT THE CAN T-10 WITH CAN SS1 BY BOLTING/WELDING AS PER APPROVED DRAWING & SPECIFICATIONS.
 10. LIFT THE ASSEMBLY OF CAN SS-2, SS-1 & T-10 TO ACCOMMODATE NEXT CAN T-4 UNDER IT.
 11. CONNECT THE CAN T-4 WITH CAN T-10 BY BOLTING/WELDING AS PER APPROVED DRAWING & SPECIFICATIONS.
 12. SIMILARLY CONNECT THE NEXT FIVE CANS MARKED T-4 TO COMPLETE UNIT-I.
 13. LIFT THE ENTIRE UNIT-I TO ITS FINAL POSITION AND FIX WITH THE SUPPORT PLATFORM AT EL(+269.50M).
 14. REMOVE THE LIFTING TACKLES FROM UNIT-I.
- STAGE-II**
1. ASSEMBLE THE CANS FOR UNIT-II IN THE SIMILAR MANNER AS DESCRIBED IN STAGE-I.
 1. LIFT THE ENTIRE UNIT-II TO ITS FINAL POSITION AND FIX WITH UNIT-I NEAR ACCESS/RESTRAINT PLATFORM AT EL(+3225.00M).
 3. REMOVE THE LIFTING TACKLES FROM UNIT-II.
- STAGE-III**
1. REPEAT THE STEPS FOR UNIT-III AND FIX THE ENTIRE UNIT-III WITH THE SUPPORT PLATFORM AT EL(+3185.00M).
- STAGE-IV**
1. REPEAT THE STEP FOR UNIT-IV AND FIX THE ENTIRE UNIT-IV WITH UNIT-III BY BOLTING/WELDING NEAR ACCESS/RESTRAINT PLATFORM AT EL. (+)45.00M.
- STAGE-V**
1. REPEAT THE STEP FOR UNIT-V AND FIX THE ENTIRE UNIT-V WITH THE SUPPORT PLATFORM AT EL(+3105.00M).
- STAGE-VI**
1. REPEAT THE STEP FOR UNIT-VI AND FIX THE ENTIRE UNIT-VI WITH UNIT-V BY BOLTING/WELDING NEAR ACCESS/RESTRAINT PLATFORM AT EL. (+)45.00M.
- STAGE-VII**
1. REPEAT THE STEP FOR UNIT-VII AND FIX THE ENTIRE UNIT-VII WITH SUPPORT PLATFORM AT EL. (+)26.00M.
- APPLY THE SAME PROCEDURE FOR ERECTION OF CANS OF FLUE-2

REFERENCE DRAWING	NOTES
01. 113-07-0100	225M HIGH TWIN FLUE R.C.C. CHIMNEY G.A. OF CHIMNEY
02. 113-07-0217 (SPT. 01 OF 10)	TYP. DETAILS OF STEEL FLUE CAN
03. 113-07-0212 (SPT. 10 OF 10)	TYP. DETAILS OF SUPPORTING ARRANGEMENT OF STEEL FLUE
04. 113-07-0214	225M HIGH TWIN FLUE R.C.C. CHIMNEY TYP. DETAIL OF RESTRAINT ARRANGEMENT OF STEEL FLUE
05. 113-07-0219	MISCELLANEOUS DETAILS.

1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METERS.
 2. ALL WELDS SHALL BE 6mm FALLET WELD U.N.G.
 3. STRUCTURAL STEEL WORK SHALL BE AS PER IS:800-1984.
 4. PLATES FOR FABRICATION OF THE FLUE SHALL BE COPPER BEARING STEEL CONFORMING TO IS:2062 EXCEPT FOR TOP TWO CANS W.D. SS1.552
 5. CANS W.D. SS1.552 SHALL BE FABRICATED FROM STAINLESS STEEL OF GRADE 304.
 6. STRENGTHENERS ETC NOT COMING IN CONTACT WITH THE GAS SHALL BE MADE OF NON-COPPER BEARING STEEL CONFORMING TO IS:2062

7. ALL WELD STEEL WELDING TO BE USED IN FABRICATION OF STEEL FLUE SHALL HAVE ULTIMATE TENSILE STRENGTH OF NOT LESS THAN 410 N/mm² & SHALL CONFORM TO IS:2062 (CONC-4)
 8. READ THIS Dwg. IN CONJUNCTION WITH "TECHNICAL SPECIFICATION FOR 225M HIGH TWIN FLUE R.C.C. CHIMNEY"
 9. FOR DETAILS OF CANS REFER Dwg. NO. 113-07-0217 (SPT. 01 OF 10 TO SPT. 10 OF 10)

NOTICE

THIS DRAWING IS THE PROPERTY OF INDURE PRIVATE LIMITED, NEW DELHI, AND IS LENT SUBJECT TO THE CONDITION THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF, DIRECTLY OR INDIRECTLY. IT SHALL NOT BE USED TO FURNISH ANY INFORMATION FOR THE MAKING OF DRAWINGS, APPARATUS OR PARTS THEREOF EXCEPT FOR THE PROJECT SPECIFICALLY PROVIDED FOR BY CONTRACT AGREEMENT WITH INDURE.

ZONE MARK	PARTICULARS	DATE	HOD	STRUCT	MECH	ELEC
01.	LENGTH OF CAN MKD. T1,T5,T7,T9 & T10 REVISED. MKD. AS Δ	30.08.12				
00.	FOR APPROVAL	26.08.11				
	REVISIONS	APPRO. BY	CHECKED BY	DESIGNED BY	DRAWN BY	SCALE

PROJECT	2x525 MW THERMAL POWER STATION MALIBRAHMANI, ANGUL, ORISSA	
OWNER	MONNET POWER COMPANY LIMITED	
OWNER'S CONSULTANT	DEVELOPMENT CONSULTANTS PVT. LTD. CONSULTING ENGINEERS KOKATA MUMBAI CHENNAI NEW DELHI	
BOP CONTRACTOR	THE INDURE PVT. LIMITED EPC BUSINESS GROUP NEW DELHI - INDIA	
TITLE :-	275M HIGH TWIN FLUE R.C.C. CHIMNEY METHODOLOGY FOR ERECTION OF STEEL FLUE	
DRAWN	D.P.Negi	SCALE
DESIGNED	R.K.S.	JOB No. I-5010
CHECKED	S.K.C.	DWG. No. 113-07-0216
APPRO. FOR CONSTRUCTION:	REV.	

Annexure-C



INSPECTORATE

TEST REPORT

AMBIENT AIR QUALITY MONITORING

TEST REPORT NO.: IGI/BBSR/BMO/13-14/0148

DATE: 23.01.2014

NAME AND ADDRESS OF CUSTOMER: MONNET POWER COMPANY LTD. & MONNET ISPAT & ENERGY LTD., M/S MONNET GROUP, VILLAGE - MALIBRAHMANI, P. O. - NISHA - 759130, VIA - CHENDIPADA, DIST. -ANGUL, ORISSA.

CUSTOMER REFERENCE: WO NO.: AWO13-00002

DATE: 11.04.2013 & 19.04.2013

SAMPLE PARTICULARS: AMBIENT AIR

SAMPLE NO.	DATE OF MONITORING	SAMPLING LOCATION	TEST PARAMETERS						
			PM10	PM2.5	SO2	NO2	CO	NOISE	
			µg/m ³	µg/m ³	µg/m ³	µg/m ³	mg/m ³	DAY TIME [dB(A)]	NIGHT TIME [dB(A)]
1	02.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	52.9	31.6	7.9	12.6	NT	50.1	42.6
2	03.12.2013	VILLAGE SANA MAHITALA IN EAST DIRECTION (APPROX. 5 KM FROM POWER PLANT STACK)	33.8	21.2	5.3	10.8	NT	48.2	41.8
3	04.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	50.9	32.2	7.0	12.4	NT	50.7	41.5
4	04.12.2013	VILLAGE BHUBANPUR IN SOUTH-EAST DIRECTION (APPROX. 4 KM FROM POWER PLANT STACK)	50.6	27.8	6.9	12.2	NT	50.4	41.3
5	05.12.2013	NEAR BOUNDARY WALL IN WEST SIDE OF POWER PLANT (APPROX. 450 MTR FROM POWER PLANT STACK)	49.2	28.6	6.4	12.8	NT	52.3	43.9
6	09.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	46.2	24.4	7.5	15.2	NT	50.9	40.7
7	11.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	43.8	23.6	9.1	12.6	NT	51.3	41.2
8	11.12.2013	NEAR BOUNDARY WALL IN SOUTH SIDE OF POWER PLANT (APPROX. 640 MTR FROM POWER PLANT STACK)	48.7	25.8	9.1	11.3	NT	51.8	42.4
9	12.12.2013	NEAR BOUNDARY WALL IN EAST SIDE OF POWER PLANT (APPROX. 850 MTR FROM POWER PLANT STACK)	38.2	20.4	8.3	10.9	NT	50.4	41.5
10	16.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	33.4	22.2	8.3	11.2	NT	51.5	41.3
11	18.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	36.7	23.7	6.6	11.0	NT	51.4	41.5
12	23.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	40.8	18.2	5.1	10.2	NT	51.3	40.5
13	25.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	43.4	20.6	5.0	10.7	NT	51.1	41.4
14	30.12.2013	NEAR BOUNDARY WALL IN NORTH SIDE OF POWER PLANT (APPROX. 900 MTR FROM POWER PLANT STACK)	45.7	20.9	5.2	10.4	NT	51.0	41.2
CPCB Standard			ANNUAL - 60	ANNUAL - 40	ANNUAL - 50	ANNUAL - 40	8 HOURS - 02	INDUSTRIAL - 75 dB(A)	INDUSTRIAL - 70 dB(A)
			24 HOURS - 100	24 HOURS - 60	24 HOURS - 80	24 HOURS - 80	1 HOUR - 04	RESIDENTIAL - 55 dB(A)	RESIDENTIAL - 45 dB(A)

NOTE: ND = NOT DETECTABLE, NT = NOT TRACEABLE
*Indicates information supplied by the customer for which the laboratory has no control.



INSPECTORATE
Annex Building 2nd Floor
Markfed Complex,
Kalpana Sq.
Bhubaneswar - 751006.
Odisha
www.inspectorate.co.in

[Signature]
AUTHORISED SIGNATORY

TEST RESULTS RELATE TO THE SAMPLE TESTED ONLY
THE CONTENTS OF THE REPORT SHALL NOT BE REPRODUCED EITHER IN FULL OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF THE ISSUING AUTHORITY
LABORATORY: PLOT NO. 211, GROUND FLOOR, SECTOR-A, ZONE-B, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR - 751010.

Table: Water Level Data of Monitoring Wells during August, 2013 surrounding 10 km. Radius of M/s. Monnet Power Company Ltd. Malibrahmani, Nisa, Angul District, Odisha

Sl.No	Location	Longitude	Latitude	Depth(m.)	MP(m.agl)	Diameter(m)	Water Level August2013 (m.bmp)	Water Level August2013(m.bgl)
1	2	3	4	5	6	7	8	9
1	KUIJO	85°04'38.2"	20°53'32.5"	11.6	0.3	1.6	2.34	2.04
2	NATARHA	85°03'49.3"	20°55'58.3"	11.1	0.4	1.5	4.25	3.85
3	NISHA	85°00'5.1"	20°55'38.8"	7	0.25	1	2.18	1.93
4	RAJHARAN	84°58'10.1"	20°57'24.2"	8.7	0.3	2.25	1.96	1.66
5	KOSALA	84°56'25.2"	21°00'19.2"	8	0.35	1.8	1.24	0.89
6	CHANDUPAL	84°58'22.8"	20°59'8.0"	9.8	0.3	2.4	3.54	3.24
7	PARANGA	85°01'35.7"	20°52'46.6"	6.65	0	3.5	0.83	0.83
8	JARASINGHA	85°03'44.9"	20°51'24.1"	9.2	0.45	2.1	1.65	1.2
9	BADA KERJANG	84°58'8.5"	20°51'32.8"	8.1	0.4	1.8	3.2	2.8
10	SANAKERJANG	84°59'20.4"	20°51'21.6"	9.9	0.46	1.8	4.55	4.09



11	SAKARSINGHA	84°57'47.6"	20°52'56.1"	6.6	0.2	1.5	2.23	2.03
12	DURGAPUR TANGARASAHU	84°54'46.3"	20°55'12.8"	7.7	0.25	1.4	2.56	2.16
13	KORADA	84°53'22.4"	20°57'0.9"	9.3	0.25	2.4	2.82	2.57
14	MUNDASAHU	84°55'11.9"	20°51'19.8"	8	0.15	2	3.5	3.35
15	JARADA	84°57'29.6"	20°50'48"	8	0.3	2.7	2.84	2.54
16	PARTARA	85°02'3.3"	20°50'26.7"	11.78	0.87	1.15	5.53	4.66
17	JHINTIPAL	84°53'51.8"	20°57'55.1"	8.46	0.3	1.46	2.17	1.87
18	KALAMCHUIN	85°04'15.6"	20°57'38.5"	8.65	0.57	2	1.3	0.73
19	GOPAL PRASAD	85°02'12.9"	20°58'21.8"	4.3	0	2.8	2.23	2.23
20	SANTARAPUR	84°57'34.2"	20°50'5.4"	6.03	0.38	2.07	1.71	1.33
21	Piezometer in Plant Premises	84°59'27.6"	20°55'7.7"		0.46		2.43	1.97



**Analytical Report along with Drinking Water Specification, Bureau of Indian Standard
(As Per 10500 – 1991 BIS)**

Date: 03.07.2013

Sl. No.	Parameter	Test Sample (with Reference No.)	BIS, Desirable limit	Permissible Limit in the absence of Alternate source
1.	pH	1. 6.80 2. - 3. 7.29 4. 7.18 5. 7.47 6. 7.46 7. 7.50 8. 7.83	6.5-8.5	No relaxation
2.	Total Hardness (as CaCO ₃) mg/L	1. 161.0 2. - 3. 390.3 4. 615.5 5. 116.7 6. 271.2 7. 37.3 8. 267.5	300	600
3.	Calcium mg/L	1. 40.1 2. - 3. 100.2 4. 156.3 5. 32.1 6. 72.1 7. 10.0 8. 68.1	75	200
4.	Magnesium mg/L	1. 24.3 2. - 3. 55.9 4. 89.9 5. 14.6 6. 36.4 7. 4.9 8. 38.9	30	-
5.	Iron, µg/L	1. 212 2. - 3. 375 4. 628 5. 167 6. 368 7. 34 8. 280	300	1000
6.	Lead, µg/L	1. 21 2. - 3. 32 4. 34 5. 4 6. 9	50	No relaxation

		7. <2 8. 11		
7.	Chloride, mg/L	1. 88.6 2. - 3. 159.6 4. 287.2 5. 78.6 6. 114.7 7. 8.6 8. 115.4	250	1000
8.	Dissolved Solids mg/L	1. 403.11 2. - 3. 716.36 4. 1190.45 5. 314.67 6. 702.3 7. 62.36 8. 532.3	250	2000
9.	Sulfate, mg/L	1. 8.27 2. - 3. 2.59 4. 82.4 5. 3.2 6. 9.31 7. Nil 8. 3.43	200	400
10.	Nitrate, mg/L	1. 1.30 2. - 3. 2.30 4. 3.84 5. 1.02 6. 2.26 7. 0.21 8. 1.71	45	100
11.	Fluoride, mg/L	1. 0.22 2. - 3. 0.56 4. 1.36 5. 0.15 6. 0.24 7. 0.10 8. 0.85	1.0	1.9
12.	Alkalinity, mg/L	1. 192.7 2. - 3. 350.6 4. 427.0 5. 141.5 6. 409.9 7. 42.8 8. 265.9	200	600

13.	Conductivity $\mu\text{s}/\text{cm}$	<ol style="list-style-type: none"> 1. 584 2. - 3. 1035 4. 1729 5. 461 6. 1015 7. 94 8. 770 	-	-
14.	Sodium mg/L	<ol style="list-style-type: none"> 1. 52.4 2. - 3. 87.4 4. 144.3 5. 47.23 6. 59.23 7. 5.21 8. 61.73 	150 L*	-
15.	Potassium, mg/L	<ol style="list-style-type: none"> 1. 5.4 2. - 3. 15.21 4. 44.82 5. 5.26 6. 14.66 7. 0.73 8. 13.23 	12.00 *	-
16.	Carbonate, CO_3 , ppm	<ol style="list-style-type: none"> 1. nil 2. - 3. nil 4. nil 5. nil 6. nil 7. nil 8. nil 		
17.	Arsenic. $\mu\text{g}/\text{ml}$	<ol style="list-style-type: none"> 1. 11.2 2. - 3. 7.89 4. 16.59 5. 5.67 6. 9.57 7. <0.1 8. 11.29 	50	No relaxation
18.	Hg. $\mu\text{g}/\text{ml}$	<ol style="list-style-type: none"> 1. <0.01 2. - 3. <0.01 4. <0.01 5. <0.01 6. <0.01 7. <0.01 8. <0.01 	1.0	No relaxation

< sign to indicate below detection limit (BDL)

Sample No.

1. Sample No.1 Jarasingha
2. Sample No.2 -
3. Sample No.3 Sakarsingha
4. Sample No.4 Kuio
5. Sample No.5 Natara
6. Sample No.6 Nisa
7. Sample No.7 Monnet
8. Sample No.8 Parang

- BIS has not yet set limit

* UK Water Supply (Water Quality) Regulation Act 1989

** DO was determined as soon as the sample was received.

It was not collected in DO bottle

Annexure-D

SPEED POST

No. 5-22/SER/CGWA/2011 - 1268

Govt. of India
Central Ground Water Board
South Eastern Region
Bhujal Bhawan, Khandagiri,
Bhubaneswar -751030.
Date: 19.09.2011

To

**The Member Secretary
Central Ground Water Authority
Ministry of Water Resources
West Block -2, Wing-3 (Ground Floor),
Sector-1, R.K. Puram,
New Delhi - 110066.**

Sub: Forwarding of Rain Water Harvesting and Artificial Recharge report in respect of M/s Monnet Power Company Ltd, Vill :-Malibrahmani, Angul District, Orissa -Reg.

Sir,

As per the directions under "NOC" to M/s Monnet Power Company Ltd, Vill :-Malibrahmani, Angul District, Orissa, the firm has submitted the Rain Water Harvesting and Artificial Recharge report for their Plant at Vill : Malibrahmani District :-Angul, Orissa. The same has been forwarded for your kind perusal and necessary action.

Encl:- As above.

Yours faithfully,

**(D.Y Sirsikar)
Regional Director**

Copy to: M/s. Monnet Power Company Ltd., Plot No:- 707/B, Amalapada, Angul-759122, Orissa, for information.

**(D.Y Sirsikar)
Regional Director**

Annexure-E

Fly Ash Silo



Annexure-F

Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



2013 12 11

Green Belt Development Photographs in M/s MPCL



Green Belt Development Photographs in M/s MPCL



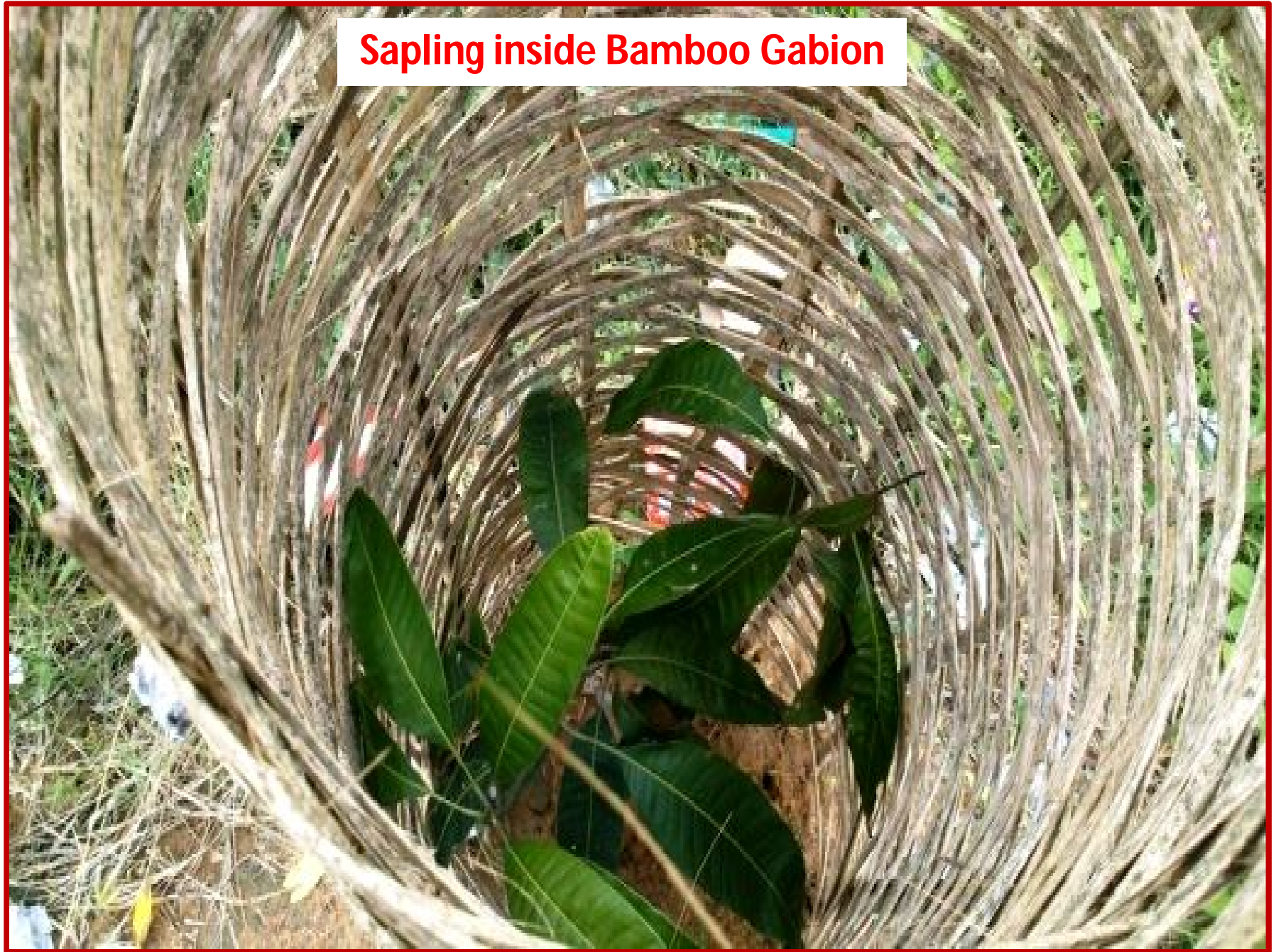


OFF-CAMPUS PLATATION

Bamboo Gabion



Sapling inside Bamboo Gabion



Narayan Sagar Pond



2013 09 16



Near Narayan Sagar Pond

Panchamahala to Bantala road





Panchamahala to Banatala Road

Kaliakata School



2013 09 16

Kankarai School



Annexure-G



19/1-

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION (PESO)
(Formerly Department of Explosives)
5th Floor, A-Block, CGO Complex, Seminary Hills,
Nagpur (M.S.) 440006

Email : explosives@explosives.gov.in

Phone/Fax No : 2510248/2510577

Dated : 11/10/2012

Prior Approval Number : A/P/HQ/OR/15/1221(P303886)



12 OCT 2012

To,

M/s Monnet Power Company Ltd.,
At Malibramahani P.O. Nisa,
Via Koshla,
Angul,
ANGUL, Odisha , Pin Code : 759130.

Sub : Proposed Petroleum Class C Installation at
Plot/Khasara No : Malibrahmani in Angul District, Village/Town : Angul, District : ANGUL, State : Odisha

Dear Sirs,

Please refer to your letter No. MPCL/CCOE/2012 dated 12/9/2012

The Drawing Nos. PE-VO-342-166-A301, 111-21-200 Dated Nil , Nil showing the site and layout etc. of the above installation is/are approved subject to condition that LOI from IOL company to be submitted at the time of grant of lic. A copy (of each) of the same is returned herewith duly endorsed.

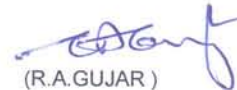
The following documents which are necessary in connection with the grant of a licence in Form XV of the Petroleum Rules, 2002 for the above installation may please be submitted to this office for further action in the matter.

1. An Application in Form IX (enclosed) duly filled in and signed.(in duplicate)
2. A Bank Draft for Rs. 15000/- being the requisite licence fee. The bank draft should be drawn on any Nationalised Bank in the favour of the Chief Controller of Explosives, Nagpur Payable at Nagpur.
3. Four copies of the approved plans.
4. Safety and Test Certificate required under rule 130 and 126 of the Petroleum Rules, 2002 (enclosed) issued by Competent person. (Original + 2 copies)
5. A original ' No Objection Certificate' from the Local District Authority together with site plan duly endorsed by him with his office seal thereon.(Original + 2 copies)
6. Specimen signature(s) of the person(s) authorised to sign the correspondence intended for the Department in connection with a copy to the Jt. Chief Controller of Explosives East Circle office ,Kolkata. (in duplicate)

This approval/permission, however, does not absolve from obtaining necessary permission/clearance from other authorities or under other statutes as applicable.

Note : Your Balance Amount with the Department is Rs.100/-, which will be used for processing of the same Licence in future.

Yours Faithfully,


(R.A.GUJAR)

Deputy Chief Controller of Explosives
for Chief Controller of Explosives

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)

Annexure-H

First Aid Center at MPCL



Ambulance engaged in First Aid Center



Annexure-I

Dt. 20.01.14

To WHOM SO EVER IT MAY CONCERN

EXPENSES STATEMENT FOR ENVIRONMENT PROTECTION MEASURES AS ESTIMATED IN EIA

REPORT FOR THE MPCL PROJECT AT ANGUL

(Rs. In Lacs)

SL	Description	Recurring Cost PA	Capital cost as submitted earlier	Actual Projected Cost.
1.	Air Pollution Control		11,500.00	20,542.34
2.	Water Pollution Control		6,000.00	#
3.	Noise Pollution Control		Included abpve	#
4.	Environment Monitoring & Management		225.00	#
5.	Reclamation Mined Area	600.00		#
6.	Occupational Health		75.00	#
7.	Green Belt		200.00	#

Order is in process and actual cost could be arrived before completion of the project.

However the expenses will not be less than the submitted figure as above submitted through EIA Report.

For Monnet Power Company Ltd.



(BB BEHERA)
Sr. GM (Accounts)