

usha martin

Usha Martin Limited

(Wire Ropes & Speciality Products Division)

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Ref: UML/Ranchi CPP/MOEF/16/01

Dated : 28.05.2016

To,
Ministry Of Environment & Forests,
Climate Change, Regional Office-Ranchi,
Bungalow No.A-2,Shyamli Colony,
Ranchi-834002
Office No: 0651-2410007/2410002

Email: ro.ranchi-mef@gov.in

Kind Attn: Mr. A.N.Sharan.

SUBJECT : SUBMISSION OF HALF YEARLY REPORTS FOR 2X10 MW CPP AT USHA MARTIN LIMITED, TATISILWAI, RANCHI (PERIOD: OCT'15 TO MARCH'16)

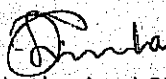
Ref.: Ministries Clearance letter no: J-13012/122/2008-1A.II (T) dated 07-04-2011

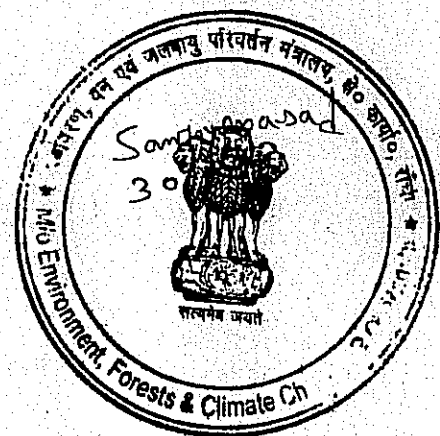
Dear Sir,

We are herewith submitting Hardcopies of the six month compliance report for your kind perusal and reference.

Thanking you and best regards,

Yours faithfully,
For Usha Martin Ltd., Ranchi


(Authorized Signatory) CPP (2 X 10MW)
USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND, PIN-835103



Encl: As above



Registered as an
Manufacturer
of
Wire Ropes
at
Ranchi Office



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USHAMARTIN

Captive Power Plant 2X10 MW CPP, Tatisilwai Ranchi	Environmental Clearance MOEF Letter No.: J-13012/122/2008- IA.II(T) dated 07-04-2011 Compliance status as on : 30.03.2016 Period : October 2015 to March 2016
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MOEF Compliance Report (Period: October 2015 to March 2016)

Sub: 2X 10MW Coal based Captive Thermal Power Plant at village Tatisilwai in Ranchi Dist., in Jharkhand - reg. Environmental Clearance

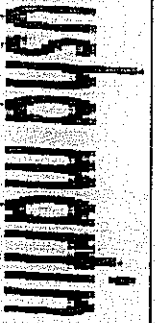
With reference to our letter dated 29.12.2010 & 28.10.2011 on the subject mentioned above, the Ministry of Environment & Forests has examined the application

2. It has been noted that the proposal is for setting up 2x10 MW Captive Coal Based Thermal Power Plant at village Tatisilwai, in Ranchi Dist., in Jharkhand. Land requirement will be 12.278 acres, which is within the extended boundary of the existing Steel Wire Plant. The co-ordinates of the site are at Latitude 23021'56.07" N to 23°22'28.79" N and Longitude 85°25'14.29" E to 85°26'03.60" E. Coal requirement will be 0.183 MTPA, which will be obtained from own captive Lohari Coal Block near Daltonganj, in Jharkhand, which is about 200 Kms away. Environmental clearance for this coal block has been obtained. Ash and Sulphur contents in coal will be 41.70% and 0.3 to 0.5% respectively. About 0.0612 MTPA of Fly Ash will be generated, which will be supplied to cement manufacturer viz. M/s Holtec Cement Ltd. Source of water requirement will be from Subarnarekha River which flows at a distance of 0.5 Km from the boundary of the project site. Air cooled condenser will be used for main condensate cooling. Make up water requirement will be 26 cum / hr. There are no national parks, wildlife sanctuaries, heritage sites, tiger / biosphere reserves etc. within 10 km of the site. Public hearing was conducted on 14.09.2010. Cost of the project will be Rs 97.0 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment 82, Forests vide S.O. 1533 (E), dated September-14, 2006.

Environment Dept. 2X10 MW CPP. Ranchi

CPP (2 X 10MW)
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JHARKHAND, PIN-833102




Captive Power Plant	Environmental Clearance
2X10 MW CPP, Tatisilwi Ranchi	MOEF Letter No.: J-13012/122/2008-IA.1(T) dated 07-04-2011
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4. Based on the information submitted by you, as at Para 2 above and others and presentation made before the Expert Appraisal Committee(Thermal Power) in its 17th Meeting held during February 7-8, 2011, the Ministry of Environment and Forests hereby accords environmental clearance under the provisions of EIA Notification dated September 14,2006, subject to the compliance of the following Specific and General conditions:

SPECIFIC CONDITIONS

A.	Specific Conditions:	Status
(i)	Road transportation of coal shall be permitted for a limited period of 36 months only. The project proponent shall shift to railway transportation thereafter. The project proponent shall be vicariously responsible for liabilities incurred for road transportation such as accidental damages to public, coal fines emission from transporting trucks etc. The project proponent shall immediately start its action plan for rail transportation with consultation with the Railways and shall submit half yearly action taken report to the Ministry on the matter.	<ul style="list-style-type: none">• Application of EC amendment submitted via proposal no. IA/JH/THE/10337/2011. ref. Annex-1• Considered in the 36th EAC held on 20.05.2015• As per EAC- Minutes of Meeting, Recommendations project has been permitted for Coal TRANSPORT by Road for Three years.

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Ranchi

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<p>(ii) High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³ Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.</p>	<ul style="list-style-type: none">• Complied
<p>(iii) Sulfur and ash contents in the coal to be used in the project shall not exceed 0.5 % and 34 % respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made of MoEF for suitable amendments to environmental clearance condition wherever necessary.</p>	<ul style="list-style-type: none">• Being Complied. However, An Amendment to use 42% ash has been recommended by EAC meeting held on 26-05-2015. Amendment letter is awaited
<p>(iv) Stack of 70 m height shall be installed and provided with continuous online monitoring equipments for Sox, Nox and PM2.5 and PM10. Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also monitored on periodic basis.</p>	<ul style="list-style-type: none">• Stack of 70 m height has been installed• Online monitoring equipments for Sox, Nox and PM2.5 and PM10 has been installed & connected to JSPCB/CPCB server. Completion certificate attached (Annex-2a & 2b)• A Mercury emission from stack has been checked periodically through M/S Mecon. Report Attached as Annex-3• Exit velocity of flue gas is now maintaining above 22m/sec although it is not commercial viable for small captive power plant.

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(v) Existing de-generated water bodies (if any) in the study area shall be regenerated at the project proponent's expenses in consultation with the state Govt.	<ul style="list-style-type: none"> There are no degenerated water bodies in the study area of CPP.
(vi) Water requirement for running the plant shall be met from harvested rainwater and no ground water shall be extracted for the purpose.	<ul style="list-style-type: none"> Water requirement for the project is met from the existing water commitment of WWR. Rain water Harvesting system has been installed No ground water is extracted.
(vii) Hydro-geological status (quality and quantity) of ground water 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/ date of water quality monitored regularly and maintained shall be submitted to the Regional Office of the Ministry.	<ul style="list-style-type: none"> Complied. Tested through M/S MECON Ltd and no significant deterioration observed.
(viii) 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.	<ul style="list-style-type: none"> Source of water for the project is River Subarnarekha. We have already installed Rainwater harvesting system, so that the requirement of water can be met from Rainwater to a large extent in lean season.
(ix) No water bodies (including natural drainage system) in the area shall be disturbed due to activities associated with the setting up /	<ul style="list-style-type: none"> Complied.

Environment Dept. 2X10 MW CPP, Ranchi

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	operation of the power plant.	
(x)	COC of 5.0 (as may be applicable) shall be adopted.	<ul style="list-style-type: none"> Complied.
(xii)	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed. A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	<ul style="list-style-type: none"> ETP of latest technology consists of neutralizing pit, guard pond, clarifier, filter press, sludge treatment plant and storage tank etc. have been installed to take care of the waste of Power plant. We also installed Sewage Treatment system (STP). All the function of ETP and STP are in closed loop, as such there will be no chance of getting mixed with storm water. The output of ETP Treated water is used in Brick Plant & dust separation. Maintain ZERO discharge from CPP Complied.
(xiii)	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.	
(xiv)	Utilization of 100% Fly Ash generated shall be made from 4th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	<ul style="list-style-type: none"> There are 03 nos of fly ash brick production unit has been installed & all are in operation. Currently (Period: Oct'15 to March'16) ash utilization of 107 % has been achieved. Cement & outside brick manufacturers are

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Prakash

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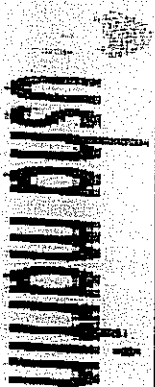
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<p>(xv) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored 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.</p>	<p>also taking our fly ash on regular basis. The utilization report for last six months is attached for your ref. via Annex-4</p> <ul style="list-style-type: none"> • Being Complied. • No ash is disposed in low lying area.
<p>(xvi) Ash pond (if any) shall be lined with HDP/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.</p>	<ul style="list-style-type: none"> • Complied. • Phase wise plantation has been commenced from the beginning of the project • This year about 1668 no's Trees have been planted.
<p>(xvii) Green Belt consisting of 3 tiers of plantations of native species around plant and covering 33% of area shall be raised. Tree density shall not less than 2500 per ha with survival rate not less than 80%.</p>	<ul style="list-style-type: none"> • A NGO under M/s Usha Martin is engaged in its unwavering commitment to social responsibility. For over three decades, the company has invested ample man-hours and
<p>(xviii) The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for providing fluoride free potable drinking water supply in the nearby villages and schools shall be</p>	<ul style="list-style-type: none"> • A NGO under M/s Usha Martin is engaged in its unwavering commitment to social responsibility. For over three decades, the company has invested ample man-hours and

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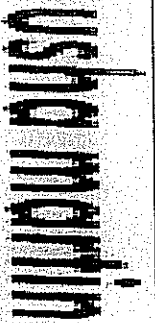
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<p>undertaken in a time bound manner.</p>	<p>capital on community development projects for integrated prosperity in rural Jharkhand, through a CSR arm, Krishi Gram Vikas Kendra (KGVK). This NGO undertakes various development initiatives, following a model of Total Village Management (TVM). Focusing on key areas like Watershed development, agricultural productivity, better health practices, education, empowering women and encouraging micro enterprise.</p>
<p>(xix) An amount of Rs. 0.50 Crores shall be earmarked as one time capital cost for CSR programmed. Subsequently a recurring expenditure of Rs. 0.10 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.</p>	<ul style="list-style-type: none">• Being Complied.


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(xx)	While identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. Vocational training programme for possible self employment and jobs shall be imparted to identified villagers free of cost.	<ul style="list-style-type: none">• Complied. Report Attached via Annex-5
(xxi)	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.	<ul style="list-style-type: none">• Complied
GENERAL CONDITIONS		
B. General Conditions:		
(i)	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 plan layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	<ul style="list-style-type: none">• Complied

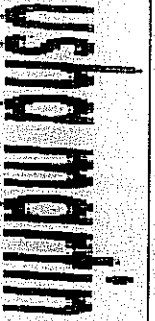
Environment Dept. 2X10 MW CPP, Ranchi

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(ii)	Storage facilities for auxiliary liquid fuel such as LDO and/ 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.	<ul style="list-style-type: none">Complied
(iii)	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.	<ul style="list-style-type: none">Complied.
(iv)	Monitoring surface water quantity and quality 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.	<ul style="list-style-type: none">Complied.Samples checked on regular basis. Report attached via Annex-6
(v)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	<ul style="list-style-type: none">Complied.

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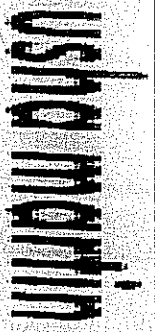
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<p>(vi) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ ear muffs etc. shall 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.</p>	<ul style="list-style-type: none"> • Complied. • Noise report is attached via Annex-6
<p>(vii) Regular monitoring of ambient air 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 exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.</p>	<ul style="list-style-type: none"> • Being Complied. • Monitored regularly in our own Environmental laboratory. Reports attached as Annex-7 • Periodically Samples have also been given to M/s MECON for independent analysis. • Ambient air quality report of all environmental parameters are attached for your ref. via Annex-3,6 & 7
<p>(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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.</p>	<ul style="list-style-type: none"> • Complied.

Environment Dept. 2X10 MW CPP, Ranchi

Qwida


CPP (2 X 10MW)
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<p>Captive Power Plant 2X10 MW CPP, Tatisilwi Ranchi</p>	<p>Environmental Clearance MOEF Letter No.: J-13012/122/2008- IA. II(T) dated 07-04-2011 Compliance status as on : 30.03.2016 Period : October 2015 to March 2016</p>
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<p>(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 Forest at http://envfor.nic.in.</p>	<ul style="list-style-type: none"> • Complied.
<p>(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 / representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.</p>	<ul style="list-style-type: none"> • Complied.
<p>(xi) An Environmental Cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the head of the Cell shall directly report to the Head of the Organization.</p>	<ul style="list-style-type: none"> • Complied

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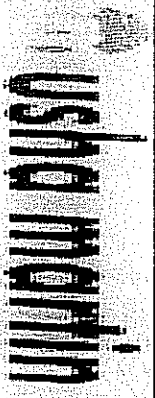
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<p>(xii) The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM2.5 & PM10), SO2, NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.</p>	<ul style="list-style-type: none"> • Complied. • Link: http://www.ushamartin.com/about-us/ • Picture of Display board is attached via Annex-8
<p>(xiii) The environment statement for each financial year ending 31st 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 be e-mail.</p>	<ul style="list-style-type: none"> • Complied.
<p>(xiv) The project proponent shall submit six monthly 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 compliance of the environment of the environmental clearance conditions on</p>	<ul style="list-style-type: none"> • Complied.

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Captive Power Plant

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their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.

(xv)

Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent 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 Nox (from stack & ambient air) shall be displayed at the main gate of the power plant.

- Complied.

(xvi)

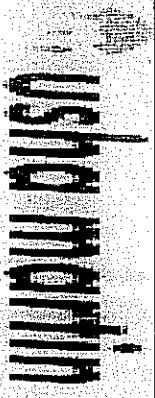
Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.

- A separate fund is already allocated.

Environment Dept. 2X10 MW CPP, Ranchi

Drinks

CPP (2 X 10MW)
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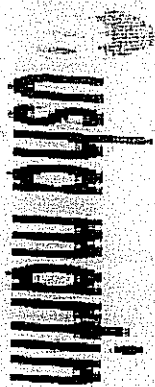
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(xvii)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	<ul style="list-style-type: none">The fund for this small project of Rs.100 cr. is already provided from the existing integrated fund for various projects' expansion
(xviii)	Full cooperation shall be extended to the Scientists/ Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.	<ul style="list-style-type: none">Noted for compliance
5	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	<ul style="list-style-type: none">Noted for compliance
6	The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.	<ul style="list-style-type: none">Noted for compliance
7	Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	<ul style="list-style-type: none">Noted for compliance

Environment Dept. 2X10 MW CPP, Ranchi

CPP (2 X 10MW)
USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND, PIN-835103



Captive Power Plant
2X10 MW CPP, Tatisilwi
Ranchi

Enviro. Mental Clearance
MOEF Letter No.: J-13012/122/2008-
IA.II(T) dated 07-04-2011
Compliance status as on : 30.03.2016
Period : October 2015 to March 2016

8	In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.	<ul style="list-style-type: none">• Noted for compliance
9	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.	<ul style="list-style-type: none">• Noted for compliance

Prinka
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TATISIL WAI, RANCHI
JHARKHAND, PIN-853103

Environment Dept. 2X10 MW CPP, Ranchi

Dr. I N Rao

From: Dr. I N Rao <in_rao@ushamartin.co.in>
Sent: Tuesday, May 12, 2015 2:11 PM
To: 'sanchita@nic.in'
Cc: 'monitoring-ec@nic.in'
Subject: RE: Acceptance Letter for EC Application- amendment for the 2x10 MW Captive Power Plant at Tatisilwai – Ranchi

Respected Madam

It is thankfully acknowledged the receipt of your e-mail informing ACCEPTANCE of our application submitted on 25-02-2015 seeking EC amendment for the 2x10 MW Captive Power Plant at Tatisilwai – Ranchi and seeking submission of documents – hard copy .

It is humbly submitted that we have already submitted a copy on 12-March-2015, However, as advised same is submitted again for your ready reference.

For your kind information and perusal please.

Thanking you

Dr. I N Rao
Sr. VP & Group Head (Environment.)

 **usha martin**

Usha Martin Limited
(Wire-Ropes & Speciality Products Division)
Tatisilwai , Ranchi - 835103
Jharkhand, India
T +91 651-3051453
M +91 9835025201
F +91 651-3051409
in_rao@ushamartin.co.in
www.ushamartin.com



CPP (2 X 10MW)
USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND, PIN-835103

From: sanchita@nic.in [mailto:sanchita@nic.in]
Sent: Monday, May 11, 2015 5:20 PM
To: Dr. I N Rao
Cc: monitoring-ec@nic.in
Subject: Acceptance Letter for EC Application

Acceptance Letter for EC

F.No.- J-13012/122/08-IA.II(T)

Ministry of Environment, Forests and Climate Change

Government of India

Indira Paryavaran Bhawan

Jor Bagh Road, Jor Bagh

New Delhi-110003

Dated: 11 May 2015

To,

USHA MARTIN LTD

Jharkhand , 835103

Subject : 2x10 MW Captive Power Project

Sir,

This has reference to your proposal No. IA/JH/THE/10337/2011 dated 25 Feb 2015 regarding grant of Environmental/CRZ Clearance for the above mentioned proposal.

2.0 This is to acknowledge that the proposal has been received in the Ministry. You are requested to submit a hard copy (signed) of the documents in the Ministry (at the address given below) within a week, along with email alert generated by the system (through speed post).

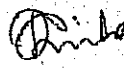
Address:

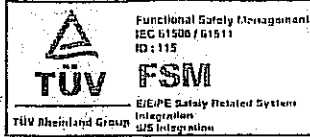
Section Officer, 3rd floor, Vayu wing, Indira Paryawaran Bhawan, Jor Bagh Road, Jor Bagh, New Delhi-110003

3.0 The proposal shall be included in the agenda for its consideration by the respective EAC for grant of EC/CRZ Clearance after receipt of the hard copy along with email alert. The hard copy of the same can also be submitted by hand in the Ministry in between 3PM to 4PM on each working day. You are requested to visit portal of the Ministry at <http://environmentclearance.nic.in> to check its inclusion in the agenda. Once the proposal is included in agenda for a meeting, you may circulate hard copies of documents to the Chairman and Members of EAC within a week of uploading of agenda on Ministry's portal.

Yours Sincerely

Member Secretary


CPP (2 X 10MW)
USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND, PIN-835103



Yokogawa India Limited
MERLIN INFINITE
Office No. 710, 7th Floor, Plot No. 51,
Block - DN, Salt Lake City, Sector - V,
Kolkata - 700 091
Tel : 91-33-30546000

YOKOGAWA

Ref: YIL/CSD/VAS/KOL/P/14313
05/05/2015

To

USHA MARTIN INDUSTRIES LIMITED
TATISILWAI, RANCHI-835103
Jharkhand

Kind attn.: Mr. Arindam dasgupta

Dear Sir,

Subject: - Submission of detailed document of Usha Martin Industries Limited, Ranchi, Jharkhand for Yokogawa India Limited's Online Emission monitoring to JSCB and CPCB server

We would like to inform you that with reference to your order no: PP/30066/14-15 dated 26/02/15 we have successfully commissioned at Usha Martin Industries Limited for Online Emission data Monitoring data Transmission to JSPCB on 28/03/15. All the Online emission data are updating in server satisfactorily without interruption. Yokogawa Server continuously monitoring all the data in Server if any discrepancy found then same will be rectified at the earliest.

Please find enclosed here with the detailed documents for your information and future record. So request you to kindly acknowledge the same.

We would like to thank you for your kind cooperation extended to us.

Thanking you

Truly yours For Yokogawa India Limited

Sukanta Das

Customer Service Division

Mob: 9748754923

Email: Sukanta.das@in.yokogawa.com





Registered Office : Plot No. 96, Electronics City Complex, Hosur Road, Bangalore - 560 100, INDIA

CIN No: U74210KA1987FLC008304

Email id : contactus@in.yokogawa.com

Web Site : <http://www.yokogawa.com/in>

CPP (2 X 10MW)
USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND, PIN-835103

MINUTES OF MEETING																					
		vigilant plant																			
CUSTOMER	USHAMARTIN LTD.																				
MEETING LOCATION	CPP (2 X 10MW) RANCHI, JHARKHAND																				
DATE	March 20, 2015																				
PURPOSE OF THE MEETING	Addition of new tags for remote transmission & monitoring on CPCB site																				
W.O.																					
CUSTOMER		PARTICIPANTS																			
Mr. M.S. Mandal Mr. V. Kumar		Mr. Dhirender Dagar (Yokogawa India Ltd) MOB: 9996952300																			
SLNO	DESCRIPTION	ACTION BY	REMARKS																		
1	M/S YIL Engineer visited the site on 28/03/15 to add and configure new tags for remote transmission & monitoring on CPCB site.	M/S YIL																			
2	The following new tags are added through Gate OPC and the same tags are added on CPCB site.	M/S YIL																			
	<table border="1"> <thead> <tr> <th>TAG</th> <th>RANGE</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>1) ETZPH</td> <td>0-125</td> <td>PH</td> </tr> <tr> <td>2) ETZTEMP</td> <td>0-150</td> <td>degC</td> </tr> <tr> <td>3) ETZTSS</td> <td>0-1000</td> <td>mg/m³</td> </tr> <tr> <td>4) BTZ12</td> <td>0-300</td> <td>degC</td> </tr> <tr> <td>5) BTZ12</td> <td>0-300</td> <td>degC</td> </tr> </tbody> </table>	TAG	RANGE	UNIT	1) ETZPH	0-125	PH	2) ETZTEMP	0-150	degC	3) ETZTSS	0-1000	mg/m ³	4) BTZ12	0-300	degC	5) BTZ12	0-300	degC		
TAG	RANGE	UNIT																			
1) ETZPH	0-125	PH																			
2) ETZTEMP	0-150	degC																			
3) ETZTSS	0-1000	mg/m ³																			
4) BTZ12	0-300	degC																			
5) BTZ12	0-300	degC																			
3	The newly added tags showing proper value after configuration and Under observation. Usha Martin will provide any further modification required for tags configured.	M/S YIL																			
4	YIL request to Usha Martin to provide detail for Limit Value as per norms set up by State Pollution control so that we can display same at our site.	M/S YIL																			
5	M/S YIL Engineer is leaving site on 28/03/2015 after completing above activities.	M/S YIL																			
 CUSTOMER		 OKOGAWA																			



(Handwritten signature)

(Handwritten signature)

CPP (2 X 10MW)
 USHAMARTIN LTD.
 TATISIL WAI, RANCHI
 JHARKHAND, PIN-835103



Yokogawa India Limited

Regd. Office :
Plot No. 96,
Electronics City, Hosur Road
Bangalore - 560 100. India

Tel : 0091-80-41586000
Fax : 0091-80-28521445

YOKOGAWA

To,

Date:24/12/2013

Usha Martin Ltd.
(Wire Ropes and Specialty products division)
Works: Tatisilwal, Ranchi 835103
Jharkhand, India.

Sub: Completion certificate for Online connectivity of CEMS data to JSPCB

Ref: PO.No. 201552 and PP/30059/13-14 dated 4/9/2013

To whomsoever it concerns

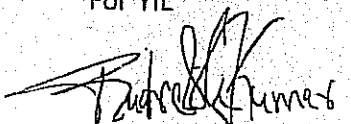
With reference to the above mentioned purchase order, we would like to inform that M/s Yokogawa India Ltd. has successfully completed supply ,supervision, erection and commissioning of emission data connectvity to JSPCB for their verification and evaluation. Pls refer to the Minutes Of Meeting signed accordingly by M/s UML

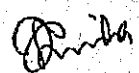
The performance is found to be satisfactory.

With this M/s Yokogawa has successfully completed and handed over the job in accordance with the Usha Martin Ltd's requirement on 13-12-2013

Thanking you,

For YIL


Mr.B.Rudresh Kumar
Assistant Manager


CPP (2 X 10MW)
USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND, PIN-835103

MINUTES OF MEETING

vigilantplant®

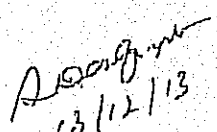
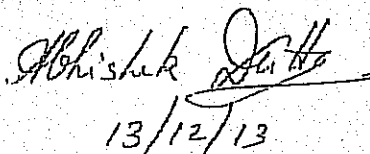
❖ CUSTOMER NAME	❖ M/s Ushamartin Ltd		
❖ MEETING LOCATION	❖ Power-Plant- Ranchl		
❖ PURPOSE OF MEETING	❖ Connectivity to JPCB		
❖ MEETING DATE	13-12-2013	❖ SERVICE REQUEST NO	KOL/13/A/CA/31354
❖ P.O. No	20152	❖ P.O. DATE	06/09/2013
❖ 1 st VISIT START FROM	14-11-2013	❖ 1 st VISIT END ON	15-12-2013
❖ 2 nd VISIT START FROM	27-11-2013	❖ 2 nd VISIT END ON	30-11-2013
❖ 3 rd VISIT START FROM	12-12-2013	❖ 3 rd VISIT END ON	13-12-2013

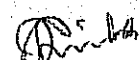
Member presents on Meeting

FROM UML		FROM YOKOGAWA
Mr Arindam Dasgupta		Mr Prabir Mandal
		Mr. Abhishek Dutta

During the visit YIL engineer carried out the following jobs

SL No	DESCRIPTION	REMARKS
1.	Emission control system is connected with OPC station (HIS0163). Through OPC Interface, required tags are configured so that we can receive those tags to the prescribed system. Here through Gate OPC, tags fetching.	
2.	Through DATA LOGGER this tags are coming to the assigned system. All the assigned tags are coming successfully through DATA LOGGER in the System. Web monitoring software was installed in this system and through this software this tags are given to JPCB server via Internet.	
3.	BSNL router was used for Internet. For making this system safe from Internet virus, one UTM box- Cyberroam was installed between Internet router and logger server system.	
4.	UTM box was configured successfully. Port A is assigned for system and Port B was assigned for Internet router. Kindly do not interchange the port or disturb the configuration, because UTM box configuration was very critical one and once it gets disturbed, then JPCB will not be able to see the data. Backup of UTM box was taken and saved in drive D and UTM box is also protected with password.	
5.	The assigned data are checked through Internet, all are successfully going to JPCB. Customer wants a certification regarding this connectivity setup for onward submission to the Ministry of Environment.	
6.	Engineer of YIL left the site on 13/12/2013	

 13/12/13 M/s UML	 13/12/13 M/s YIL
---	--


 CPP 12 X 10MM
 USHAMARTIN LTD.
 TATISIL, WAL, PUNSCHE
 HARKHANDI, PIN-835111

मेकॉन लिमिटेड (भारत सरकार का संस्थान)
MECON LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)

प्रधान कार्यालय (Head Office) : राँची-2, झारखण्ड, भारत, Ranchi - 2, Jharkhand, India, फोन/Phone : 0651-2483000, फैक्स/Fax : 0651-2482189/2482214
ई-मेल/E-mail : ranchi@meconlimited.co.in वेबसाइट/Website : http:// www.meconlimited.co.in

No.11.S2.Q744.02.2.02

Dated: 17.10.2015

M/s Usha Martin Limited
(Captive Power Plant)
Tatisilwai
Ranchi - 835 103
JHARKHAND

Sub.: Mercury emission monitoring report from CPP.
Ref.: Purchase order no. PP/30011/15-16 dated 20.07.2015

Dear Sir,

Please find enclosed herewith the mercury (Hg) emission monitoring report from CPP as annexure - I.

Thanking you and assuring you of our best services at all times.

Yours faithfully,
for MECON LIMITED



(Dr. Balbir Singh)
Dy. General Manager
Env. Engg. Section

Major Offices:

नई दिल्ली/New Delhi
+91-11-2204 1201 (Phone)
+91-11-2204 1214 (Fax)
delhi@meconlimited.co.in

मुम्बई/Mumbai
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mumbai@meconlimited.co.in

कोलकाता/Kolkata
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+91-44-2618 4873 (Phone)
+91-44-2618 4874 (Fax)
chennai@meconlimited.co.in

बैंगलुरु/Bangalore
+91-80-2657 1661-63 (Phone)
+91-80-2657 6352 (Fax)
bangalore@meconlimited.co.in



No.11.S2.Q78Y.02.2.02

Annexure -V
Sheet 1 of 1

MERCURY EMISSION RESULTS FROM CAPTIVE POWER PLANT(CPP)

Project : M/s Usha Martin Limited, Tatisilwai
Date of Sampling : 28.08.2015

Sl. No.	Location	Parameter	Result s $\mu\text{g}/\text{Nm}^3$	Remarks
1.	ESP outlet	Mercury	BDL	

BDL denotes Below Detection Limit for Hg $<0.03 \mu\text{g}/\text{m}^3$

ENVIRONMENTAL ENGLABORATORY
MECON RANCHI-834002

Sanjiv Kumar
ANALYSED BY

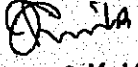
CHECKED BY

Usha martin Limited, 2X10 MW CPP, Ranchi

Fly Ash Utilization from Oct'15 to March'16

Month	Qty Generated (Mt)	Qty Utilized (Mt)			Unutilized (Mt)	Utilization (%)
		Utilized in Fly Ash Brick Plant	3rd Party Utilization	Total (Mt)		
Oct'15	2785.3	1510.98	2038.22	3549.2	-763.9	127
Nov'15	2413.61	1361.9	1884	3245.9	-832.29	134
Dec'15	3351	1367.27	1231.73	2599	752	78
Jan'16	3547.81	1520.46	1100.59	2621.05	926.76	74
Feb'16	3701.08	1859.4	1607.87	3467.27	233.81	94
March'16	2868.12	2154.79	2583.1	4737.9	-1869.75	165
Total	18666.9	9774.8	10445.5	20220.3	-1553.4	107**

**** The higher utilizations is due to consumption of previous month/ years ash generation**


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JHARKHAND, PIN-835103

2015-16

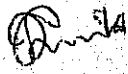
Progress Report UML CSR Power Plant Area October'15 - March' 16



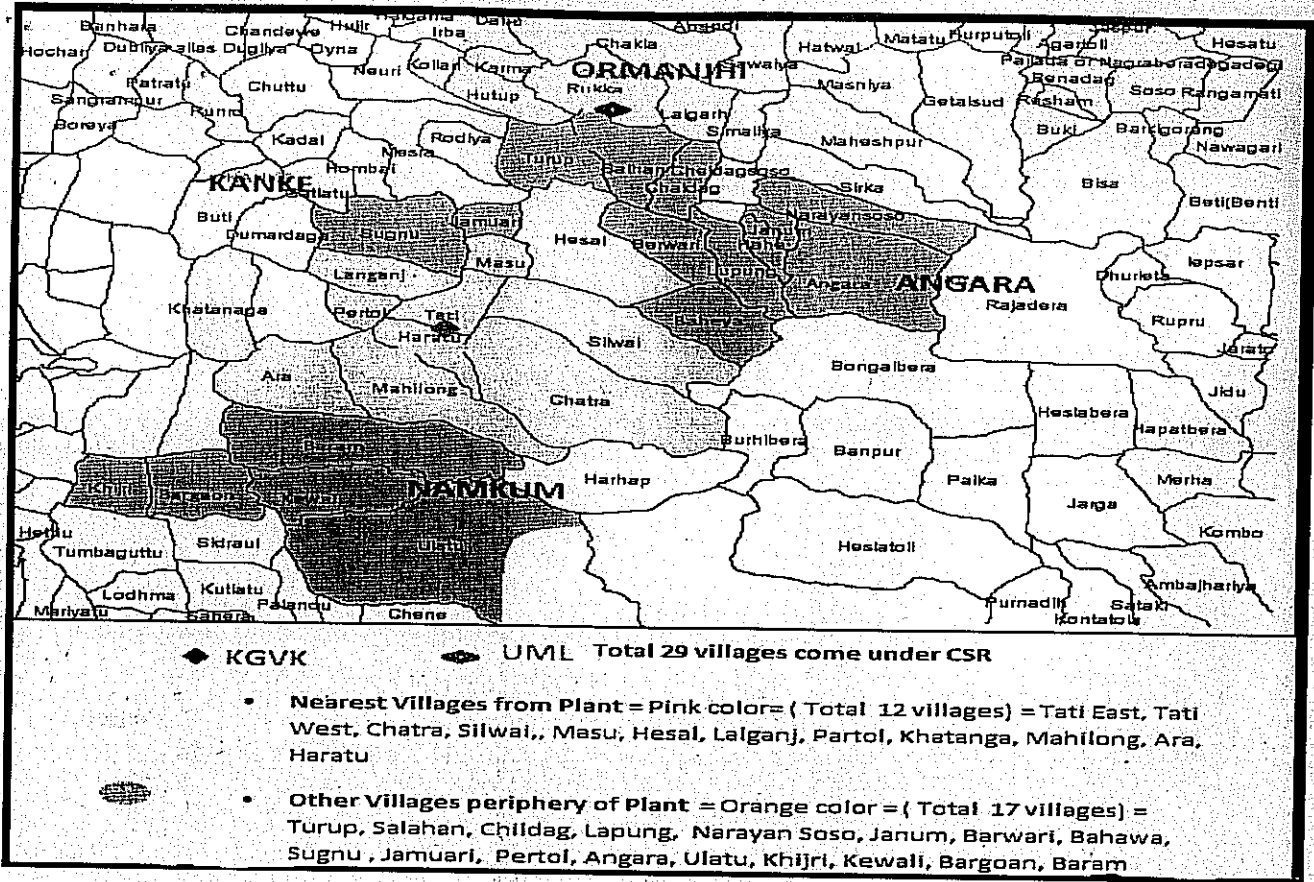
21/05/2015-15-39

CSR

USHA MARTIN Ltd

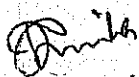

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JHARKHAND, PIN-835103

Villages covering CSR Project Power Plant Area.



Achievements of UML-CSR Ranchi for the period October' 15 – March '16

The project area of UML-GSR, Ranchi is operational in 29 villages in and around the Captive Power Plant and covering 3 Blocks of Ranchi District Namely Namkum, Angara and Kanke. KGVK a CSR arm of Usha Martin Ltd. focused its activities on eight TVM (Total Village management) pillars i.e. Health, Agriculture, Natural Resource Management, Training and Capacity Building, Education, Livelihood, Infrastructure development and Renewable energy. The activities carried out in the month from October'15 to March' 16 are as follows:


 CPP (2 X 10MW)
 USHAMARTIN LTD.
 TATISIL WAI, RANCHI
 JHARKHAND, PIN-835103

Natural Resource Management Activities:

- Almost 82 % of the House Holds in the 29 villages are having Access to safe drinking water. The rest 18 % we are targeting to cover in next 3 years. In this context we have done repairing and Maintenance of Two (02) **Jal Minars** (Water Tanks) in villages Silwai and Haratu. In both the villages water user groups have been made and they are regularly conduction their meetings and contribution some amount for repair and maintenance of the Jal Minar.
- For promotion of organic farming we have promoted NADEP compost (53) & Compost pit (54) for organic manure, Fish tonic (13) a organic way for pest control. We have also promoted Azola pit (95) to add nutrient value in cattle feed.
- Soil test has been done for the farmers to know the nature of their field and add necessary nutrients accordingly.
- As an ongoing activity we are also repairing the existing Hand Pumps in the 29 villages and creating water user groups. For this we have trained twenty persons (20) from the village itself, as a result generating employment for them also. These mechanics have been provided certificates from KGVK and as and when demand comes the Mukhiya's also call them and provide assignments.



Health Activities

- During the period Sixty One (61) **General Health Camps** and Three (03) **Dental Camp** were organized in 29 villages in which around 1530 patients were examined and medicines were distributed.
- **Twelve (12) Adolescent girls group** has been formed in 11 villages and Sixty One (61) meetings have been done to make them aware about personal hygiene, communicable diseases, Aneamia etc.
- **Eighty Three (83) Home Visits** has been for awareness about Anti Natal Check up, Post Natal Check up, Immunization etc. with the ladies who were present in Health



Office of Sahiya
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USHAMARTIN LTD.
TATISIL WAI, RANCHI
JHARKHAND - PIN-835103

- For prevention of disease we have promoted Kitchen Garden in Sixty Eight (68) households through waste water management. Farmers will save around Rs300-600 per month and will get nutritional food.
- We have school health session in government schools. The children are made aware about personal hygiene, hand washing techniques, prevention from different diseases etc.
- Animal health camp has been organized in Eleven (11) villages where total 953 cattle's were vaccinated.

Training and Capacity Building Activities:

- Training on local pest management/ improved cropping practices and organic manure has been conducted. Total 1682 farmers were made aware about the organic way of farming.
- Various trainings of SHG's were carried out at KGVK on the issues of TVM, SSS, Animal Husbandry, Vegetable cultivations etc for the farmers / SHG members of 29 villages.
- **Village level meetings of VHC, VEC, and SHG** was regularly organized in **29 villages**.
- **Regular Quality circle meeting** are being held in all villages and also-Audit of QC have been done by experts from Usha Martin Ltd.
- Regular training of PRI members, SHG members, Village Sparks is organized on issues like **SHG Book Keeping, Quality Circle, Agriculture and Animal Husbandry**.



Educational Activities:

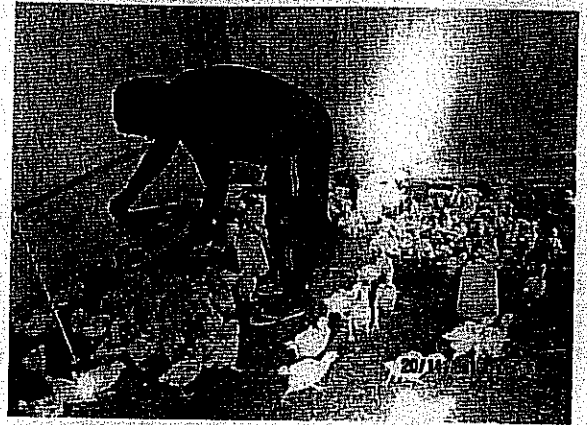
- Quality assessment input has been completed and remedial classes are running in Silwai, Lalganj, Khatanga, Pertol and Baram Government middle school. Approx 325 children's are being benefitted by this activity and with this additional support are doing well in class.
- **Edutainment classes** by the education team are organized in Government schools of Ara, Mahilong and Khatanga.



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 USHAMARTIN LTD.
 TATINIL WAI, BANYU
 HARJENDI, 09131100

Livelihood Generation Activities:

- As an income generation Activity, **Mushroom cultivation** has been promoted among **343 farmers** in 29 villages through which an additional income of Rs 1500-2000 has been generated. Also the mushroom spans are purchased from KGVK Agro, thus providing space for integration among two units.
- **Twelve (12)** farmers have started poultry farming as business unit with proper training and market facility. They are earning around Rs 4000-5000 per month.
- **Eight Hundred Ninety (890)** ducklings have been distributed between 89 households through which additional income of Rs 2500- 3000 will be generated by selling eggs in next 04 months.



Women Empowerment:

- Training has been provided to 24 ladies on pickle making, pappad making, imitation jewellery etc.
- **09 Adult literacy centers** are running in 08 villages in which around 142 women are learning to read and write, identify letters etc. Some of them have proceeded further and are able to write their names etc and are demanding for some advanced courses.

Token Activities:

- Computer set has been given to Government School to promote computer education among the children so that they can cope up with digitalization. Around 25 children are being benefitted.

Prithi
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TATISIL WAI, RANCHI
JHARKHAND, PIN-835103

Photo Gallery:

Figure- 1: Hand pump Repair



Figure- 2 NADEP Compost



Figure- 3 KitchenGarden



Figure- 4 Home Visit



Dmitri
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USHAMARTIN LTD.
TATISIL WAL, RANCHI
JHARKHAND, PIN-815103

Figure- 5 Vermi Compost



Figure- 6 Computer to Govt. School



Figure-7 Poultry Unit

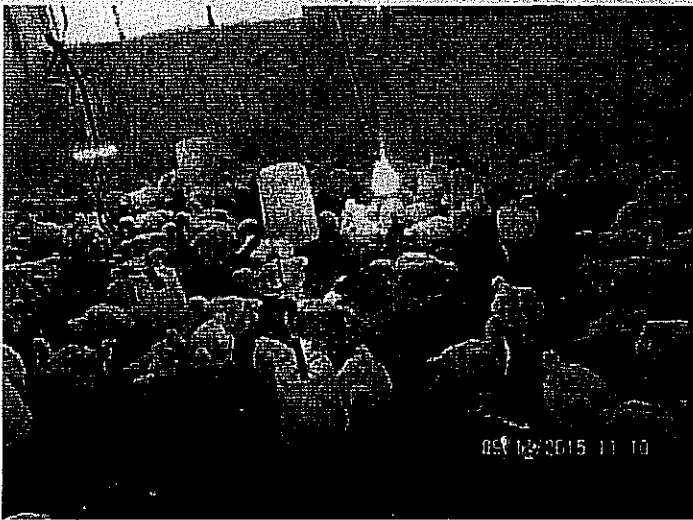


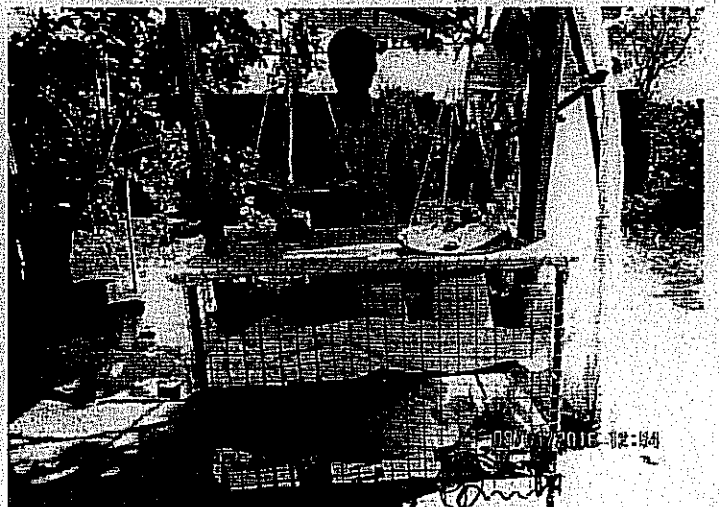
Figure- 10 Mushroom Cultivation



Figure- 11 Village Meeting with PRI Member



Figure – 12 Poultry Entrepreneur



CPP 12 X 10 MW
USHAMAKTIN LTD.
TATISIL WAL RANCHI
JHARKHAND INDIA

Figure – 12 Animal Health Camp



Figure – 13 Organic Way for Pest Control



Figure – 14 School Health Session



Figure – 15 Duckery Distribution





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MECON LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)



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CIN No. : U74140JH1973GOI001199

No.11.S2.Q78Y.02.2.02

Dated: 11.12.2015

M/s. Usha Martin Limited
(Captive Power Plant)
Tatisilwai
Ranchi - 835 103
JHARKHAND

Sub.: Effluent water quality monitoring report for 2st quarter.

Ref.: Purchase order-no. PP/30011/15-16 dated 20.07.2015

Dear Sir,

Please find enclosed herewith the effluent water quality monitoring report as annexure - I. The relevant standards as applicable are indicated in the reports.

Thanking you and assuring you of our best services at all times.

Yours faithfully,
for **MECON LIMITED**

(Dr. Balbir Singh)
Dy. General Manager
Env. Engg. Section

Major Offices:

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No. 11.S2.Q78Y.02.2.02

Annexure-I
Sheet 1 of 1

EFFLUENT WATER ANALYSIS REPORT

Project : M/s Usha Martin Limited (CPP), Tatisilwai
Date of Sampling : 30.11.2015
Type of Sample : Treated Effluent from CPP

Sl. No.	Parameter	General Standards*	Results
1.	pH	5.5 - 9.0	7.35
2.	Total suspended solids, mg/l	100	55
3.	Oil & Grease, mg/l	10	<2
4.	Phosphates (as P), mg/l	5.0	3.54
5.	Chloride (as Cl), mg/l	-	395
6.	BOD, 3 days at 27 °C, mg/l	30	18
7.	COD, mg/l	250	50
8.	Total Dissolved Solids, mg/l	-	1147
9.	Cyanide, mg/l	0.2	<0.01

Note: *General standards for discharge of environmental pollutants vide Ministry of Env. and Forests notification dated 19th May, 1993 and amendment dated 31st December, 1993.

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MECON RANCHI-834002

J. K. Kumar
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MECON LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)



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CIN No. : U74140JH1973GOI001199

No.11.S2.Q78Y.02.2.02

Dated: 22.12.2015

M/s Usha Martin Limited
(2X10 MW CPP)
Tatisilwai
Ranchi - 835103

Sub.: Ambient Noise Monitoring Report
Ref. : Purchase order no. PP/30007/12-13 dated 17.01.2014

Dear Sirs,

Please find enclosed herewith the summarised and hourly ambient noise monitoring report of 2X10-MW Captive Power Plant (CPP) as Annexure-I and II respectively. The monitoring was carried out during the period from 03.12.2015 to 04.12.2015. The relevant standards as applicable for ambient noise quality are also indicated in the report.

Thanking you and assuring you of our best services at all times.

Yours faithfully,
for MECON LIMITED

(Dr. Balbir Singh)
Dy. General Manager
Env. Engg. Section

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Annexure-I
Sheet 1 of 1

Summarised Results of Noise Monitoring at CPP Area

Sl. No.	Station Location	*Results					
		Day (0600-2200 hrs)			Night (2200-0600 hrs)		
		Max.	Min.	Log Avg.	Max.	Min.	Log Avg.
N-1	Near Laboratory	70.1	57.6	65.9	59.3	47.3	53.6
N-2	Near CPP Main gate	69.0	60.3	66.1	60.5	50.1	57.7
N-3	Near CPP Main gate-2	64.5	53.1	61.9	53.5	49.9	51.1
N-4	Near Coal Handling Plant	69.7	62.1	67.5	62.2	60.4	61.1

All values are in dB(A)

*Note: Sound pressure level - Leq(A) were measured for 5-10 minutes in one hour intervals for 24 hours.

Ambient Air Quality Norms in Respect of Noise

Type of Area	Day (0600-2200 hrs)	Night (2200-0600 hrs)
Industrial Area.	75	70
Commercial Area.	65	55
Residential Area.	55	45
Silence zone.	50	40

All values in dB (A)

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Annexure -II

UML (CPP), Tatisilwai

Project - 2X10 MW Captive Power Plant, Usha Martin Limited, Tatisilwai
Monitoring Period - 03.12.2015 to 04.12.2015

Results of Ambient Noise Monitoring (Night Time during 6.00 to 22.00 Hrs.)

Near Laboratory		Near CPP Main Gate		Near CPP Gate-2		Near Coal Handling Plant	
Time Hrs.	N-1	Time Hrs.	N-2	Time Hrs.	N-3	Time Hrs.	N-4
6.00	61.5	6.15	60.5	6.30	59.3	6.40	63.1
7.00	63.9	7.15	61.7	7.30	59.7	7.40	67.1
8.00	65.1	8.15	63.9	8.30	60.7	8.40	66.4
9.00	66.1	9.15	67.1	9.30	60.8	9.40	66.5
10.00	67.3	10.15	66.5	10.30	61.3	10.40	67.5
11.00	67.9	11.15	68.9	11.30	61.9	11.40	68.5
12.00	69	12.15	69.0	12.30	62.3	12.40	66.9
13.00	68.8	13.15	68.7	13.30	63.1	13.40	68.3
14.00	67.9	14.15	68.5	14.30	63.8	14.40	69.4
15.00	70.1	15.15	66.5	15.30	63.7	15.40	69.3
16.00	66.1	16.15	67.7	16.30	64.5	16.40	69.4
17.00	59.3	17.15	63.5	17.30	64.4	17.40	69.7
18.00	58.6	18.15	61.9	18.30	63.1	18.40	68.5
19.00	57.6	19.15	61.8	19.30	58.7	19.40	63.3
20.00	60	20.15	66.1	20.30	57.3	20.40	62.1
21.00	60.3	21.15	60.3	21.30	53.1	21.40	65.1

Results of Ambient Noise Monitoring (Night Time during 22.00 to 6.00 Hrs.)

Time Hrs.	N-1	Time Hrs.	N-2	Time Hrs.	N-3	Time Hrs.	N-4
22.00	59.3	22.15	60.5	22.30	53.5	22.40	60.5
23.00	55.3	23.15	59.7	23.30	49.9	23.40	60.9
24.00	50.7	0.15	59.3	24.30	51.5	0.40	60.5
1.00	49.1	1.15	58.4	1.30	50.1	1.40	60.4
2.00	48.3	2.15	57.7	2.30	50.7	2.40	62.2
3.00	47.3	3.15	55.3	3.30	50.6	3.40	61.7
4.00	50.3	4.15	51.3	4.30	50.9	4.40	61.1
5.00	53.3	5.15	50.1	5.30	50.0	5.40	60.9

All Values in dB (A).

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 CIN No. : U74140JH1973GOI001199

No.11.S2.Q78Y.02.2.02

Dated: 15.01.2016

M/s Usha Martin Limited
(Captive Power Plant)
Tatisilwa
Ranchi - 835 103
JHARKHAND

Sub.: Ambient air quality, stack emission, drinking water quality, effluent water quality and sludge quality monitoring report for 2nd quarter.

Ref.: Purchase order no. PP/30011/15-16 dated 20.07.2015

Dear Sir,

Please find enclosed herewith the ambient air quality, stack emission, drinking water quality, effluent water quality and sludge quality monitoring report as annexure - I, II, III, IV and V respectively. The relevant standards as applicable are indicated in the reports.

Thanking you and assuring you of our best services at all times.

एक कदम स्वच्छता की ओर

Yours faithfully,
 for **MECON LIMITED**

(Dr. Balbir Singh)
Dy. General Manager
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Annexure - I
Sheet 1 of 1

AMBIENT AIR MONITORING REPORT

Project : M/s Usha Martin Limited (CPP), Tatisilwai
Date of Monitoring : 03.12.2015 to 04.12.2015
Duration of Sampling : 24 hour

Sl. No.	Location	Parameter	Result s $\mu\text{g}/\text{m}^3$	Remarks
1.	CPP - Main Gate	Particulate Matter ($<10\mu\text{m}$) or PM10	78	
		Particulate Matter ($<2.5\mu\text{m}$) or PM2.5	25	
		Sulphur Dioxide (SO_2)	12	
		Nitrogen Oxides (NO_x)	26	
		Carbon Monoxide (CO)	2468	
2.	Residential Quarter	Particulate Matter ($<10\mu\text{m}$) or PM10	84	
		Particulate Matter ($<2.5\mu\text{m}$) or PM2.5	23	
		Sulphur Dioxide (SO_2)	12	
		Nitrogen Oxides (NO_x)	25	
		Carbon Monoxide (CO)	2511	
3.	Near SLF	Particulate Matter ($<10\mu\text{m}$) or PM10	81	
		Particulate Matter ($<2.5\mu\text{m}$) or PM2.5	21	
		Sulphur Dioxide (SO_2)	11	
		Nitrogen Oxides (NO_x)	28	
		Carbon Monoxide (CO)	2711	

BDL denotes Below Detection Limit for $\text{NO}_x < 10 \mu\text{g}/\text{m}^3$ & for $\text{SO}_2 < 4 \mu\text{g}/\text{m}^3$

Norms : National Ambient Air Quality Standards as per CPCB vide notification dated 18th November, 2009 for Industrial, Residential, Rural and other area as follows :

PM10, 24 hrs. average	:	100 $\mu\text{g}/\text{m}^3$
PM2.5, 24 hrs. average	:	60 $\mu\text{g}/\text{m}^3$
NO_x , 24 hrs. average	:	80 $\mu\text{g}/\text{m}^3$
SO_2 , 24 hrs. average	:	80 $\mu\text{g}/\text{m}^3$
CO, 1 hr. average	:	4,000 $\mu\text{g}/\text{m}^3$

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Annexure-III
Sheet 1 of 1

RESULTS OF DRINKING WATER ANALYSIS

Project : Usha Martin Limited (CPP), Tatisilwai
Date of sampling : 30.11.2015
Location : Drinking water from CPP (DW-25)

Sl. No.	Parameters	Norms*		Results
		Requirement (desirable limits)	Permissible limits in the absence of alternate source	DW-25
1	Colour, Hazen Units	5	25	<5
2	Odour	Agreeable	Agreeable	Agreeable
3	pH value	6.5 to 8.5	No Relaxation	7.2
4	Taste	Agreeable	Agreeable	Agreeable
5	Turbidity, NTU, Max.	1	5	<0.02
6	Free residual chlorine, mg/l, Min	0.2	1	nil
7	Total Dissolved Solids, mg/l, max.	500	2000	68
8	Aluminium (as Al), mg/l	0.03	0.2	<0.02
9	Boron (as B), mg/l, max.	0.5	1	<0.5
10	Calcium (as Ca), mg/l, max.	75	200	1.6
11	Chloride (as Cl), mg/l, max.	250	1000	14
12	Copper (as Cu), mg/l, max.	0.05	1.5	<0.025
13	Fluoride (as F), mg/l, max.	1.0	1.5	0.126
14	Iron (as Fe), mg/l, max.	0.3	No Relaxation	0.21
15	Magnesium (as Mg), mg/l, max.	30	100	0.97
16	Manganese (as Mn), mg/l, max.	0.1	0.3	<0.04
17	Nitrate (as NO ₃), mg/l, max.	45	No Relaxation	4.1
18	Phenolic compounds (as C ₆ H ₅ OH), mg/l, max.	0.001	0.002	<0.001
19	Sulphate (as SO ₄), mg/l, max.	200	400	<4.0
20	Total alkalinity (as CaCO ₃), mg/l	200	600	12
21	Total hardness (as CaCO ₃), mg/l, max	200	600	8
22	Zinc (as Zn), mg/l, max.	5	15	<0.005
23	Cadmium (as Cd), mg/l, max.	0.003	No relaxation	<0.01
24	Cyanide (as CN), mg/l, max.	0.05	No relaxation	<0.01
25	Lead (as Pb), mg/l, max.	0.01	No relaxation	<0.05
26	Mercury (as Hg), mg/l, max.	0.001	No relaxation	<0.0005
27	Nickel (as Ni), mg/l, max.	0.02	No relaxation	<0.02
28	Total chromium (as Cr), mg/l, Max.	0.05	No relaxation	<0.05
29	Coliform organisms, MPN/100ml	0	-	<1.1

*IS: 10500 (2012): Drinking water-Specification

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Annexure-IV
Sheet 1 of 1

EFFLUENT WATER ANALYSIS REPORT

Project : M/s Usha Martin Limited (CPP), Tatisilwai
Date of Sampling : 30.11.2015
Type of Sample : Treated Effluent from CPP (E19)

Sl. No.	Parameter	General Standards*	Results
1.	pH	5.5 - 9.0	7.35
2.	Total suspended solids, mg/l	100	55
3.	Oil & Grease, mg/l	10	<2
4.	Lead (as Pb), mg/l	0.1	0.05
5.	Zinc (as Zn), mg/l	5.0	0.05
6.	Phosphates (as P), mg/l	5.0	3.54
7.	Chloride (as Cl), mg/l	-	395
8.	BOD, 3 days at 27 °C, mg/l	30	18
9.	COD, mg/l	250	50
10.	Iron (as Fe), mg/l	3.0	1.21
11.	Manganese (as Mn), mg/l	2.0	0.46
12.	Total Dissolved Solids, mg/l	-	1147
13.	Cyanide, mg/l	0.2	<0.01

Note: *General standards for discharge of environmental pollutants vide Ministry of Env. and Forests notification dated 19th May, 1993 and amendment dated 31st December, 1993.

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Annexure-V
Sheet 1 of 1

SLUDGE ANALYSIS REPORT

Project : M/s Usha Martin Limited (CPP), Tatisilwai
Date of Sampling : 30.11.2015
Type of Sample : ETP Sludge Sample

Sl. No.	Parameter	*Standards (Concentration Limits)	Results Total metal concentration (mg/kg)
1.	Manganese (as Mn)	-	969
2.	Cadmium (as Cd)	≤50 mg/Kg	8
3.	Iron (as Fe)	-	21758
4.	Zinc (as Zn)	≤20,000 mg/Kg	1294
5.	Nickel (as Ni)	≤5,000 mg/Kg	14
6.	Lead (as Pb)	≤5,000 mg/Kg	150
7.	Total Chromium (as Cr)	≤5,000 mg/Kg	82
8.	Copper (as Cu)	≤5,000 mg/Kg	48

*Ministry of Environment & Forests Notification, New Delhi, The Hazardous Wastes
(Management and Handling) Rules, 1989 as amended, on 24th September, 2008 (Schedule-2)

ENVIRONMENTAL ENGG. LABORATORY
MECON RANCHI-834002

Sunit Kumar
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CIN No. : U74140JH1973GOI001199

No.11.S2.Q78Y.02.2.02

Dated: 16.01.2015

M/s Usha Martin Limited
(Captive Power Plant)
Tatisilwai
Ranchi - 835 103
JHARKHAND


Sub. : Ground water analysis report.
Ref. : Purchase order no. PP/30011/15-16 dated 20:07.2015

Dear Sir,

Please find enclosed herewith the analysis report of ground water samples collected on 30.11.2015 as annexure - I. The relevant standards as applicable are indicated in the report.

Thanking you and assuring you of our best services at all times.

Yours faithfully,
for MECON LIMITED


(Dr. Balbir Singh)
Dy. General Manager
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MECON LIMITED, RANCHI - 834002

No.11.S2.Q78Y.02.2.02

Annexure-I
Sheet 1 of 2

RESULTS OF DRINKING WATER ANALYSIS

Project : Usha Martin Limited (CPP), Tatisilwai
Date of sampling : 30.11.2015
Location : Ground water from inside CPP (GW-1) and Haratu Village (GW-2)

Sl. No.	Parameters	Norms*		Results	
		Requirement (desirable limits)	Permissible limits in the absence of alternate source	GW-1	GW-2
1	Colour, Hazen Units	5	25	<5	<5
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable
3	pH value	6.5 to 8.5	No Relaxation	7.4	7.3
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity, NTU, Max.	1	5	<0.02	<0.02
6	Free residual chlorine, mg/l, Min	0.2	1	nil	nil
7	Total Dissolved Solids, mg/l, max.	500	2000	301	270
8	Aluminium (as Al), mg/l	0.03	0.2	<0.02	<0.02
9	Boron (as B), mg/l, max.	0.5	1	<0.5	<0.5
10	Calcium (as Ca), mg/l, max.	75	200	29	34
11	Chloride (as Cl), mg/l, max.	250	1000	43	47
12	Copper (as Cu), mg/l, max.	0.05	1.5	<0.025	<0.025
13	Fluoride (as F), mg/l, max.	1.0	1.5	0.216	0.409
14	Iron (as Fe), mg/l, max.	0.3	No Relaxation	0.95	4.31
15	Magnesium (as Mg), mg/l, max.	30	100	7.77	14.58
16	Manganese (as Mn), mg/l, max.	0.1	0.3	0.13	0.05
17	Nitrate (as NO ₃), mg/l, max.	45	No Relaxation	<1.0	<1.0
18	Phenolic compounds (as C ₆ H ₅ OH), mg/l, max.	0.001	0.002	<0.001	<0.001
19	Sulphate (as SO ₄), mg/l, max.	200	400	13	17.6
20	Total alkalinity (as CaCO ₃), mg/l	200	600	156	108
21	Total hardness (as CaCO ₃), mg/l, max.	200	600	104	144
22	Zinc (as Zn), mg/l, max.	5	15	0.25	<0.005
23	Cadmium (as Cd), mg/l, max.	0.003	No relaxation	<0.01	<0.01
24	Cyanide (as CN), mg/l, max.	0.05	No relaxation	<0.01	<0.01
25	Lead (as Pb), mg/l, max.	0.01	No relaxation	<0.05	<0.05
26	Mercury (as Hg), mg/l, max.	0.001	No relaxation	<0.0005	<0.0005
27	Nickel (as Ni), mg/l, max.	0.02	No relaxation	<0.02	<0.02
28	Total chromium (as Cr), mg/l, Max.	0.05	No relaxation	<0.05	<0.05
29	Coliform organisms, MPN/100ml	0	-	<1.1	<1.1

*IS: 10500 (2012): Drinking water-Specification

ENVIRONMENTAL ENGG.LABORATORY
MECON RANCHI-834002

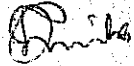
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Usha martin Limited, 2X10 MW CPP,Ranchi

Environment Testing Result & frequency of Testing at CPP,Ranchi

Usha Martin Ltd.2X10 MW CPP,Ranchi				
Environment Testing facility & frequency at CPP,Ranchi				
Sl.No.	Area	What Has been Stipulated		
		Parameters	Frequency of tests by CPP,UML	No. of Location for below 200 MW CPP
A	Ambient Air	RSPM	Twice in a Week	02 nos
		Sulphur Dioxide		
		Oxides of Nitrogen		
B	Stack Emission	Particulate Matter	Once in 4 weeks	01 no stack
		Sox		
		Nox		
		Mercury Emission		
C	Effluent Monitoring	Total Suspended Solids	Once in a Day	01 No(ETP O/L)
		BOD		
		COD		
		Oil & Grease		
		Zinc		
		pH		
		Lead		
		Iron		
D	Ground Water	Mercury	Once in Every Two Month	08 nos
		Chromium		
		Arsenic		


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		Lead		
		pH		
E	Surface Water	Mercury		04 nos
		Chromium		
		Arsenic		
		Lead		
		pH		
F	Noise Monitoring	Noise in dBA	Regular Monitoring	07 nos
G	Sludge Monitoring	Manganese	Once in Six Month	01 nos (ETP sludge)
		Cadmium		
		Iron		
		Zinc		
		Nickel		
		Lead		
		Copper		
Chromium				

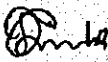


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Usha Martin Limited, 2X10 MW CPP

Effluent Water Analysis Report

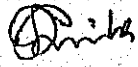
USHA MARTIN LTD, RANCHI				
11th January '16				
Sl.No.	Parameters	Unit	General Standards	Results
1	pH	-	5.5-9.0	7.8
2	Total Suspended Solids	Mg/ltr	100	31
3	Oil & Grease	Mg/Ltr	10	1.9
4	Lead as Pb	Mg/Ltr	0.1	<0.02
5	Zinc as Zn	Mg/Ltr	5.0	<0.005
6	Phosphate as P	Mg/Ltr	5.0	3.44
7	Chloride as Cl	Mg/Ltr	-	263
8	BOD ,3 days at 27 ^o C	Mg/Ltr	30	13
9	COD	Mg/Ltr	250	24
10	Iron as Fe	Mg/Ltr	3.0	0.39
11	Manganese as Mn	Mg/Ltr	2.0	0.27


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RESULTS OF WATER ANALYSIS

Project : Usha Martin Limited
Date of sampling : 2nd Feb'16
Location : Ground water from CPP (W-1) and Treated water from WTP of CPP (W-2)

Sl.No	Characteristics	Requirement (Desirable Limits)	Permissible Limits in the absence of alternate source	Results	
				W-1	W-2
Essential Characteristics					
1.	Colour, Hazen units, Max.	5	25	6	Nil
2.	Odour	Unobjectionable	-	Unobjec.	Unobjec.
3.	Taste	Agreeable	-	Agree.	Agree.
4.	Turbidity, NTU, Max.	5	10	5.7	Nil
5.	pH	6.5 to 8.5	No Relaxation	7.8	7.4
6.	Total Hardness (as CaCO ₃), mg/l, Max.	300	600	317	0.2
7.	Iron (as Fe), mg/l, Max.	0.3	1.0	0.8	<0.02
8.	Chloride (as Cl), mg/l, Max.	250	1000	267	8
9.	Residual Free Chlorine, mg/l, Min.	0.2	-	Not Detected	Not Detected
10.	Fluoride (as F) mg/L, Max.	1.0	1.5	1.01	0.11
Desirable Characteristics					
11.	Dissolved Solids mg/l, Max.	500	2000	516	21
12.	Calcium (as Ca), mg/l, Max.	75	200	88	Absent
13.	Magnesium (as Mg), mg/L, Max.	30	100	29	Absent
14.	Copper (Cu), mg/l, Max.	0.05	1.5	<0.01	<0.01
15.	Manganese (as Mn), mg/l, Max.	0.1	0.3	0.041	<0.01
16.	Sulphate (as SO ₄), mg/l, Max.	200	400	62	<1.0
17.	Nitrate (as NO ₃), mg/l, Max.	45	100	1.9	<1.0
18.	Mercury (as Hg), mg/l, Max.	0.001	No relaxation	<0.0005	<0.0005
19.	Lead (as Pb), mg/l, Max.	0.05	No relaxation	<0.05	<0.05
20.	Zinc (as Zn), mg/l, Max.	5.0	15	0.237	<0.005
21.	Chromium (as Cr6+), mg/l, Max.	0.05	No relaxation	<0.01	<0.01
22.	Mineral oil mg/l, Max.	0.01	0.03	<0.01	<0.01
23.	Alkalinity (as CaCO ₃) mg/l, Max.	200	600	295	0.3
24.	Aluminium (as Al) mg/l, Max.	0.03	0.2	<0.01	<0.01


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Usha martin Limited, 2X10 MW CPP

Incoming Coal received statement

Usha Martin Ltd (2X10 MW CPP, Ranchi)			
January - February 2016			
S.No.	Date	Ash%	Sulfur%
1	02.01.2016	37.9	0.30
2	04.01.2016	36.9	0.27
3	05.01.2016	38.2	0.21
4	20.01.2016	38.5	0.22
5	21.02.2016	38.9	0.27
6	24.02.2016	39.0	0.23
7	26.02.2016	38.9	0.25

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NOISE REPORT AT DIFFERENT WORKING AREA**Usha Martin Limited, Ranchi (2X10 MW CPP)****21st January, 2016**

S.No.	AREA	Level (Db)
1	CHIMNEY AREA	80
2	BOILER (BH 140) GROUND FLOOR	84
3	TURBINE BUILDING 1ST FLOOR	83
4	TURBINE FLOOR	86
5	TURBINE (II) - GENERATOR SIDE	85
6	ADM BUILDING	72
7	CHP AREA - NEAR PRIMARY CRUSHER HOUSE	76
8	CHP AREA - NEAR SECONDARY CRUSHER HOUSE	78
9	WTP	71
10	STORE AREA	66

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CPP (2 X 10MW)
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USHA MARTIN LTD, RANCHI
Stack Monitoring Results for 2X10 MW CPP
Date: 04.03.2016

Sl.No	Location	Date of Sampling	Area of Stack m ²	Temp °C	Average Exit Velocity m/s	Volumetric flow rate Nm ³ /hr	Particulate Matter mg/Nm ³	Sulphur Dioxide mg/Nm ³	Nitrogen oxide mg/Nm ³	Carbon monoxide %
01	ESP outlet of CPP	04.03.16	1.485	137	23.1	49951	47	110	79	<0.1

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Usha Martin Limited, 2X10 MW CPP

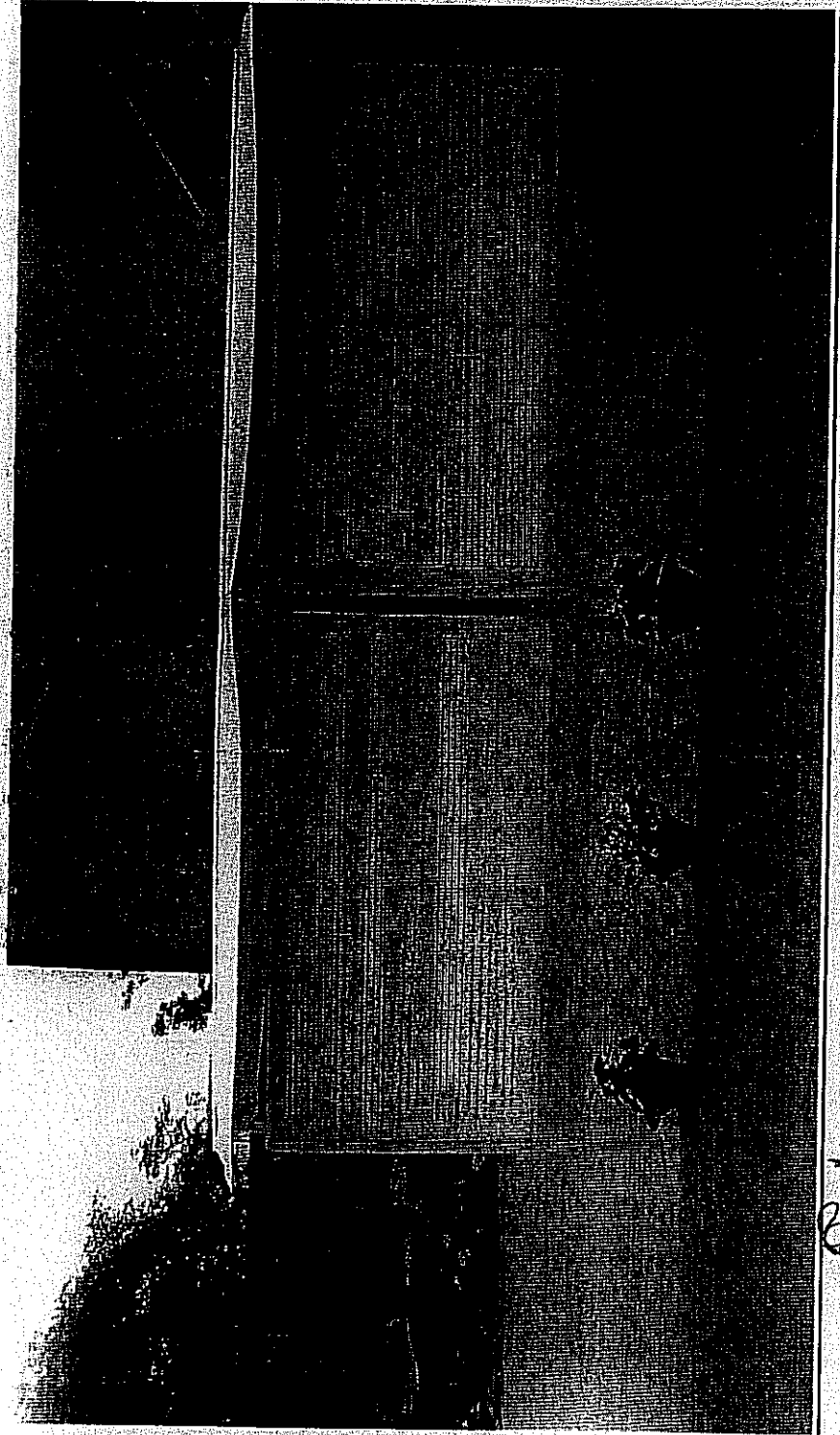
Ambient Air Monitoring Report

USHA MARTIN LTD. RANCHI			
DATE: 20.01.2016-21.01.2016			
DURATION: 24 Hour			
Sl.No.	Location	Parameters	Results(micro gram/m ³)
1	CPP-Main Gate	Respirable suspended particulate Matter(RSPM)/PM10	70
		Nitrogen Oxide(NO _x)	22
		Sulphur Dioxide(SO _x)	11
2	CPP-Store	Respirable suspended particulate Matter(RSPM)/PM10	75
		Nitrogen Oxide(NO _x)	23
		Sulphur Dioxide(SO _x)	14
3	CPP-SLF	Respirable suspended particulate Matter(RSPM)/PM10	79
		Nitrogen Oxide(NO _x)	27
		Sulphur Dioxide(SO _x)	16

Prints
CPP (2 X 10MW)
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TATISH-WAI, RANCHI

Usha martin Limited, 2X10 MW CPP

Display Board at CPP main Gate



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