usha martin
Usha Martin Limited
(Wire Ropes & Speciality Products Division)

Works : Tatisilwai, 835103, Ranchi, Jharkhand, India
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Ref: CPP/ENV/UML/EC/MOEF/21-22/07 Dated: 29.11.2021

To

DDG , IFS,
Ministry Of Environment, Forest & Climate Change,
Regional Office-Ranchi,
Bunglow No.A-2,Shyamli Colony, Ranchi-834002
Office No: 0651-2410007/2410002

Email: ro.ranchi-mef@gov.in

Kind Attn: Dr. T.H.Mahato

Subject: Submission of half yearly Compliance report of Conditions stipulated in EC granted to our 2X10 MW CPP at USHA MARTIN LIMITED, Tatisilwai, Ranchi for the period April'21 to Sept'21

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

Dear Sir,

We are herewith submitting the half yearly Compliance report of Conditions stipulated in EC granted to our 2X10 MW Captive Power Plant, M/s USHA MARTIN LIMITED, Tatisilwai, Ranchi for the period **April'21 to Sept'21** 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: Six monthly compliance Report

usha martin	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 : 31. 09. 2021 Period : **April'21 to Sept'21**

Environmental Clearance Compliance Report (Period: April'21 to Sept'21)

Sub: Six monthly EC compliance report pertaining to 2X10MW Coal based Captive Thermal Power Plant at village Tatisilwai in Ranchi Dist., in Jharkhand

With reference to the subject mentioned, please find the compliance status of conditions stipulated in EC granted to our 2X10MW CPP vide letter no.- J-13012/122/2008-IA.II(T) dated 07-04-2011 and EC amendment Letter no.- J-13012/122/2008-IA.II(T)dated 09.10.2019 & 13.05.2020

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.	• **The MoEF&CC has issued EC amendment vide letter dated 13.05.2020 & 09.10.2019 and accords -** • Permission to transport coal by road through for the period till 13.05.2022. We intent to procure 0.183MTPA Coal through e-auction from different mines of CCL & JSMDC and from Tata West Bokaro, Jamadoba & HEC Ranchi. • EC amendment letters are attached as **annex-1**

(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.	• Complied. • High Efficiency Electrostatic Precipitators (ESPs) has been installed • Provided Bag filters and static water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable areas.
(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.	• An Amendment to use 41.7% ash has been issued vide letter No-J-13012/122/2008-IA.II(T) on Dated 09.10.2019 • Complied. • Coal report is attached for ref.**Annex-2**
(iv)	Stack of 70 m height shall be installed and provided with continuous online monitoring equipment's 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.	• Complied • Online monitoring equipment's has been installed & connected to JSPCB/CPCB server. Completion certificate attached as **Annex-3 & 4** • Exit velocity of flue gas is maintained. Mercury emission from stack has been checked on periodic basis. Current report is attached. **(Annex-2A)**
(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.	• There are no de-generated 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.	• Water requirement for the project is met from the existing water commitment of WWR. • Rain water harvesting system has been established. • 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.	• Complied.
(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.	• 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 / operation of the power plant.	• Complied.
(x)	COC of 5.0 (as may be applicable) shall be adopted.	• Complied.
(xi)	A well designed rain water harvesting shall be put in place before commissioning of the plant. Central groundwater Authority/Board shall be consulted for finalization of appropriate rainwater harvesting technology/design within a period of three months from the date of this clearance and details shall be furnished.	• Complied • Approval by Ground water division, Jharkhand & completion certificates are attached as **Annex-5 & 6**
(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	• ETP & STP of latest technology have been installed & treated effluent is being re-used.

	sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	• All the function of ETP and STP are in closed loop, as such there will be no chance of getting mixed with storm water. • Maintaining ZERO discharge from CPP
(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.	• Complied.
(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.	We have achieved Fly Ash utilization rate of 75.7% at CPP in last six months. Due to covid-19,utilization rate decreased & expected time line to achieved 100% utilization by March'22 • The Ash utilization report for last Six Months is attached for your ref. as **Annex-7**
(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 of in low lying area.	• Complied. • No ash is disposed in low lying area. • Construction details is attached as **Annex-7A**
(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.	

(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%.	• Complied. • Phase wise plantation is in process. • Report is attached as **Annex 8**
(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 undertaken in a time bound manner.	• 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 capital on community development projects for integrated prosperity in rural Jharkhand, through CSR arm. 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.
(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.	• Complied.

(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.	• Complied. • CSR report Attached as Annex-9
(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.	• Complied • Social audit report is attached as Annex-10

GENERAL CONDITIONS		
B.	**General Conditions:**	**Status**
(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 plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	• Complied
(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	• Complied • NO liquid fuel used in boiler during this period.

	Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	
(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.	• 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.	• Complied. • Samples checked on regular basis. Report attached as **Annex-2**
(v)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	• Complied.
(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.	• Complied. • Noise report is attached via **Annex-2** • Audiometric test has been carried out for all CPP employees periodically
(vii)	Regular monitoring of ambient air ground level concentration of SO2 Nox, PM2.5 & 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	• Being Complied. • Monitored regularly by in-house NABL Accredited Environmental laboratory.

	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.	• Accreditation certificate is attached as **Annex-11**
(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.	• Complied.
(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.	• Complied.
(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.	• Complied. • Copy of Clearance letter sent is attached for ref. **Annex 12**
(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.	• Complied

(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.	• Complied. • Link: http://www.ushamartin.com/about-us/ • Picture of Display board is attached as Annex-13 • All prescribed parameters are included in display board.
(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.	• Complied. • Form-V is uploaded in website. • Link: http://www.ushamartin.com/about-us/
(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 their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.	• Complied.

(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. • Criteria pollutants levels including NOx (from stack & ambient air) are displayed at the main gate of the power plant.
(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 allocated.
(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.	• The fund for this small project of Rs.100 cr. is already provided from the existing integrated fund for various projects' expansion • Documents regarding financial closure for this project is attached as **Annex-14**
(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.	• Agreed, • 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.	• Noted for compliance
6	The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.	• Operations already started
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.	• Agreed, • Noted for compliance
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.	• 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.	• Noted for compliance

Others conditions: *(As Per EC amendment letter vide letter No-J-13012/122/2008-IA.II(T) on Dated 09.10.2019)*

	The following additional conditions are stipulated for compliance.	Status
i.	The status of the complaint No. C-2472/19 filed before the Chief Judicial Magistrate, Ranchi by the Jharkhand State Pollution Control Board for transporting coal by road without Ministry's permission is to be furnished along with Six Monthly Compliance Report.	Court case is under process.
ii.	The status of complaint No. C-2472/19 filed before the Chief Judicial Magistrate, Ranchi by the Jharkhand State Pollution Control Board u/s 19 of Environment (Protection) Act, 1986 for transporting coal by road without Ministry's permission shall be submitted along with Six Monthly Compliance Report. Copies of the orders passed by the Chief Judicial Magistrate shall also be submitted.	Court case is under process.
iii.	Coal shall be procured through e-auction only and not from open market.	Complied. We are procuring coal through e-auction. Compliance Status of Office Memorandum on dated 11th Nov'20 against File No: J-13012/8/2009-IA.II (T) is attached as **Annex 15**
iv.	The transportation by road shall be through mechanically covered trucks to the extent feasible, else through trucks firmly covered by tarpaulin sheet.	• Complied
v.	Possibility of upgrading road shoulders into pakka road in consultation with the State Govt. be explored be explored.	• Noted
vi.	Periodic maintenance of the road shall be done by the project proponent at its own cost and shall also facilitate the traffic control on the road in consultation with the State Govt.	• Noted

vii.	Avenue plantation shall be carried out in consultation with Social Forestry Department and NHAI or PWD along the routes proposed for transportation. The progress report such a number of sampling planted, length of road covered, survival rate, expenditure on maintenance (tree guard, watering and manure supply) shall be submitted along with six monthly compliance report.	• Noted
viii.	The PP shall advertise in the local leading newspapers and place on the website, the temporary permission accorded by the Ministry as a part of public information.	• Complied • Published on dated 09.11.2019
ix.	The SO_2 and No_x emissions from the flue gas shall be restricted to below 600 mg/Nm^3 and 600 Mg/Nm^3, respectively.	• Being followed • Report attached
23	All other conditions mentioned in the EC vide dated 07.04.2011 shall remain the same.	• Noted

J-13012/122/2008-IA.II (T)
Government of India
Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhawan, Jor Bagh Road
Aliganj, New Delhi-110003

Dated: 13.05.2020

To

M/s Usha Martin Ltd.
2A, Shakespeare Sarani,
Kolkata- 700 071.

Tel. No. 033-22823985/39800300; Fax: 033-22829029/39800400.

Sub: Coal Based Captive Thermal Power Plant of 2x10 MW at Village Tatisilwai, District Ranchi in Jharkhand by M/s. Usha Martin Ltd. – reg. amendment of EC regarding permission to transport coal by road.

Sir,

The undersigned is directed to refer your online application No. ***IA/JH/THE/138854/2020*** dated 27.01.2020 for seeking permission to transport coal by road for the above mentioned project.

2. It has been noted that Environmental Clearance (EC) for the above project was accorded vide letter dated 07.04.2011. Subsequently, the Ministry vide letter dated 9.10.2019 granted:-

a) ex-post facto permission for sourcing of coal through e-auction and transportation by road for a period of three years i.e. till 31.03.2018;

b) permission to transport coal by road for further period of three years, i.e. till 31.03.2021; from

   i. Sikini mines- 124.4 km
   ii. Magadh Mines- 145.5 km
   iii. Amrapali mines- 141.9 km, and

c) amendments regarding sourcing coal through e-auction, land requirement to 22.437 acres instead of 12.278 acres and ash content to 41.7% instead of 34%.

3. It has been noted that the 2x10 MW Captive Power Plant was established to ensure the uninterrupted power supply to Steel Wire and Wire rope plant to prevent breakage of wire to ensure internationally acceptable wire ropes particularly for use in critical safety applications. The wire rope plant is providing employment to 4400 workmen.

4. It was informed that the Hon'ble Supreme Court vide its judgment dated 25.8.2014 and 24.9.2014 cancelled allocation of Lohari Coal Block which was to cater coal requirement to the captive power plant. The plant started its operations with commissioning of 1st Unit on 31.3.2012 and 2nd Unit on 31.12.2012. At present, the company has been sourcing coal through e-auction from nearby mines of Central Coalfields Ltd. But during recent times e-auction is very much irregular which resulted in coal shortage as well as high production costs. It was informed that the company was forced to stop its production of one unit for 82 days in the the year 2019.

5. It has been informed that the auctioned quantity has reduced by 47% and 59% in FY 19 and FY20 (till Dec 2019) respectively as compared to quantity offered during FY18 which reduced the chances of winning the required quantity of coal for the Power Plant.

6. The Coal requirement for the power plant is 0.183 MTPA. The coal quantity of 500 tonnes per day involving to & fro movement of 40 tippers per day with capacity 25 tonnes. It has been now proposed to procure coal by road from a) West Bokaro Ghato Mines & Jamadoba Mines of Tata Steel, and b) Heavy Engineering Corporation Ltd., Ranchi through Bilateral agreement/Window Sale. The Traffic Impact Assessment Report has been submitted for the proposed routes of coal transportation. The details of these routes are as below:

Routes	**Length, km**	**Length of Stretch (in km) w.r.t. Type**				**Type of road**
		Single Lane (<5.5 m)	**Intermediate (≥ 5.5 m)**	**Two Lane (≥ 7 m)**	**Multi-lane (≥ 10 m)**	
Route-1: HEC Plant to CPP.	64.77	0.90	2.80	2.02	59.05	Black top: 64.57 & Concrete: 0.2 km
Route-2: West Bokaro OC coal mine of Tata Steel to CPP.	66.76	0.90	0.00	0.30	65.56	Black Top: 66.76 km

7. The traffic sufficiency assessment has been estimated. The percentage utilisation of road after taking into consideration of existing traffic and incremental is in the range of 32-116%. Where existing traffic is exceeding the design service volume of the road, it has been proposed to restrict the movement of trucks to the time period between 9 pm to 8 am only, when the traffic is lean.

8. The baseline air quality has been collected at various locations along the route. Incremental concentrations have been predicted and the cumulative concentrations including baseline data are within the ambient air quality standards.

9. It has been informed that all other environmental and safety measures will be implemented such as dust control measures at unloading point, covering trucks with tarpaulin cover, maintenance of vehicles and following Central Motor Vehicles Act and Rules for maintaining road safety.

10. The matter was placed before the Re-constituted Expert Appraisal Committee (Thermal Power) in its meetings held on 21.2.2020. In acceptance of the

recommendations of the EAC in its meeting held on 21.2.2020 and in view of the information/documents/clarifications furnished by you, with respect to the above mentioned power project, **the Ministry hereby accords permission to transport coal by road through additional routes from West Bokaro Ghato Mines & Jamadoba Mines of Tata Steel Ltd. and Heavy Heavy Engineering Corporation Ltd., Ranchi for a period two years** subject to following additional conditions:

i. The coal shall be transported through Route-1: HECL, Ranchi during lean traffic period (9 pm to till 8 am).

ii. Water sprinkling is to be carried out at the road stretch near Tatisilwai village to control secondary dust.

11. All other conditions mentioned in the EC vide dated 07.04.2011 and amendment letter dated 9.10.2019 shall remain the same, as applicable.

This issues with the approval of the Competent Authority.

Yours faithfully,

(Dr. S. Kerketta)
Director, IA.I

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi- 834002.
5. The Secretary (Environment), Forests and Environment Department Government of Jharkhand.
6. The Chairman, Jharkhand State Pollution Control Board, TA Building, HEC Complex, P.O. Dhurwa, Distt. Ranchi.
7. The District Collector, Ranchi District, Govt. of Jharkhand.
8. Guard file/Monitoring file.
9. Website of MoEF&CC.

Director, IA.I

J-13012/122/2008-IA.II (T)
Government of India
Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhawan, Jor Bagh Road
Aliganj, New Delhi-110003

Dated: 09.10.2019

To

M/s Usha Martin Ltd.
2A, Shakespeare Sarani,
Kolkata- 700 071.

Tel. No. 033-22823985/39800300; Fax: 033-22829029/39800400.

Sub: ***Coal Based Captive Thermal Power Plant of 2x10 MW at Village Tatisilwai, District Ranchi in Jharkhand by M/s. Usha Martin Ltd. – reg. amendment of EC regarding permission to transport coal by road, sourcing of coal, land requirement and ash content in coal.***

Sir,

This has reference to your online application No. ***IA/JH/THE/10337/2011*** dated 25.02.2015 and 16.1.2015 and the documents submitted vide your letters dated 26.4.2018 and 11.6.2019 on the above subject. It is noted that Environmental Clearance (EC) for the above project was accorded vide letter dated 07.04.2011. As per the said EC, the coal shall be obtained from captive Lohari coal block in Jharkhand and road transportation of coal was permitted for a limited period of three years only. Vide your application dated 25.2.2015, it has been requested for sourcing of coal through e-auction and extension of permission for temporary road transportation of coal for three years Further, you have also requested for corrections in the EC as per EIA/EMP report regarding land requirement and ash content in coal.

2. The specific condition 4A(i) of the EC dated 7.4.2011 stipulates as follows:

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 immedieately start its action plant for rail transportation with consultation with the Railways and shall submit half yearly action taken report to the Ministry on the matter."

3. It has been informed that Unit-1 (1x10 MW) and Unit-2 (1x10 MW) have been commissioned in March, 2012 and December, 2012 respectively. The coal requirement for the project is 1.25 Lakh Tonnes per annum (500 Tons/day involving 20 trucks with 25 ton capacity). Nearest railway stations are Tatisilwai (1 km) and Hatia (15 km). The Hatia station has only outward transport facility and Tatisilwai has no siding for coal loading and unloading.

4. It has been informed that the Lohari coal block, Jharkhand which was allocated for this captive power plant has been de-allocated by the Supreme Court. The coal is currently procured through e-auction carried by M/s Central Coalfields Ltd. or M/s Jharkhand State Mineral Development Corporation since the commissioning of the power plant.

5. The coal has been transported by the road since commissioning of the power plant. The distance of road transportation is in the range of 83-100 km depending upon coal mine.

6. It has been informed that the quantity of coal transported by road since its commissioning is as follows:

Sr.No	Year	Quantity (MT)
1	FY13	63,782
2	FY14	67,480
3	FY15	1,12,995
4	FY16	1,14,883
5	FY17	1,17,258
6	FY18	1,25,134
Total		6,01,532

7. It has been informed that the Hatia Railway station is at 15 km and there is no infrastructure to deal with inward coal rakes. Further, Hatia railway station is situated in populated area and road transportation from Hatia to Tatisilwai will be through Ranchi city during limited hours. The Tatisilwai Railway station is at 01 km from the power plant and the required infrastructure to deal with inward coal is not available.

8. The additional information sought by the Ministry has not been submitted. Accordingly, the proposal dated 25.2.2015 has been delisted from the pendency of the Ministry. As the coal transportation has been taken place by road without Ministry's approval after 31.3.2015, the Ministry directed Jharkhand State Pollution Control Board to take a credible action u/s 19 of E(P) Act, 1986. Subsequently, Jharkhand State Pollution Control Board vide letter dated 7.6.2019 informed that a complaint vide No.2472/10 has been filed in the Court of Chief Judicial Magistrate for transporting coal by road without formal approval from the Ministry.

9. It has been noted that the proposal for further extension of permission for road transportation till the railway infrastructure is established, has been submitted in the Ministry.

10. It has been informed that the requirement of coal for the present power plant (2x10 MW) is in the range of 1.25 Lakh Tonnes per annum. It is not feasible to establish a railway siding within the plant area as it requires additional land acquisition. The area of captive power plant is 22.437 acres out of which main plant occupies 12.278 acres and rest of the area is occupied by the utilities such as coal yard, rain water harvesting system, plantation, ash dyke, weigh bridge and reservoir, etc. Further, there is no private land available adjacent to the plant area.

11. It has been informed that the Lohari coal block (near Daltonganj, Jharkhand) which was linked to the plant for coal supply has been de-allocated by the Supreme Court. Hence, there is no definite source available now and company is procuring coal through e-auction from M/s Central Coalfields Ltd. (M/s CCL) and M/s Jharkhand State Mineral Development Corporation. Further, all coal mines of M/s CCL are in the vicinity as well as within the 200 km from the plant. The e-auction coal is supplied only by road mode based on low priority given for Captive Power Plant as non-core consumer.

12. It has been informed that the peak coal requirement is 500 TPD at 100% Plant Load Factor (PLF). M/s CCL has issued a circular and informed that the

lifting of coal from its mines shall be through Road mode only to non-core consumers. The Circular of M/s CCL dated 9.9.2014 states that the allotment of coal from October, 2014 onwards will be made by rail mode only nearby consumers of Captive Power Plant/sponge iron.

13. It has been noted that M/s Mecon Ltd., Ranchi has carried out feasibility study for laying railway siding and line from the nearest take off point and submitted the report on 13.5.2019. The report has mentioned that coal unloading facilities at plant to accommodate full rake, the area of 870 m length x 25 m width (21,750 m^2/ 2.175 Ha) is required. Whereas, the plant area of 22.437 acres measures 345 m (West- East) x 325 m (South-North) and hence construction of private siding is not possible. It has concluded that the plant cannot accommodate full or half rake unloading railway yard as well as 8 wagons unloading yard on present land profile of the plant. Further, there is no vacant private land available for siding beyond railway boundary. The coal rake from Tori/Barkakana end on existing up line cannot enter in to the plant which is located on down side.

14. It has been informed that the quantity of coal required is only 4 rakes per month (500 Tons/day). Considering the low quantities, establishing private railway siding is not economically viable and the asset may end up in the category of Non Performing Assets (NPA) and will also make the Wire Rope plant unviable.

15. The three routes proposed for road transportation are viz. Route-1: Sikni mines-124.4, Route-2: Magadh Mine- 145.5 km and Route-3: Amrapali Mine-141.9 km.

Route No.	From	Length of the route (km)	Remarks
Route-1	Sikni Mines to Plant	124.4 km	NH-5: 83 km NH-75: 46 km 6-lane Ring road: 23.5 km
Route-2	Magadh Mine to Plant	145.5 km (Route-1: 124.4 km+ 21.1 km)	Additional 21 km is NH-99
Route-3	Amrapali mine to Plant	141.9 km	NH-33: 84 km SH-7: 47 km

16. The maximum part of the route considered is a highway passing through rural areas. These highways are NH-75, NH-99, NH-33 and SH-7, which are considered as an all-purpose road, with no control of access and with heterogeneous mix of fast and slow-moving vehicles. Width of the roads in the proposed route is provided as below:

Route	Length	Lane				Type of road
		Single Lane (<5.5 m)	Intermediate Lane (5.5-7 m)	Two Lane (7-10 m)	Multi lane (≥10 m)	
Route-1	124.4 km	0.9 km	4.2 km	33.4 km	85.9 km	Black Top: 63% Concrete: 37%
Route-2	145.5 km	2.9 km	4.2 km	53.2 km	86.2 km	Black Top: 68%

						Concrete: 32%
Route-3	141.9 km	0.9 km	Nil	46.6 km	94.4 km	Black Top: 100%

17. The daily coal requirement is 500 MT/day which involve 25 trucks (50 to and fro) with the capacity of 20 Tons. The percentage utilisation of the roads including the project traffic is in the range of 48.5-96.8%. Thus the roads at all points have sufficient capacity to accommodate present and proposed traffic for next three years.

18. All the three routes considered for the study are capable to support existing as well as projected traffic loads at LoS C in rural as well as urban areas. Only at one census point, Tati village, movement is and shall be restricted to night hours only. The projected traffic volume after five year plus, with its natural growth, shall be vary between 14.3% to 165.3% of DSV on roads passing through Urban areas.

19. The maximum ground level concentrations due to proposed traffic have been computed by using a dispersion modelling software and the details are as below:

Parameter	Highest AAQ baseline ($\mu g/m^3$)	Incremental Values ($\mu g/m^3$)	Resultant concentrations ($\mu g/m^3$)	National Standard ($\mu g/m^3$)
PM_{10}	82.2	4.41	86.61	100
$PM_{2.5}$	47.8	1.07	48.87	60
SO_2	13	0.27	13.27	80
NO_2	22.2	1.92	24.12	80

20. It has been informed that the vehicles will be covered with tarpaulin sheet, have PUC and have spill-proof transportation. Vehicles having fitness certificate shall be allowed to ply.

22. It has been noted that a Committee involving MoC, MoP, M/s CIL Ltd., Railway Board and other major stakeholders, has been constituted to review the status of rail connectivity infrastructure at the plant site & pit head/coal mines area and need for extension of road transportation for various power projects and coal mines.

21. The matter was placed before the Re-constituted Expert Appraisal Committee (Thermal Power) in its meetings held during 19th-20th May, 201527.03.2019 and 26.6.2019. In acceptance of the recommendations of the EAC in its meeting held on 26.6.2019 and in view of the information/documents/clarifications furnished by you, with respect to the above mentioned power project, **the Ministry hereby accords the following**:

a) ***Ex-post facto permission for sourcing of coal through e-auction and transportation by road for a period of three years i.e. till 31.03.2018;***

b) ***Permission to transport coal by road for further period of three years, i.e. till 31.03.2021; A final decision to allow road permanently will be taken after the recommendations of the Committee constituted for formulating the policy on coal transportation.***

c) ***Amendments regarding sourcing coal through e-auction, land requirement of the project shall be 22.437 acres instead of 12.278 acres and restriction of ash content in coal shall be 41.7% instead of***

34% are allowed.

21. The following additional conditions are stipulated for compliance.

i. The status of the complaint No.C-2472/19 filed before the Chief Judicial Magistrate, Ranchi by the Jharkhand State Pollution Control Board for transporting coal by road without Ministry's permission is to be furnished along with Six Monthly Compliance Report.

ii. The status of complaint No.C-2472/19 filed before the Chief Judicial Magistrate, Ranchi by the Jharkhand State Pollution Control Board u/s 19 of Environment (Protection) Act, 1986 for transporting coal by road without Ministry's permission shall be submitted along with Six Monthly Compliance Report. Copies of the orders passed by the Chief Judicial Magistrate shall also be submitted.

iii. Coal shall be procured through e-auction only and not from open market.

iv. The transportation by road shall be through mechanically covered trucks to the extent feasible, else through trucks firmly covered by tarpaulin sheet.

v. Possibility of upgrading road shoulders into pakka road in consultation with the State Govt. be explored be explored.

vi. Periodic maintenance of the road shall be done by the project proponent at its own cost and shall also facilitate the traffic control on the road in consultation with the State Govt.

vii. Avenue plantation shall be carried out in consultation with Social Forestry Department and NHAI or PWD along the routes proposed for transportation. The progress report such as number of saplings planted, length of road covered, survival rate, expenditure on maintenance (tree guard, watering and manure supply) shall be submitted along with six monthly compliance report.

viii. The PP shall advertise in the local leading newspapers and place on the website, the temporary permission accorded by the Ministry as a part of public information.

ix. The SO_2 and NO_x emissions from the flue gas shall be restricted to below 600 mg/Nm^3 and 600 mg/Nm^3, respectively.

22. All other conditions mentioned in the EC vide dated 07.04.2011 shall remain the same.

This issues with the approval of the Competent Authority.

Yours faithfully,

(Dr. S. Kerketta)
Director, IA.I

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

4. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi- 834002.
5. The Secretary (Environment), Forests and Environment Department Government of Jharkhand.
6. The Chairman, Jharkhand State Pollution Control Board, TA Building, HEC Complex, P.O. Dhurwa, Distt. Ranchi.
7. The District Collector, Ranchi District, Govt. of Jharkhand.
8. Guard file/Monitoring file.
9. Website of MoEF&CC.

Director, IA.I

Mr Tanuj Sinha
CPP

J-13012/122/2008-IA.II (T)
Government of India
Ministry of Environment, Forest and Climate Change

. Indira Paryavaran Bhawan, Jor Bagh Road
Aliganj, New Delhi-110003

Dated: 10.10.2019

Office Order

Sub: Coal Based Captive Thermal Power Plant of 2x10 MW at Village Tatisilwai, District Ranchi in Jharkhand by M/s. Usha Martin Ltd. – reg. Directions under Section 5 of Environment (Protection) Act, 1986.

The Environmental Clearance (EC) for the above mentioned project was accorded vide Ministry's letter dated 07.04.2011. As per the said EC, the coal shall be obtained from captive Lohari coal block in Jharkhand and road transportation of coal was permitted for a limited period of three years only.

2. The specific condition 4A(i) of the EC dated 7.4.2011 stipulates as follows:

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 immedieately 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."

3. The Unit-1 (1x10 MW) and Unit-2 (1x10 MW) have been commissioned in March, 2012 and December, 2012 respectively. The coal requirement for the project is 1.25 Lakh Tonnes per annum (500 Tons/day involving 20 trucks with 25 ton capacity). Nearest railway stations are Tatisilwai (1 km) and Hatia (15 km). The Hatia station has only outward transport facility and Tatisilwai has no siding for coal loading and unloading.

4. It has been informed that the Lohari coal block, Jharkhand which was allocated for this captive power plant has been de-allocated by the Supreme Court. The coal is currently procured through e-auction carried by M/s Central Coalfields Ltd. or M/s Jharkhand State Mineral Development Corporation since the commissioning of the power plant.

5. The coal has been transported by the road since commissioning of the power plant. The distance of road transportation is in the range of 83-100 km depending upon coal mine.

6. It has been informed that the quantity of coal transported by road since its commissioning is as follows:

Sr.No	Year	Quantity (MT)
1	FY13	63,782
2	FY14	67,480
3	FY15	1,12,995
4	FY16	1,14,883
5	FY17	1,17,258
6	FY18	1,25,134
Total		6,01,532

7. The proposal for extension of permission for road transportation has been recommended by the EAC (Thermal Power) in its meeting held during 19th -20th May, 2015. However, the approval for transportation of coal by road could not be accorded as certain requisite information was pending from the Project Proponent. The Jharkhand State Pollution Control Board has filed a complaint vide No.C-2472/19 before the Chief Judicial Magistrate, Ranchi by for transporting coal by road without Ministry's permission.

8. Further, the Ministry vide letter dated 09.10.2019 granted ex-post facto permission for sourcing of coal through e-auction and transportation by road for a period of three years i.e. till 31.03.2018; permission to transport coal by road for further period of three years, i.e. till 31.03.2021; and amendments regarding sourcing coal through e-auction, land requirement of 22.437 acres instead of 12.278 acres and restriction of ash content in coal shall be 41.7% instead of 34%, etc.

9. In view of the above, **the Jharkhand State Pollution Control Board is hereby directed to carry out the environmental damage assessment for transporting coal by road from March, 2015 till March, 2018 by the M/s Usha Martin Ltd. without Ministry's approval and furnish a copy of its report to the Chief Judicial Magistrate, Ranchi for further action duly endorsing a copy to this Ministry.**

This issues with the approval of the Competent Authority.

(Dr. S. Kerketta)
Director, IA.I

The Chairman
Jharkhand State Pollution Control Board
TA Building, HEC Complex,
P.O. Dhurwa, Distt. Ranchi-834004.

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi- 834002.
5. The Secretary (Environment), Forests and Environment Department Government of Jharkhand.
6. The District Collector, Ranchi District, Govt. of Jharkhand.
7. M/s Usha Martin Ltd., 2A, Shakespeare Sarani, Kolkata- 700 071.
8. Guard file/Monitoring file.
9. Website of MoEF&CC.

Director, IA.I

J-13012/122/2008-IA.II (T)
Government of India
Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhawan, Jor Bagh Road
Aliganj, New Delhi-110003

Dated: 13.05.2020

To

M/s Usha Martin Ltd.
2A, Shakespeare Sarani,
Kolkata- 700 071.

Tel. No. 033-22823985/39800300; Fax: 033-22829029/39800400.

Sub: Coal Based Captive Thermal Power Plant of 2x10 MW at Village Tatisilwai, District Ranchi in Jharkhand by M/s. Usha Martin Ltd. – reg. amendment of EC regarding permission to transport coal by road.

Sir,

The undersigned is directed to refer your online application No. ***IA/JH/THE/138854/2020*** dated 27.01.2020 for seeking permission to transport coal by road for the above mentioned project.

2. It has been noted that Environmental Clearance (EC) for the above project was accorded vide letter dated 07.04.2011. Subsequently, the Ministry vide letter dated 9.10.2019 granted:-

a) ex-post facto permission for sourcing of coal through e-auction and transportation by road for a period of three years i.e. till 31.03.2018;

b) permission to transport coal by road for further period of three years, i.e. till 31.03.2021; from

   i. Sikini mines- 124.4 km
   ii. Magadh Mines- 145.5 km
   iii. Amrapali mines- 141.9 km, and

c) amendments regarding sourcing coal through e-auction, land requirement to 22.437 acres instead of 12.278 acres and ash content to 41.7% instead of 34%.

3. It has been noted that the 2x10 MW Captive Power Plant was established to ensure the uninterrupted power supply to Steel Wire and Wire rope plant to prevent breakage of wire to ensure internationally acceptable wire ropes particularly for use in critical safety applications. The wire rope plant is providing employment to 4400 workmen.

4. It was informed that the Hon'ble Supreme Court vide its judgment dated 25.8.2014 and 24.9.2014 cancelled allocation of Lohari Coal Block which was to cater coal requirement to the captive power plant. The plant started its operations with commissioning of 1st Unit on 31.3.2012 and 2nd Unit on 31.12.2012. At present, the company has been sourcing coal through e-auction from nearby mines of Central Coalfields Ltd. But during recent times e-auction is very much irregular which resulted in coal shortage as well as high production costs. It was informed that the company was forced to stop its production of one unit for 82 days in the the year 2019.

5. It has been informed that the auctioned quantity has reduced by 47% and 59% in FY 19 and FY20 (till Dec 2019) respectively as compared to quantity offered during FY18 which reduced the chances of winning the required quantity of coal for the Power Plant.

6. The Coal requirement for the power plant is 0.183 MTPA. The coal quantity of 500 tonnes per day involving to & fro movement of 40 tippers per day with capacity 25 tonnes. It has been now proposed to procure coal by road from a) West Bokaro Ghato Mines & Jamadoba Mines of Tata Steel, and b) Heavy Engineering Corporation Ltd., Ranchi through Bilateral agreement/Window Sale. The Traffic Impact Assessment Report has been submitted for the proposed routes of coal transportation. The details of these routes are as below:

Routes	**Length, km**	**Length of Stretch (in km) w.r.t. Type**				**Type of road**
		Single Lane (<5.5 m)	**Intermediate (≥ 5.5 m)**	**Two Lane (≥ 7 m)**	**Multi-lane (≥ 10 m)**	
Route-1: HEC Plant to CPP.	64.77	0.90	2.80	2.02	59.05	Black top: 64.57 & Concrete: 0.2 km
Route-2: West Bokaro OC coal mine of Tata Steel to CPP.	66.76	0.90	0.00	0.30	65.56	Black Top: 66.76 km

7. The traffic sufficiency assessment has been estimated. The percentage utilisation of road after taking into consideration of existing traffic and incremental is in the range of 32-116%. Where existing traffic is exceeding the design service volume of the road, it has been proposed to restrict the movement of trucks to the time period between 9 pm to 8 am only, when the traffic is lean.

8. The baseline air quality has been collected at various locations along the route. Incremental concentrations have been predicted and the cumulative concentrations including baseline data are within the ambient air quality standards.

9. It has been informed that all other environmental and safety measures will be implemented such as dust control measures at unloading point, covering trucks with tarpaulin cover, maintenance of vehicles and following Central Motor Vehicles Act and Rules for maintaining road safety.

10. The matter was placed before the Re-constituted Expert Appraisal Committee (Thermal Power) in its meetings held on 21.2.2020. In acceptance of the

recommendations of the EAC in its meeting held on 21.2.2020 and in view of the information/documents/clarifications furnished by you, with respect to the above mentioned power project, **the Ministry hereby accords permission to transport coal by road through additional routes from West Bokaro Ghato Mines & Jamadoba Mines of Tata Steel Ltd. and Heavy Heavy Engineering Corporation Ltd., Ranchi for a period two years** subject to following additional conditions:

i. The coal shall be transported through Route-1: HECL, Ranchi during lean traffic period (9 pm to till 8 am).

ii. Water sprinkling is to be carried out at the road stretch near Tatisilwai village to control secondary dust.

11. All other conditions mentioned in the EC vide dated 07.04.2011 and amendment letter dated 9.10.2019 shall remain the same, as applicable.

This issues with the approval of the Competent Authority.

Yours faithfully,

(Dr. S. Kerketta)
Director, IA.I

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony, Ranchi- 834002.
5. The Secretary (Environment), Forests and Environment Department Government of Jharkhand.
6. The Chairman, Jharkhand State Pollution Control Board, TA Building, HEC Complex, P.O. Dhurwa, Distt. Ranchi.
7. The District Collector, Ranchi District, Govt. of Jharkhand.
8. Guard file/Monitoring file.
9. Website of MoEF&CC.

Director, IA.I

usha martin

TC - 5404

UML/F/27 (C)

ENVIRONMENTAL LABORATORY, 2X10 MW CPP, TATISILWAI, RANCHI (JHARKHAND) – 835103
E-Mail: tanmay_roy@ushamartin.co.in, cpp_wtprnc@ushamartin.co.in
OFFICE NO: 06513051 683, 06513051 689 Fax: 06513051 409/410

TEST REPORT OF COAL

Sample Details

Date & Time of Sampling : 11.09.2021 & 10:30AM	
Sample ID : CPP/SEP/01	
Type of Sample : COAL	
Duration of Sampling : 1 hrs	
Sample Drawn by : Mr Subhas Chatterjee	
Sample Plan Reference : UML/DOC/110	
Testing Condition : 25.2°C , 62%RH	
UNIQUE LAB REPORT NO : TC540421000000963F	

Client Details

Client Name	:Usha Martin Limited(CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 11.09.2021
Date of testing	: 11.09.2021
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

COAL TEST REPORT

Sl.no.	Analysis	unit	Results	Test method
1	MOISTURE (IN SAMPLE COAL)	%	2.84	IS : 1350 (part-1) 1984 RA 2013
2	ASH	%	39.19	IS : 1350 (part-1) 1984 RA 2013
3	VM	%	23.71	IS : 1350 (part-1) 1984 RA 2013
4	GCV	Kcal/kg	4298.00	IS : 1350 (part-2) 1970 RA 2015

Declaration:-

1. Results reported are valid at the time of testing and under the stated testing condition.
2. Result in the report refers to only the sample submitted by the client.
3. This report shall will be reproduced expect in full and without the written permission of environmental laboratory, CPP, UML, Ranchi.

TESTED BY
(Manish Kumar)

CHECKED BY
(Tanmay Roy)

AUTHORISED BY
(Tanmoy Sinha)

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

usha martin

TC - 5404

UML/F/27 (E)

ENVIRONMENTAL LABORATORY, 2X10 MW CPP, TATISILWAI, RANCHI (JHARKHAND) – 835103

E-Mail: tanmay_roy@ushamartin.co.in, cpp_wtprnc@ushamartin.co.in

OFFICE NO: 06517180 683, 06517180 689 Fax: 06517180 409/410

TEST REPORT

ETP WATER

Sample Details

Date & Time of Sampling	: 11.09.2021 & 2:00M
Sample ID	: SEP/CPP/EW/11
Type of Sample	: CPP TREATED ETP WATER
Duration of Sampling	: 1 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.2°C , 62 % RH
UNIQUE LAB REPORT NO	: TC540421000000962F

Client Details

Client Name	:Usha Martin Limited(CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 11.09.2021
Date of testing	: 11.09.21-16.09.21
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

REPORT

Sl.No.	Characteristics	Unit	Requirement (Desirable limit)	Results	Test Method
1	pH		5.50 – 9.00	7.14	APHA 22nd Edition-4500 H^+
2	Total Dissolved Solids	Mg/ltr		660.00	APHA 22nd Edition-2540 C
3	Total Suspended solids	Mg/ltr	100.00	36.40	APHA 22nd Edition-2540 D
4	Dissolved oxygen	Mg/ltr		4.30	IS:3025, (part-38) 2014
5	Oil & Grease	Mg/ltr	10.00	5.20	IS:3025, (part-39) 2014

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

Declaration:-

1. Results reported are valid at the time of testing and under the stated testing condition.
2. Result in the report refers to only the sample submitted by the client.
3. This report shall will be reproduced expect in full and without the written permission of environmental laboratory, CPP, UML, Ranchi.

TESTED BY
(Manish Kumar)

CHECKED BY
(Tanmay Roy)

AUTHORISED BY
(Tanmoy Sinha)

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

usha martin

UML/F/27 (E)

ENVIRONMENTAL LABORATORY, 2X10 MW CPP, TATISILWAI, RANCHI (JHARKHAND) – 835103

E-Mail: tanmay_roy@ushamartin.co.in, cpp_wtprnc@ushamartin.co.in

OFFICE NO: 06517180 683, 06517180 689 Fax: 06517180 409/410

TEST REPORT

ETP WATER

Sample Details

Date & Time of Sampling	: 11.09.2021 & 2:00M
Sample ID	: SEP/CPP/EW/11
Type of Sample	: CPP TREATED ETP WATER
Duration of Sampling	: 1 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.2°C , 62 % RH
UNIQUE LAB REPORT NO	: TC540421000000962F

Client Details

Client Name	:Usha Martin Limited(CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 11.09.2021
Date of testing	: 11.09.21-16.09.21
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

TEST REPORT

Sl.No.	Characteristics	Unit	Requirement (Desirable limit)	Results
1	Lead	Mg/ltr	0.10	<0.10
2	Zinc	Mg/ltr	5.00	0.25
3	Phosphate	Mg/ltr	5.00	0.40
4	Chloride	Mg/ltr	-	118.00
5	BOD, 3 days at 27 °C	Mg/ltr	30.00	2.80
6	COD	Mg/ltr	250.00	30.00
7	Iron	Mg/ltr	3.00	0.10
8	Manganese	Mg/ltr	2.00	0.31

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

Declaration:-

1. Results reported are valid at the time of testing and under the stated testing condition.
2. Result in the report refers to only the sample submitted by the client.
3. This report shall will be reproduced expect in full and without the written permission of environmental laboratory, CPP, UML, Ranchi.

TESTED BY
(Manish Kumar)

CHECKED BY
(Tanmay Roy)

AUTHORISED BY
(Tanmoy Sinha)

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

usha martin

TC - 5404

UML/F/27 (A)

ENVIRONMENTAL LABORATORY, 2X10 MW CPP, TATISILWAI, RANCHI (JHARKHAND) – 835103

E-Mail: tanmay_roy@ushamartin.co.in, cpp_wtprnc@ushamartin.co.in

OFFICE NO: 06517180 683, 06517180 689 Fax: 06517180 409/410

TEST REPORT

DRINKING WATER

Sample Details

Date & Time of Sampling	: 11.09.2021 & 2:00pm
Sample ID	: SEP/CPP/DW/09
Type of Sample	: CPP DRINKING WATER
Duration of Sampling	: 1 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.2°C , 62 %RS
UNIQUE LAB REPORT NO	: TC540421000000960F

Client Details

Client Name	:Usha Martin Limited(CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 11.09.2021
Date of testing	: 11.09.21-16.09.21
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

REPORT

Sl.No.	Characteristics	Unit	Requirement (Desirable limit)	Results	Test Method
1	pH		6.50 to 8.50	6.98	APHA 22nd Edition-4500 H^+
2	Total Dissolved Solids	Mg/ltr	500.00	112.00	APHA 22nd Edition-2540 C
3	Turbidity	NTU	1.00	< 0.10	APHA 22nd Edition-2130 B
4	Alkalinity	Mg/ltr	200.00	10.00	IS:3025, (part-23) 2014
5	Acidity	Mg/ltr		8.00	IS:3025, (part-22) 2014
6	Total hardness (as $CaCO_3$)	Mg/ltr	300.00	12.00	IS:3025, (part-21) 2014
7	Calcium (as $CaCO_3$)	Mg/ltr	75.00	8.00	IS:3025, (part-40) 2014
8	Magnesium (as $CaCO_3$)	Mg/ltr	30.00	4.00	APHA 22ndEdition -3500mg B
9	Chloride	Mg/ltr	250.00	9.00	IS:3025, (part-32) 2014
10	Sulphate	Mg/ltr	200.00	4.46	APHA 22ndEdition-4500 So_4 2
11	Residual free chlorine	Mg/ltr	0.20	<0.10	IS:3025, (part-26) 2014
12	Iron	Mg/ltr	0.30	0.13	IS:3025, (part-53) 2014
13	Nitrate	Mg/ltr	45.00	1.40	IS:3025, (part-39) 2014
14	Nitrite	Mg/ltr		<0.05	APHA 22ndEdition-4500No_2 B
15	Silica	Mg/ltr		1.20	IS:3025, (part-35) 2014
16	Temperature	°C		25.0	IS:3025, (part-9) 2006

** IS: 10500(2012): Drinking Water Specification

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TEST REPORT

DRINKING WATER

Sample Details

Date & Time of Sampling : 11.09.2021 & 2:00pm	
Sample ID : SEP/CPP/DW/09	
Type of Sample : CPP DRINKING WATER	
Duration of Sampling : 1 hrs	
Sample Drawn by : Mr Suraj Kumar	
Sample Plan Reference : UML/DOC/110	
Testing Condition : 25.2°C , 62 %RS	
UNIQUE LAB REPORT NO : TC540421000000960F	

Client Details

Client Name	:Usha Martin Limited(CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 11.09.2021
Date of testing	: 11.09.21-16.09.21
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

TEST REPORT

Sl.No.	Characteristics	Unit	Requirement (Desirable limit)	Results
1	Colour	Hazen	5.00	<5.00
2	Odour		AGREEABLE	AGREEABLE
3	Taste		AGREEABLE	AGREEABLE
4	Fluoride	Mg/ltr	1.00	0.036
5	Manganese	Mg/ltr	0.10	0.010
6	Mercury	Mg/ltr	0.001	<0.0005
7	Lead	Mg/ltr	0.01	<0.005
8	Zinc	Mg/ltr	5.00	<0.400

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TEST REPORT

GROUND WATER

Sample Details

Client Details

Date & Time of Sampling	: 11.09.2021 & 2:00PM	Client Name	:Usha Martin Limited(CPP Div)
Sample ID	: SEP/CPP/GW/10	Client Address	: Tatisilwai, Ranchi
Type of Sample	: CPP GROUND WATER	Client Code	: UML/CPP/03
Duration of Sampling	: 1 hrs	State	: Jharkhand
Sample Drawn by	: Mr Suraj Kumar	Date of Receipt of Sample	: 11.09.2021
Sample Plan Reference	: UML/DOC/110	Date of testing	: 11.09.21-16.09.21
Testing Condition	: 25.2°C , 62 %RH	Test Performed	: At Permanent Lab
UNIQUE LAB REPORT NO : TC540421000000961F		Date of Report	: 30.09.2021

REPORT

Sl.No.	Characteristics	Unit	Requirement (Desirable limit)	Results	Test Method
1	pH		6.50 to 8.50	7.16	APHA 22nd Edition-4500 H^+
2	Total Dissolved Solids	Mg/ltr	500.00	180.00	APHA 22nd Edition-2540 C
3	Turbidity	NTU	1.00	44.40	APHA 22nd Edition-2130 B
4	Alkalinity	Mg/ltr	200.00	76.00	IS:3025, (part-23) 2014
5	Acidity	Mg/ltr		6.00	IS:3025, (part-22) 2014
6	Total hardness (as $CaCO_3$)	Mg/ltr	300.00	84.00	IS:3025, (part-21) 2014
7	Calcium (as $CaCO_3$)	Mg/ltr	75.00	62.00	IS:3025, (part-40) 2014
8	Magnesium (as $CaCO_3$)	Mg/ltr	30.00	22.00	APHA 22nd Edition -3500mg B
9	Chloride	Mg/ltr	250.00	60.98	IS:3025, (part-32) 2014
10	Sulphate	Mg/ltr	200.00	8.43	APHA 22nd Edition-4500 So_4 2
11	Residual free chlorine	Mg/ltr	0.20	<0.10	IS:3025, (part-26) 2014
12	Iron	Mg/ltr	0.30	0.20	IS:3025, (part-53) 2014
13	Nitrate	Mg/ltr	45.00	4.47	IS:3025, (part-39) 2014
14	Nitrite	Mg/ltr		<0.05	APHA 22nd Edition-4500No_2 B
15	Silica	Mg/ltr		11.23	IS:3025, (part-35) 2014
16	Temperature	°C		24.0	IS:3025, (part-9) 2006

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TEST REPORT

GROUND WATER

Sample Details

Client Details

Date & Time of Sampling	: 11.09.2021 & 2:00PM	Client Name	:Usha Martin Limited(CPP Div)
Sample ID	: SEP/CPP/GW/10	Client Address	: Tatisilwai, Ranchi
Type of Sample	: CPP GROUND WATER	Client Code	: UML/CPP/03
Duration of Sampling	: 1 hrs	State	: Jharkhand
Sample Drawn by	: Mr Suraj Kumar	Date of Receipt of Sample	: 11.09.2021
Sample Plan Reference	: UML/DOC/110	Date of testing	: 11.09.21-16.09.21
Testing Condition	: 25.2°C , 62 %RH	Test Performed	: At Permanent Lab
UNIQUE LAB REPORT NO : TC540421000000961F		Date of Report	: 30.09.2021

TEST REPORT

Sl.No.	Characteristics	Unit	Requirement (Desirable limit)	Results
1	Colour	Hazen	5.00	<5.00
2	Odour		AGREEABLE	AGREEABLE
3	Taste		AGREEABLE	AGREEABLE
4	Fluoride	Mg/ltr	1.00	0.042
5	Manganese	Mg/ltr	0.10	0.010
6	Mercury	Mg/ltr	0.001	<0.0005
7	Lead	Mg/ltr	0.01	<0.005
8	Zinc	Mg/ltr	5.00	0.11

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TEST REPORT

NOISE MONITORING

Sample Details

Date of Sampling	: 24.06.2021 – 29.06.2021
Sample ID	JUN/CPP/NOS/04
Type of Sample	: Noise
Duration of Sampling	: 24hrs (Per Location)
Sample Drawn by	: Mr. Suraj Kumar
Sample Plan Reference	: UML/DOC/110
UNIQUE LAB REPORT NO	: TC540421000000854F

Client Details

Client Name	: Usha Martin limited (CPP)
Client Address	: Tatisilwai, Ranchi
Client Code	:UML/CPP/03
State	: Jharkhand
Test Performed	: At Permanent Lab
Date of Report	: 30.06.2021
Sample Description	: Measurement of Noise at UML CPP Area

TEST REPORT OF NOISE LEVEL

Monitoring Date	24.06.2021 – 29.06.2021					
Station Location	Noise Results in dB (A) Day			Noise Results in dB (A) Night		
	AVG	MIN	MAX.	AVG.	MIN.	MAX.
CPP MAIN GATE	59.6	49.3	68.7	62.9	54.2	72.2
CPP WTP AREA	63.8	57.8	72.2	61.6	51.1	70.1
CPP BOILER AREA, Machine Area	79.2	73.6	86.7	81.2	75.1	88.4
CPP ADM BUILDING	65.2	58.6	72.2	64.4	58.3	68.7
CPP COAL YARD AREA	58.2	52.6	66.0	57.8	50.4	63.8

Ambient Air Quality Norms in Respect of Noise

AREA	CATEGORY AREA	NOISE LEVEL in dB(A)	
		DAY TIME	NIGHT TIME
A	INDUSTRIAL AREA	75	70
B	COMMERCIAL AREA	65	55
C	RESIDENTIAL AREA	55	45
D	SILENCE ZONE	50	40

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TEST REPORT

AMBIENT AIR MONITORING

Sample Details

Date & Time of Sampling	: 14.09.2021 & 1:10PM
Sample ID	: CPP/ENV/SEP/MG/36
Type of Sample	: Ambient Air
Duration of Sampling	: 24 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.0°C , 60%RS
UNIQUE LAB REPORT NO	: TC540421000000950F

Client Details

Client Name	:Usha Martin Limited (CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 15.09.2021
Date of testing	: 16.09.2021
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

REPORT

Sl.No.	Sample Location	Parameter	Unit	Desirable limit *	Results	Test Method
1	MAIN GATE	Particulate Matter PM2.5	µg/M³	≤60.00	45.42	SOP/UML/WT/02 Based on CPCB guideline Vol-I : 2012
2		Respirable Particulate Matter PM10	µg/M³	≤100.00	60.88	IS:5182 (PT – 23) : 2006
3		Sulphur Dioxide	µg/M³	≤80.00	<10.00	IS:5182 (PT – 2) : 1999 Reaffirmed 2001
4		Nitrogen Dioxide	µg/M³	≤80.00	23.40	IS:5182 (PT – 6) : 2006

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

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TEST REPORT

AMBIENT AIR MONITORING

Sample Details

Date & Time of Sampling	: 12.09.2021 & 1:30PM
Sample ID	: CPP/ENV/SEP/MTG/34
Type of Sample	: Ambient Air
Duration of Sampling	: 24 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.0°C , 60%RS
UNIQUE LAB REPORT NO	: TC540421000000948F

Client Details

Client Name	:Usha Martin Limited (CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 13.09.2021
Date of testing	: 16.09.2021
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

REPORT

Sl.No.	Sample Location	Parameter	Unit	Desirable limit *	Results	Test Method
1	MATERIAL GATE	Particulate Matter PM2.5	µg/M³	≤60.00	48.17	SOP/UML/WT/02 Based on CPCB guideline Vol-I : 2012
2		Respirable Particulate Matter PM10	µg/M³	≤100.00	69.83	IS:5182 (PT – 23) : 2006
3		Sulphur Dioxide	µg/M³	≤80.00	<10.00	IS:5182 (PT – 2) : 1999 Reaffirmed 2001
4		Nitrogen Dioxide	µg/M³	≤80.00	21.24	IS:5182 (PT – 6) : 2006

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TEST REPORT

AMBIENT AIR MONITORING

Sample Details

Date & Time of Sampling	: 13.09.2021 & 2:00PM
Sample ID	: CPP/ENV/SEP/SLF/35
Type of Sample	: Ambient Air
Duration of Sampling	: 24 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.0°C , 60%RS
UNIQUE LAB REPORT NO	: TC540421000000949F

Client Details

Client Name	:Usha Martin Limited (CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 14.09.2021
Date of testing	: 16.09.2021
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

REPORT

Sl.No.	Sample Location	Parameter	Unit	Desirable limit *	Results	Test Method
1	SLF AREA	Particulate Matter PM2.5	µg/M³	≤60.00	36.94	SOP/UML/WT/02 Based on CPCB guideline Vol-I : 2012
2		Respirable Particulate Matter PM10	µg/M³	≤100.00	49.69	IS:5182 (PT – 23) : 2006
3		Sulphur Dioxide	µg/M³	≤80.00	<10.00	IS:5182 (PT – 2) : 1999 Reaffirmed 2001
4		Nitrogen Dioxide	µg/M³	≤80.00	19.94	IS:5182 (PT – 6) : 2006

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TEST REPORT

AMBIENT AIR MONITORING

Sample Details

Date & Time of Sampling	: 15.09.2021 & 1:10PM
Sample ID	: CPP/ENV/SEP/WTP/37
Type of Sample	: Ambient Air
Duration of Sampling	: 24 hrs
Sample Drawn by	: Mr Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.0°C , 60%RS
UNIQUE LAB REPORT NO	: TC540421000000951F

Client Details

Client Name	:Usha Martin Limited (CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 16.09.2021
Date of testing	: 16.09.2021
Test Performed	: At Permanent Lab
Date of Report	: 30.09.2021

REPORT

Sl.No.	Sample Location	Parameter	Unit	Desirable limit *	Results	Test Method
1	WTP AREA	Particulate Matter PM2.5	µg/M^3	≤60.00	35.04	SOP/UML/WT/02 Based on CPCB guideline Vol-I : 2012
2		Respirable Particulate Matter PM10	µg/M^3	≤100.00	48.09	IS:5182 (PT – 23) : 2006
3		Sulphur Dioxide	µg/M^3	≤80.00	<10.00	IS:5182 (PT – 2) : 1999 Reaffirmed 2001
4		Nitrogen Dioxide	µg/M^3	≤80.00	22.39	IS:5182 (PT – 6) : 2006

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TEST REPORT

NOISE MONITORING

Sample Details

Date of Sampling	: 20.09.2021 to 25.09.2021
Sample ID	: SEP/CPP/NOS/04
Type of Sample	: Noise
Duration of Sampling	: 24hrs (Per Location)
Sample Drawn by	: Mr. Suraj Kumar
Sample Plan Reference	: UML/DOC/110
UNIQUE LAB REPORT NO	: TC540421000000969F

Client Details

Client Name	: Usha Martin limited (CPP)
Client Address	: Tatisilwai, Ranchi
Client Code	:UML/CPP/03
State	: Jharkhand
Test Performed	: At Permanent Lab
Date of Report	: 25.09.2021
Sample Description	: Measurement of Noise at UML CPP Area

TEST REPORT OF NOISE LEVEL

Monitoring Date / Station Location	20.09.2021 to 25.09.2021					
	Noise Results in dB (A) Day			Noise Results in dB (A) Night		
	AVG	MIN	MAX.	AVG.	MIN.	MAX.
CPP MAIN GATE	65.8	60.2	76.2	65.7	55.6	74.3
CPP WTP AREA	67.1	58.8	74.6	67.1	57.5	73.2
CPP BOILER AREA, MACHINE AREA	81.5	76.2	87.9	83.0	74.2	90.5
CPP ADM BUILDING	67.5	62.2	73.4	67.1	62.8	71.5
CPP COAL YARD AREA	61.4	56.2	67.2	59.9	54.5	63.7

Ambient Air Quality Norms in Respect of Noise

AREA	CATEGORY AREA	NOISE LEVEL in dB(A)	
		DAY TIME	NIGHT TIME
A	INDUSTRIAL AREA	75	70
B	COMMERCIAL AREA	65	55
C	RESIDENTIAL AREA	55	45
D	SILENCE ZONE	50	40

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(Manish Kumar)

CHECKED BY
(Tanmay Roy)

AUTHORISED BY
(Tanmoy Sinha)

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

usha martin

TC - 5404

UML/F/27 (S)

ENVIRONMENTAL LABORATORY, 2X10 MW CPP, TATISILWAI, RANCHI (JHARKHAND) – 835103
E-Mail: tanmay_roy@ushamartin.co.in, cpp_wtprnc@ushamartin.co.in
OFFICE NO: 06513051 683, 06513051 689 Fax: 06513051 409/410

TEST REPORT

STACK MONITORING

Sample Details

Date & Time of Sampling	: 24.08.2021 & 12:30PM
Sample ID	: CPP/ENV/AUG/STACK/01
Type of Sample	: STACK
Duration of Sampling	: 3.5 hrs
Sample Drawn by	: Mr. Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 24.2°C , 59%RS
UNIQUE LAB REPORT NO	: TC540421000000914F

Client Details

Client Name	:Usha Martin Limited (CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 24.08.2021
Date of testing	: 24.08.21-25.08.21
Test Performed	: At Permanent Lab
Date of Report	: 30.08.2021

TEST REPORT

Sl. No.	Description	Unit	Desirable limit	Results	Test Method
1	Location			CHIMNEY	
2	Area of Stack	(M^2)		1.485	
3	Temperature of flue gas	(^oC)		112.0	
4	Average Velocity	(m/s)		23.56	
6	Particulate matter	(mg/Nm^3)	50.00	42.51	IS 11255, (part-1) 1985 reaffirmed 2003
7	Sulphur Dioxide	(mg/Nm^3)	350.00	236.42	IS 11255, (part-2) 1985 reaffirmed 2003
8	Nitrogen Oxides	(mg/Nm^3)	350.00	189.52	IS 11255, (part-7) 2005

Note: - General Emission standards as per Gazette of India, published by ministry of Environment & forests, 19th May , 1993 are for PM- 150 mg/Nm^3.

Declaration:-

1. Results reported are valid at the time of testing and under the stated testing condition.
2. Result in the report refers to only the sample submitted by the client.
3. This report shall will be reproduced expect in full and without the written permission of environmental laboratory, CPP, UML, Ranchi

TESTED BY
(Manish Kumar)

CHECKED BY
(Tanmay Roy)

AUTHORISED BY
(Tanmoy Sinha)

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

usha martin

Annex 2A

Point - 4

UML/F/27 (S)

ENVIRONMENTAL LABORATORY, 2X10 MW CPP, TATISILWAI, RANCHI (JHARKHAND) – 835103
E-Mail: tanmay_roy@ushamartin.co.in, cpp_wtprnc@ushamartin.co.in
OFFICE NO: 06513051 683, 06513051 689 Fax: 06513051 409/410

TEST REPORT

MERCURY EMISSION RESULTS IN CAPTIVE POWER PLANT(CPP)

Sample Details

Date & Time of Sampling	: 12.02.2021
Sample ID	: CPP/ENV/FEB/STACK/Hg
Type of Sample	: STACK (MERCURY)
Duration of Sampling	: 2 hrs
Sample Drawn by	: Mr. Suraj Kumar
Sample Plan Reference	: UML/DOC/110
Testing Condition	: 25.2°C , 56%RH

Client Details

Client Name	:Usha Martin Limited (CPP Div)
Client Address	: Tatisilwai, Ranchi
Client Code	: UML/CPP/03
State	: Jharkhand
Date of Receipt of Sample	: 12.02.2021
Date of testing	: 12.02.2021
Test Performed	: At Permanent Lab
Date of Report	: 20.02.2021

TEST REPORT

Sl. No.	Location	Parameter	Results Micro gm/Nm^3	Remarks
1	ESP Outlet	Mercury	**BDL	

**BDL denotes Below Detection Level for Hg < 0.03 Micro gm/Nm^3

TESTED BY
(Manish Kumar)

CHECKED BY
(Tanmay Roy)

AUTHORISED BY
(Tanmoy Sinha)

CPP (2 X 10MW)
USHAMARTIN LTD.
TATISILWAI, 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

MINUTES OF MEETING

vigilantplant.

CUSTOMER	USHA MARTIN LTD.
MEETING LOCATION	CPP , TATISILWAI , RANCHI , JHARKHAND
DATE	March28,2015
PURPOSE OF THE MEETING	Addition of new tags for remote transmission & monitoring on CPCB site
W.O.	

PARTICIPANTS

CUSTOMER
Mr.M.S. Mandal
Mr. V. Kumar

YOKOGAWA
Mr.Dhirender Dagar
(Yokogawa India Ltd)
MOB.-9996952300

SL.NO	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 at CPCB site- TAG RANGE UNIT 1.ETP_PH 0-14 pH 2.ETP_TEMP 0-150 degC 3.ETP_[illegible]TSS 0-1000 mg/ltr 4.B1TI312 0-300 degC 5.B2TI312 0-300 degC	M/S YIL	
3	The newly added tags showing proper value after configuration and under observation. Usha Martin will update if 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 | YOKOGAWA

YOKOGAWA INDIA LTD

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 connectivity 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

◆ MINUTES OF MEETING

vigilantplant

❖ CUSTOMER NAME	❖ M/s Ushamatin ltd		
❖ MEETING LOCATION	❖ Power-Plant- Ranchi		
❖ 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
❖ 1st VISIT START FROM	14-11-2013	❖ 1st VISIT END ON	15-12-2013
❖ 2nd VISIT START FROM	27-11-2013	❖ 2nd VISIT END ON	30-11-2013
❖ 3rd VISIT START FROM	12-12-2013	❖ 3rd VISIT END ON	13-12-2013

Member presents on Meeting

FROM UML			FROM YOKOGAWA
Mr Arindam Dasgupta		YOKOGAWA	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'nt interchanges the port or disturb the configuration, because UTM box configuration was very critical one and once it get disturb, then JPCB will not 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 aeap for onward submission to the Ministry of Enviroment..	
6.	Engineer of YIL left the site on 13/12/2013	

13/12/13	Abhishek Dutta 13/12/13
M/s UML	M/s YIL

Office of the Director, Ground Water Directorate, Jharkhand, Ranchi.
"Abhiyantran Bhawan", Kutchery Chowk, Ranchi-834001, Phone-91-2217141/Fax-91-2214830
E Mail-gwi.rwh@gmail.com

Letter No.**G.W.D**.380...../ Ranchi. dated..25.11.2011../

From,

S.L.S. JAGESHWAR,
Director,
Ground Water Directorate, Jharkhand.
Water Resources Department,
Govt. of Jharkhand.

To,

Sri N.K. Patodia
Assistant Vice-President
Usha Martin Limited
Wire Ropes & Specialty Products Division
Tatisilvai-835103
Ranchi, Jharkhand.

Sub:- **Approval of "Rain Water Harvesting" Plan submitted by you for your Captive Power Plant.**

Ref:- Your letter no.UML/CPP/EMS/GWD/RWH/11/04 dated 25.10.2011.

Sir,

Kindly refer to your Design & Plan of "Rain Water Harvesting" for Ground Water Recharging prepared by KRG Rain Water Foundation, Chennai along with associated Hydrological, Hydro- meteorological and Geophysical data of the area, submitted to this office vide your letter no-UML / CPP / EMS / GWD / RWH/11/04 dated 25.10.2011.

Your Rain Water Harvesting for Ground Water Recharging Plan envisages to recharge **77963M^3** of run-off-rainwater every year, resulting in Groundwater Recharge of the order of **66269M^3** annually. The recharge structures incorporated in the plan consists of **One Storage Cum Percolation Pond** (SCP) of dimensionon (Top dia-40060M and bottom dia 31.40M) and a depth of 4.60M. 4 nos. of **Recharge shafts** are also proposed in the bed of the SCP. Additionally, one no. of **Dug cum bore-well** and one no. **Recharge well with one no. Recharge shaft** is also provided for in the plan. One number of **contour bund** has also been proposed.

Demand of water in the plant, as stated in the said plan is 624M^3 per day ie. 227760M^3 per annum, which is being lifted from Subarnarakha River. In accordance with prevailing rules of Water Resources Department, Govt. of Jharkhand, more than 2% of above quantity (227760M^3) must be recharged. 66,269M^3 of rainfall runoff is proposed to be recharged per year, as per the plan submitted, after the construction of recharge structures against the mandatory requirement of 4600M^3.

P T O -2

For further recharge, it is suggested to provide depth of recharge shafts of various recharge structures uniformly as 80M instead of 70M, 50M and 30M as proposed in the submitted Rain Water Harvesting Plan.

The plan submitted by you for "Rain Water Harvesting" is approved subject to the following conditions: -

1. Your entire "Rain Water Harvesting" Project for Ground Water Recharging must be completed with in 60 days of the approval of the plan.

2. Prior to Construction of proposed check-dam over nalla, necessary consent of the concerned authority must be obtained.

3. The Proposed Rain Water Harvesting Recharge Pits (Linear Artificial Recharge Structure) must be constructed as per standard design of filter materials and boring in the pits, annexed with this letter.

4. The Ground Water Level in at least 3-4 dug wells in and around your plant, must be monitored in the first week of every month and the data be necessarily made available to this office.

5. The quality of Ground Water in and around the plant area must be monitored periodically (every 6 months) and the data be necessarily made available to this office and to Jharkhand State Pollution Control Board, Dhurwa, Ranchi.

6. The Recharge Pits (LARS) to be constructed by you must be maintained properly, for all times to come. The top-coarse sand-layer in the pit, must be changed every alternate year, before the onset of monsoon.

7. The Completion Report of the entire project within the stipulated period (60 days), must be communicated to this office as well as to Jharkhand State Pollution Control Board, immediately after completion of the project.

8. **"This Plant has elaborate Rain Water Harvesting Facility",** must also be displayed prominently at the entrance and other places of your plant, in order to sensitize more people about Rain Water Harvesting.

Enclosures: -**(1)** Technically Approved Rain Water Harvesting Plan.
(2) Standard Plan and Design of Recharge Pits.

Yours sincerely,

24.11.11

D. Banerjee
(Deputy Director)
Ground Water Directorate, Ranchi.

24/11/2011

Director,
Ground Water Directorate,
Jharkhand, Ranchi.

Annex 6

usha martin

Usha Martin Limited
(Wire Ropes & Speciality Products Division)
Works : Tatisilwai - 835 103, Ranchi, Jharkhand,
Ph.: (00 91 651) 226 52 41/3051400/430, Fax : (00 91 651) 3051409/410

Ref : UML/EMS/GWD/RWH/12/02
Date : 15/10/2012

To

The Director,
Ground Water Directorate, Jharkhand,
Water Resources Department,
"Abhiyantran Bhawan", Kutchery Chowk,
Ranchi - 834 001

Kind Attn. of : Mr. SLS Jageshwar
Sub : To submit Completion Report on Rain Water Harvesting Plan

Ref : i) Our Letter Ref. No. UML/CPP/EMS/GWD/RWH/12/01 dtd. 03.05.2012 and
ii) Your Letter Ref. No. GWD - 197/ Ranchi dtd. 21.04.2012

Dear Sir,

Further to our above letter (ref. No. UML/CPP/EMS/GWD/RWH/12/01 dtd. 03/05/2012), we would like to place following facts before your good self for kind information :

We are pleased to inform you that the entire construction activities of Rain Water Harvesting Plan had already been completed by M/s. KRG Rainwater Foundation, Chennai. In this connection, M/s. KRG Rainwater Foundation, Chennai has also issued a "Completion Certificate" as well as a "Completion Report". We are hereby enclosing two sets of the above Certificate and Report for your kind perusal please. We are very confident that the Installation of Rainwater Harvesting Systems will augment the recharge of Ground Water and also improve the quality of Ground Water of not only the entire factory premises but also the surrounding communities to a considerable extent. In this connection, we would like to mention that the Land of CPP is low level land and as such we have developed the RWH System in this area. The system is working perfectly.

Being submitted for favour of information and in compliance of above referred letter.

Thanking you,

Yours' faithfully,
for **USHA MARTIN LIMITED,**
(Wire Ropes & Speciality Products Division)

N.K. Patodia

(NK Patodia)
Asst. Vice President

Encl : As stated above

Usha Martin Ltd.
2*10MW CPP,Ranchi

FLY ASH GENERATION & UTILISATION REPORT (PERIOD: APRIL'21 TO SEPT'21)

SOLID WASTE/FLY ASH GENERATION & UTILIZATION 2021-22							
MONTH	QTY ASH GENERATED (MT)	QTY UTILIZED (MT)			UNUTILIZED (MT)	UTILIZATION IN % *	Balance fly ash in Dyke
		UTILIZED IN FLY ASH BRICK PLANT	3RD PARTY UTILIZATION	TOTAL (MT)			
APRIL' 21	5589.74	0	5493.72	5493.72	96.02	98.3	168.91
MAY '21	6256.35	0	4635.94	4635.94	1620.41	74.1	1789.32
JUN' 21	6550.22	0	2870.52	2870.52	3679.7	43.8	5469.02
JUL' 21	5706.24	0	2696.39	2696.39	3009.85	47.3	8478.87
AUG' 21	3335.43	0	3060.35	3060.35	275.08	91.8	8753.95
SEPT' 21	3959.12	0	3909.97	3909.97	49.15	98.8	8803.1
TOTAL(MT)	**31397.1**	**0**	**22666.89**	**22666.89**	**8730.21**	**75.7**	

- **Total Ash Generation: 31397.10 MT**
- **Total Ash utilization: 22666.89 MT**
- **% of Utilization: 75.7 %**
- **Balance Qty in Ash Dyke : 8803 MT**

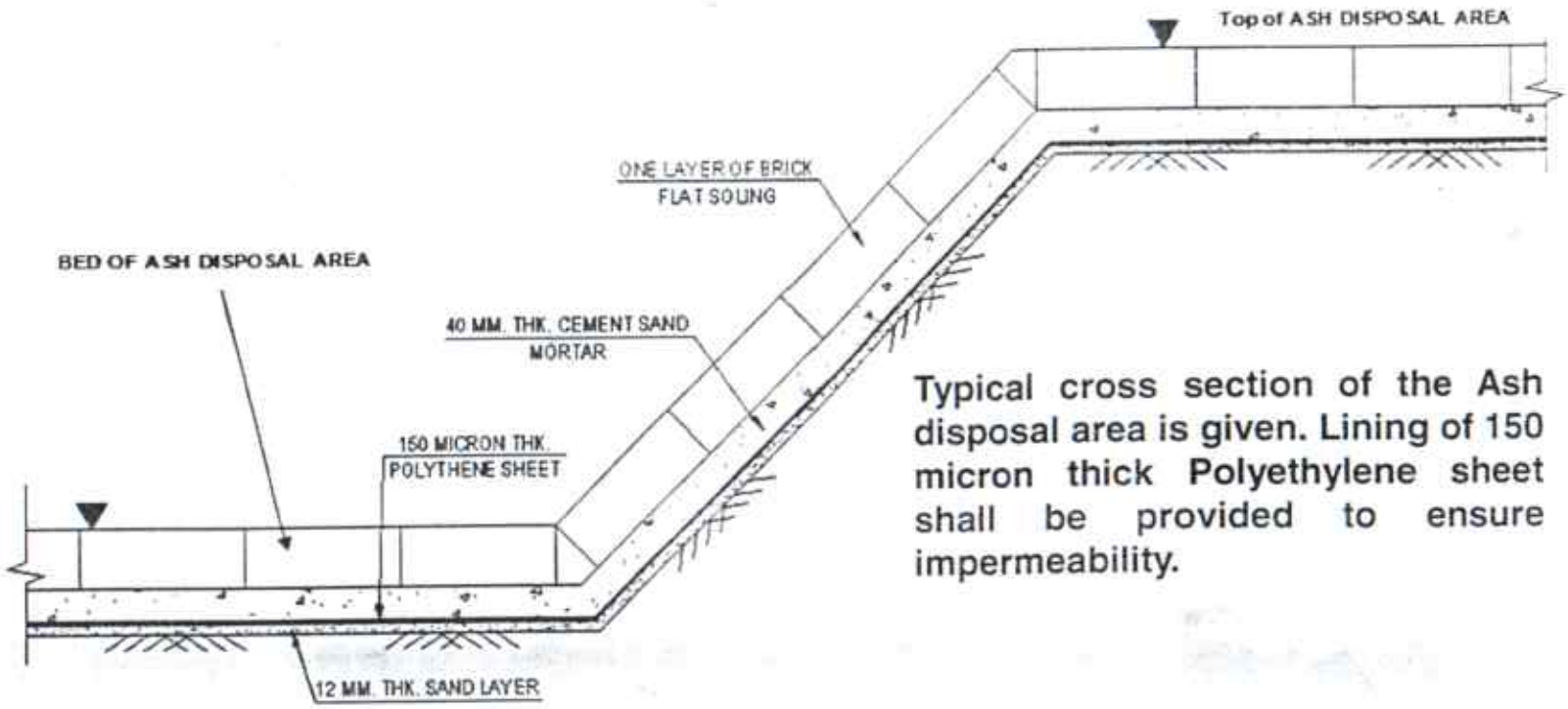
**** Utilization rate decreased due to Covid-19 situation and expected to achieved 100% utilization by coming March'22**

TOR POINT 22 :

Details regarding ash pond impermeability including soil analysis report and whether it would be lined, if so details of the lining etc.

Compliance:

TYPICAL PART CROSS SECTION OF THE ASH DISPOSAL AREA SHOWING LINING DETAIL TO PREVENT LEACHING



Typical cross section of the Ash disposal area is given. Lining of 150 micron thick Polyethylene sheet shall be provided to ensure impermeability.

Annex 7A

Captive Power Plant (CPP) - Existing Plant Description

		No. of Plants						
Sl.No.	Name of Plant	Till 2014*	2015-16 ##	2016-17##	2017-18 ##	2018-19##	2019-20 ##	2020-21##
1	Eucalyptus	654	1668	1155	1762	1400	1903	963
2	Babool							
3	Gamhar							
4	Pipal							
5	Acacia							
6	Sissoo							
7	Jamun							
8	Neem							
9	Bakain							
10	Forest plant							
11	Babool							
12	Mango							
13	Guava							
14	Litchi							
15	Amaltas							
16	Moringa							
17	kadam							
18	Alstonia							
19	Peltofarm							
20	gulmohar							
21	jakranda							
22	melia dubia							
23	karanj							
24	Ashok							
25	papaya							
26	lemon							
27	chikoo							
28	jackfruit							
29	Ber							
30	Pomegrannate							
* Existing Plants		## Plantation done			**Tree planting plan			

Requirement

•Plantation Area to be = 7.85 Acre i.e 3.177 Ha ,No of Plants to be = 7942@2500 plant/Ha

Completed:7239 Plants

****Remaining Plantation to be raised in FY 21-22 =940 Nos**

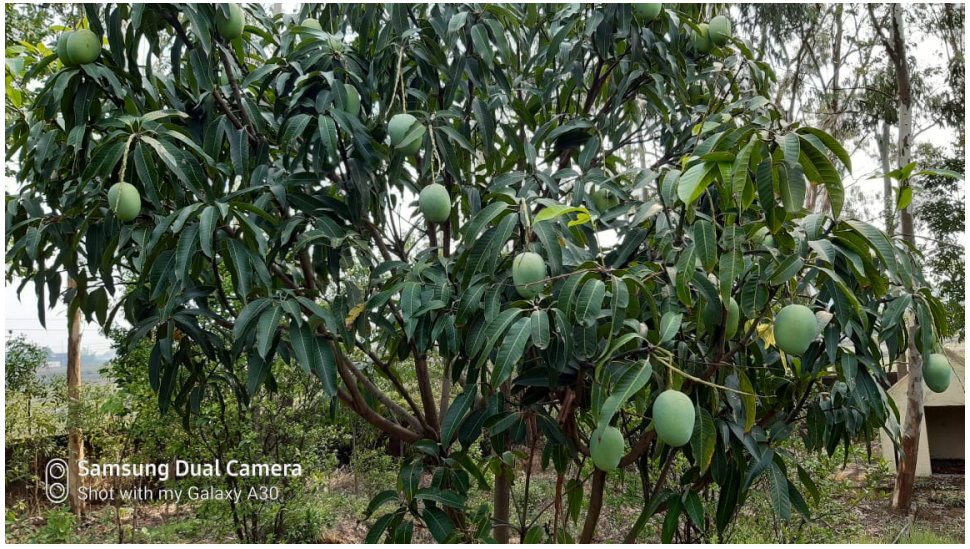
SOME GLIMPSES OF MANGO ORCHARD, 2X10 MW Captive Power Plant, M/s Usha Martin Limited, Ranchi

28.05.2021


Samsung Dual Camera
Shot with my Galaxy A30


Samsung Dual Camera
Shot with my Galaxy A30


Samsung Dual Camera
Shot with my Galaxy A30


Samsung Dual Camera
Shot with my Galaxy A30

28.05.2021

Annex 10

REPORT ON SOCIAL AUDIT FOR THE PERIOD OF 2020-21

OF

USHA MARTIN LTD CSR INITIATIVES

Report Submitted to

usha martin

Report Prepared by

Citizens Foundation

Citizens Foundation, 7Betar Kendra, Niwaranpur, Ranchi, Jharkhand 834002

Website: www.citizensfoundation.org, Email: mail@citizensfoundation.org

Ph. No: 0651-2481777/2482777

ACKNOWLEDGEMENT

We are grateful to USHA MARTIN LTD management for giving us the opportunity to work on this report. First of all, we are thankful to Dr. Mayank Murari, Sr DGM CSR and PR and other personnel of UML for providing us the opportunity of conducting the social audit. We express our sincere gratitude to the field and supporting staffs of UML who helped us to understand the implementation process and provided relevant data related to the different initiatives. We would like to express our deep gratitude to Gram Panchayat Mukhiya, and all those who have directly or indirectly helped us in this audit process. Without their support and cooperation at the field this task could not have been achieved successful completion.

We would like to thank Mr. Ganesh Reddy, CEO, and Citizens Foundation for his immense support. We are also thankful to all support staff of Citizens Foundation for their kind support in crucial time. We would also extend a warm thanks to Mr. Hemant Tirkey, Director-Partnership and Mr. Shyamal Herenz–Director NRML, CF who contributed magnanimously to this social audit with their comments and insights. Nevertheless, we would like to express our sincere thanks towards researchers who devoted their time and knowledge in this social audit.

Chapter 1: Introduction

When Usha Martin Ltd hereinafter referred as "Usha Martin" commenced business in 1962, the Founder's vision was to be a global company and a world leader in manufacturing wire ropes. Amongst many challenges that lay in the pathway of achieving that vision, was awareness that it would not succeed as a global company and world leader by just being an island of prosperity in a sea of poverty and discontent outside its factory gates in Jharkhand. For several years the Founders of Usha Martin searched for answers to achieve inclusive growth that eliminates discontent in a manner that could be sustained over generations and scalable across a wide population that our capabilities would allow. It is a long-standing observation that India is essentially two countries – one fuelling the drive for urbanization in India's burgeoning cities and another striving for development in the vast rural landscape of Bharat.

It is indeed a great divide, one that has seemed to widen over the past four decades. Pursuing inclusive growth to bridge this gap was one of the reasons why the Founders of Usha Martin set up Usha Martin Foundation as a registered society under the Societies Registration Act, 1860 in Jharkhand. The Founders vision was that it would deliver the social development and economic growth commitment of Usha Martin to rural Jharkhand. To do so, it was envisaged that Usha Martin performs its activities and to start with, in near and adjacent areas of Usha Martin's plants and operations. However, to make a real and sustainable difference to rural Jharkhand, Usha Martin would perform activities across as many geographical areas as its resources and capabilities would allow. Accordingly, mobilizing the community and its available resources, we sought to find a way to ensure sustainable development in the region. In the intervening years, we have achieved some of the goals we had set for ourselves. And a lot remains to be done.

In the beginning Usha Martin's corporate social responsibilities ("CSR") had attributes of pure philanthropy, and contributed to other non-government organizations ("NGOs") to implement various CSR projects. The results were a satisfactory until the early 1990s when Usha Martin became more project-oriented engaging with various institutions to understand the needs of rural communities that would make a real measurable difference in their lives.

Usha Martin philosophy is market-based bottom-up approach of integrated interventions that are multi-disciplinary and integrated to effectively deliver and impact poverty reduction strategies. Usha Martin model is conscious about abdication of personal financial gain and tends to support social entrepreneurship among the communities by advocating effective use of resources and available capital which is in contrast with the

conventional charity approach. Decades of government-led and entitlement-based approach to charity towards the local communities of Jharkhand yielded poor results. Human Development Index (HDI), per capita income, per capita consumption and other socio-economic indicators for the local community was abysmally low. Secondary data from different official reports and websites provided enough material to preliminarily analyse the broader trends of socio-economic Conditions of local communities.

The needs were many and basic in nature. While others take these for granted but the reality is that we cannot deliver on rural development unless we develop water infrastructure for drinking and agriculture; provide access to energy; stabilize the domestic environment by tending to the health needs of the mother and child and deliver education; empower women towards an earnings-based vocation; build capacity through training and create market linkages to enable an opportunity to increase income.

CSR MISSION AND STRATEGY

To achieve inclusive growth in our areas of operations and neighbouring communities through integrated community and rural development that is sustainable, scalable and adaptable by transforming beneficiaries to become producers, entrepreneurs and customers.

Objectives of Social Audit

1. Social Audit (SA) enables organizations to explore and generate their own values. SA provides a coherent and clear image of UML and helps this organization to plan and execute their CSR initiatives in a transparent and fair way.
2. It helps the organization to understand how each of the stakeholders of these projects have met the assigned responsibilities.
3. SA helps UML to assess the capabilities of the implementing agencies and accordingly, the organization can identify and plan its future CSR projects.
4. SA creates a new level of participative democracy focused on values and long-term visions and in the process makes UML transparent to stakeholders and supporters.

Scope of Social Audit

This assessment follows the stakeholder approach to determining social performance, wherein all the actions of the company towards the community stakeholder groups are within the ambit of social audit. Host communities are the villages which are in the immediate neighborhood of UML plant sites and are directly impacted by the plant operations either environmentally, economically or socially.

The social audit is a transparent process and documentation conducted to measure and manages the social objectives of the company. It is geared to provide better governance systems for any organization. The social audit is expected to deliver mechanisms by which UML can identify inconsistencies between its aims and the final implementation. Using the audit report, UML can develop high levels of detailing in what they wish to measure and verify and which will be appropriate to the needs of the organization as well as other stakeholders. The audit will also aid UML to understand the current impact and limitations to impact. In addition, it will provide UML a multi-stakeholder perception of its programme and help in formulation of future CSR policies.

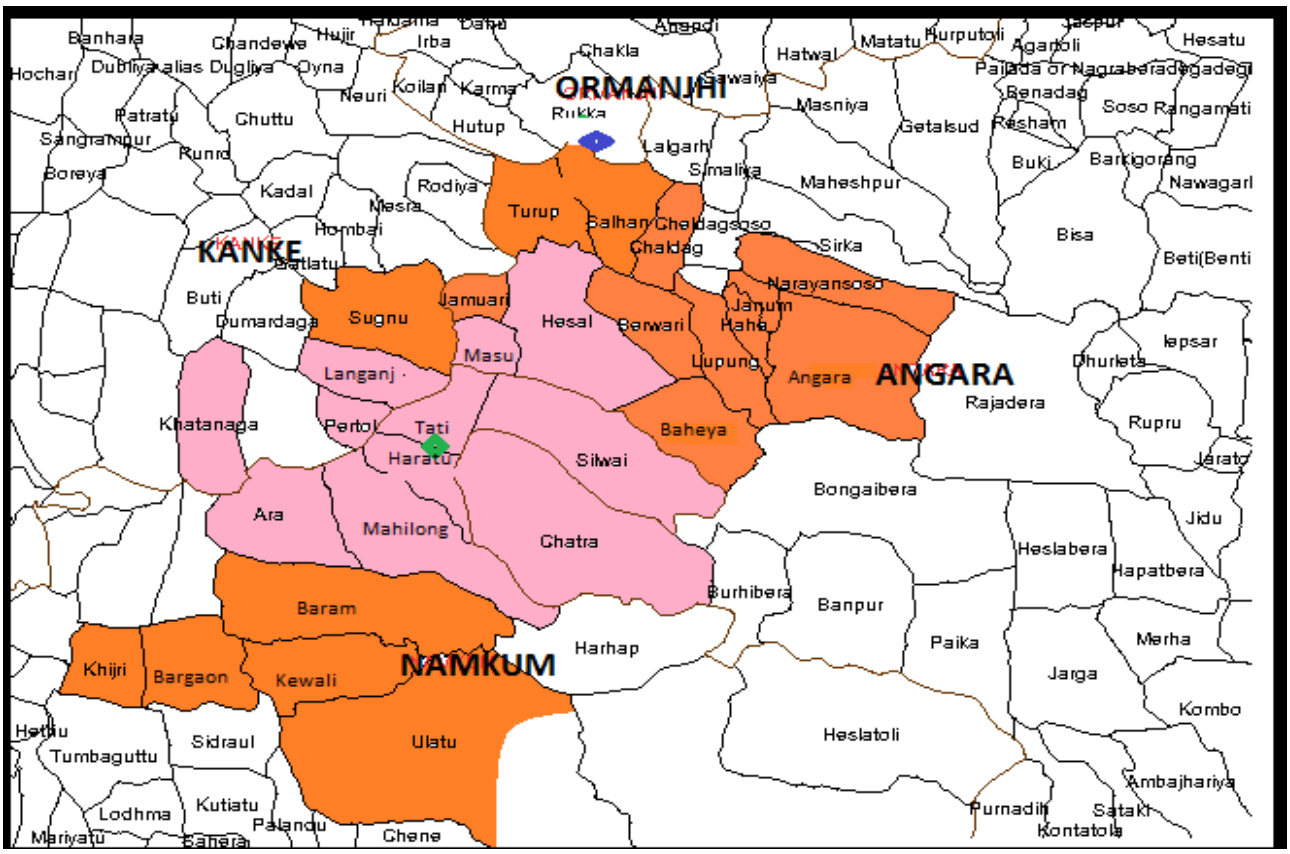
Methodology

Participative methods have been employed to engage stakeholders. The nature of the data is qualitative and quantitative. As it is a multi-stakeholder study, multiple research tools have been adopted. For the data collection multistage sampling technique has been adopted. In the first stage, data has been collected from UML through interview and focus group discussion. In the second stage stratified sampling technique has been adopted for data collection regarding implementation of activities. In the last stage, individual beneficiaries have been identified for interview and focus group discussion. For interviews, semi-structured questionnaire has been designed. The questions are based on the background, development, current conditions, and overall implementation of the project. Even the environmental interactions of one or more individuals, groups, communities involved in the projects have been studied.

Chapter 2: Project Area Description

The project area of UML-CSR, Ranchi is operational in 29 villages in and around the Captive Power Plant and rope making plant, covering three Blocks of Ranchi District Namely Namkum, Angara and Kanke. Although there are 29 operational villages but these activities are only carried out in **18** villages of 3 blocks. The details are underneath:

Sr. No	Block Name	Village Number	Village Name
1	Namkum	09	LalKhatanga, Bargaon
			Silwai,Khijri
			Mahilong, Ulatu
			Arra, Baram, Kewali
2	Angara	17	Angara, Baheya, Berwari, Chatra,
			Masu, NaraynSoso, Tati E, Tati W,
			Chaldag, Hehey, Haratu, Hesal,
			Jamuari, Janum, Lupung,
			Salhan, Turup,
3	Kanke	02	Lalganj, Pertol,



Map showing Operational

Chapter 3: Thematic Intervention

A. Natural Resource Management

Introduction-Natural resources comprise of land, water, biodiversity and genetic resources, biomass resources, forests, livestock, fisheries, wild flora and fauna. Natural Resources Management (NRM) refers to the sustainable utilization of major natural resources, such as land, water, air, minerals, forests, fisheries, and wild flora and fauna. Together, these resources provide the ecosystem services that underpin human life.

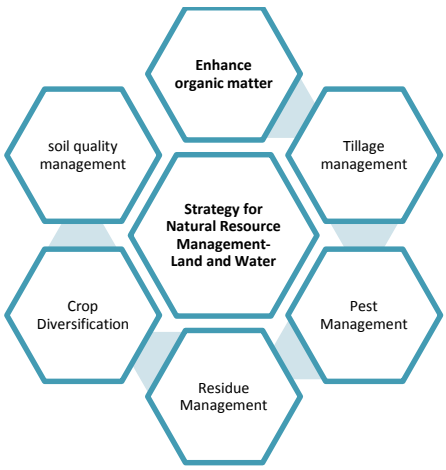
Problems-Soil and water quality problems caused by unsustainable agricultural production practices are not only leading to low productivity and quality of agricultural produce but also to environmental problems such as air quality and the release of toxic pollutants. In fact, unsustainable use and uninformed land use changes are depleting the quantity and deteriorating the quality of groundwater and associated ecosystems, upon which livelihoods is dependent. Severe soil degradation from erosion, compaction, or salinization can destroy the productive capacity of the soil and exacerbate water pollution from sediment and agricultural chemicals.

Objectives

- To ensure availability of safe drinking water
- To promote sustainable agricultural practices
- To ensure food security of the village communities

Strategy for improving Natural Resource Management

Towards fulfilment of the desired objectives a multi-pronged strategy was adopted. It involved the following aspects:



i. **Soil quality management**-Managing soil for today and tomorrow. As soil quality is linked to sustainability a key strategy adopted was to focus on improving soil quality by assessing and managing soil so that it functions optimally now and is not degraded for future use

ii. **Enhance organic matter**- regular additions of organic matter improve soil structure, enhance water and nutrient holding capacity, protect soil from erosion and compaction, and support a healthy community of soil organisms. Practices that increase organic matter include: leaving crop residues in the field, choosing crop rotations that include high residue plants, using optimal nutrient and water management practices to grow healthy plants with large amounts of roots and residue, growing cover crops, applying manure or compost.

iii. **Tillage management**: Reducing tillage minimizes the loss of organic matter and protects the soil surface with plant residue. Tillage is used to loosen surface soil, prepare the seedbed, and control weeds and pests. But tillage can also break up soil structure, speed the decomposition and loss of organic matter, increase the threat of erosion, destroy the habitat of helpful organisms, and cause compaction. New equipment allows crop production with minimal disturbance of the soil. (Link to cultivation practices).

iv. **Pest management**-Pesticides and chemical fertilizers have valuable benefits, but they also can harm non-target organisms and pollute water and air if they are mismanaged. Nutrients from organic sources also can pollute when misapplied or over-applied. Efficient pest and nutrient management means testing and monitoring soil and pests; applying only the necessary chemicals, at the right time and place to get the job done; and taking advantage of non-chemical approaches to pest and nutrient management such as crop rotations, cover crops, and manure management. (Link to fertility management and pest management practices.)

v. **Residue management**: Bare soil is susceptible to wind and water erosion, and to drying and crusting. Ground cover protects soil, provides habitats for larger soil organisms, such as insects and earthworms, and can improve water availability. Ground can be covered by leaving crop residue on the surface or by planting cover crops. In addition to ground cover, living cover crops provide additional organic matter, and continuous cover and food for soil organisms. Ground cover must be managed to prevent problems with delayed soil warming in spring, diseases, and excessive build-up of phosphorus at the surface. (Link to residue and cover crop practices.)

vi. **Diversify cropping systems**: Diversity is beneficial for several reasons. Each plant contributes a unique root structure and type of residue to the soil. A diversity of soil organisms can help control pest populations, and a diversity of cultural practices can reduce weed and disease pressures. Diversity across the landscape can be increased by using buffer strips, small fields, or contour strip cropping. Diversity over time can be increased by using

long crop rotations. Changing vegetation across the landscape or over time not only increases plant diversity, but also the types of insects, microorganisms, and wildlife that live on your farm. (Link to cropping systems and integrated pest management practices.)

Activities Undertaken

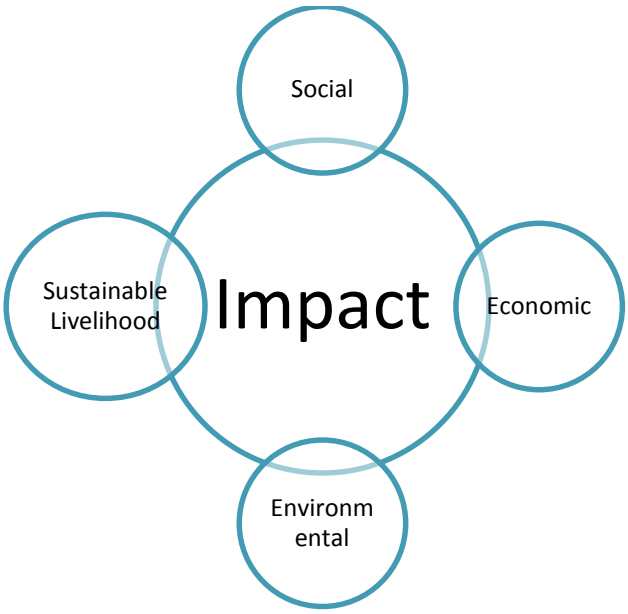
S. No	Key Activities	Number
1.	Hand pump New Installation/ Repair	105
2.	Vermi composting	10
3.	Compost pit	205
4.	NADEP composting	36
5.	Wheat Distribution	21

Hand pumps New Installation and repair of a hundred and five units was undertaken during the year as access and availability of safe drinking water and water for domestic use is a major problem that the communities are facing. Vermi composting of ten units was introduced in the reference villages. The concerned families were trained about the materials required and method for its preparation. Compost pit-Altogether 205 compost pit were dug and filled with plant and other organic residue

NADEP composting was adopted by 36 families. The Nadep method of making compost is unique not because it is successful in making good compost, which other methods can also lay claim to; its real secret lies in the large quantities of compost the process can deliver with a minimum of human effort within a specific period of time. The process basically involves placing select layers of different types of compostable materials in a simple, mud-sealed structure designed with brick and mud water. Wheat distribution among 21 farmers was done to promote crop diversification and improve nutritional status of the families.

Impact

Activities have been undertaken keeping in view the set objectives for bringing about an effective and sustainable application of natural resource management in the reference village. These activities have been instrumental in bringing about short term and long-term impacts in the following areas:



Social

Most people have become aware that using composts is an effective way to increase healthy plant production, help save money, reduce the use of chemical fertilizers, and conserve natural resources. Compost provides a stable organic matter that improves the physical, chemical, and biological properties of soils, thereby enhancing soil quality and crop production. When correctly applied, compost has the following beneficial effects on soil properties, thus creating suitable conditions for root development and consequently promoting higher yield and higher quality of crops.

Economic

The farmers are able to fetch higher prices for their organically grown crops. It has resulted in significant cost savings by reducing the need for water, pesticides, fungicides, herbicides, and nematodes. NADEP has helped to reduce cash expenses on chemical fertilizer, improved soil fertility, increased crop yield. The use of compost reduced the need for mineral fertilizer thus reducing production costs and outside dependence

Environmental

- Use of compost has provided a rich source of plant nutrients and improved soil fertility. It has made the environment healthy.
- It has increased fertility of land at low cost.
- Further it has enhanced physical, chemical, and biological properties of soil.
- Plant protection medicines are reduced due to its use. Cost of production has also got reduced.
- There is increase in the catchment power of the soil.

Sustainable Livelihood

The various activities in natural resource management have created new jobs for the community members. As it has led to organic crop production, there is reduced dependence on outside inputs.

Health Activities

Problems

Although improving maternal and child health care continues to adversely affect the community. Child malnutrition is a major area of concern as the progress is extremely slow. Poor child nutritional status is further confirmed by high levels of anaemia among children as well as women of reproductive age. Approximately half the children (aged 6–35 months) and one-third of women (aged 15–49 years) suffer from moderate to severe Anaemia. The people often suffer from the burden of communicable diseases like TB, malaria and other vector-borne diseases. Adolescent girls face multiple challenges. In addition to anaemia and lack of adequate nutrition they have to deal with the social challenges of early marriage and social taboos.

Causes

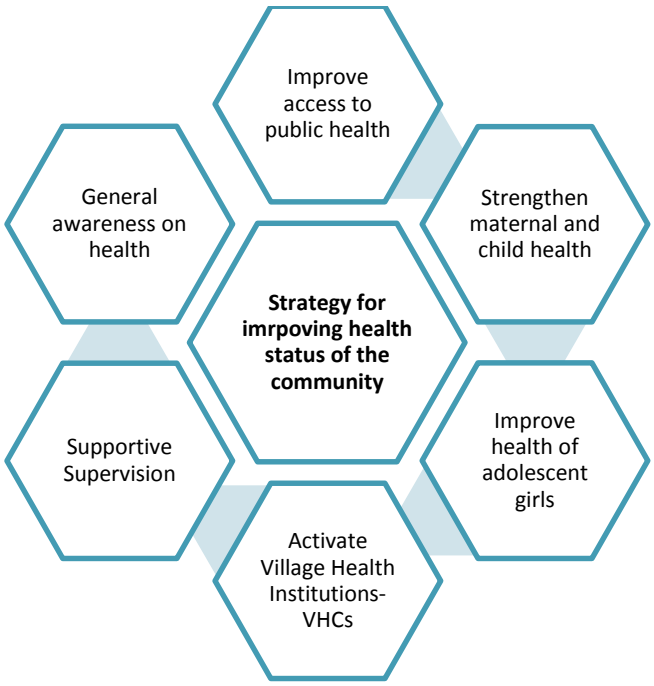
The issue of availability, accessibility, acceptability, affordability and quality with regard to health care remains a serious concern. It is common to find that although there are health centres and dispensaries but very few doctors or trained professional are available to attend to the patients. Lack of behaviour change communication and demand side barriers also lead to poor response from the community.

Objectives

- To improve the overall general health of the community members
- To ensure access to maternal and child health care
- To improve the health status of adolescent girls.

Strategy

The strategy adopted for improving health status of the community focuses on access to health, strengthening village health and supportive supervision.



1. Improve access to public health

Access to healthcare services is critical to good health, yet community members face a variety of access barriers. Ideally, residents should be able to conveniently and confidently access services such as primary care, dental care, behavioural health, emergency care, and public health services. Access to healthcare is important for:

- Overall physical, social, and mental health status
- Disease prevention
- Detection, diagnosis, and treatment of illness
- Quality of life
- Preventable death
- Life expectancy

Even when an adequate supply of healthcare services exists in the community, there are other factors to consider in terms of healthcare access. For instance, to have good healthcare access, a rural resident must also have:

- Financial means to pay for services, such as health insurance that is accepted by the provider

- Means to reach and use services, such as transportation to services that may be located at a distance.
- Confidence in their ability to communicate with healthcare providers has poor health literacy
- Belief that they will receive quality care

2. Strengthen maternal and child health

Pregnant women are particularly disadvantaged when it comes to their socio-cultural status, political participation and opportunities for personal development. Improved quality of obstetric services is essential for convincing the women to give birth in health facilities, where they will benefit from emergency care in the event of complications. Pregnant women are given counselling on Ante natal, delivery and post natal care services .Similarly initiatives are taken to ensure that children get fully immunised and provided balanced nutrition

3. Improve health of adolescent girls

Promoting healthy behaviours during adolescence, and taking steps to better protect young people from health risks are critical for the prevention of health problems in adulthood, and for countries' future health and ability to develop and thrive.

4. Activate Village Health Institutions-VHCs

Village Health Committees are the first step towards community orientation of health care services and for making health as a people's movement. Village Health Committee will facilitate in addressing the health needs of the entire village with the help of health providers and health institutions. VHCs will play an important role in planning and monitoring of the health care services through community monitoring mechanism. For strengthening of VHSCs provision of untied fund has been made under NRHM. Each VHSC will receive a grant of 10000 as an untied fund which will be used for the community actions for improvement of health status of the community including demand generation for health care services, sanitation drives, emergency health care needs, rewards for exceptional work in health sector etc.

5. Supportive Supervision

Ongoing support is needed for health workers in the frontline of service delivery to perform to their full potential and deliver quality patient care. The aim of supportive supervision is to increase the capacity and confidence of the individual to take on the specific tasks addressed via focused observation, mentorship, and feedback. Supportive supervision helps to assure that critical investments in training and technical assistance are realized.

6. **General awareness on health**

Health check-ups and dos and don'ts in matters of healthcare are an important component of improving people's awareness on health.

Activities Undertaken

S. No	Key Activities	Number
1.	General Health Camps	29
2.	Adolescent Girls group Meet	82
3.	Supportive Supervision	162
4.	Village Health Committee Meeting	79

1. A total of 29 General Health Camps were organised. Many people face poor health conditions due to affordability issues or lack of awareness towards health and that causes them chronic diseases. In the health camps expert medical professionals perform thorough medical diagnosis, help people prevent underlying diseases and provide suitable prescription and medical treatment. The health examinations like blood pressure, blood sugar, joints and bones strength, and nutrition and vitamins level are conducted in the health camp and free medicines are also distributed to the beneficiaries as part of the social welfare initiative. In addition, health awareness sessions are conducted by the doctors, emphasize the importance of proper sanitation & hygiene, awareness of timely diagnosis and preventive measures to lead a healthy life.

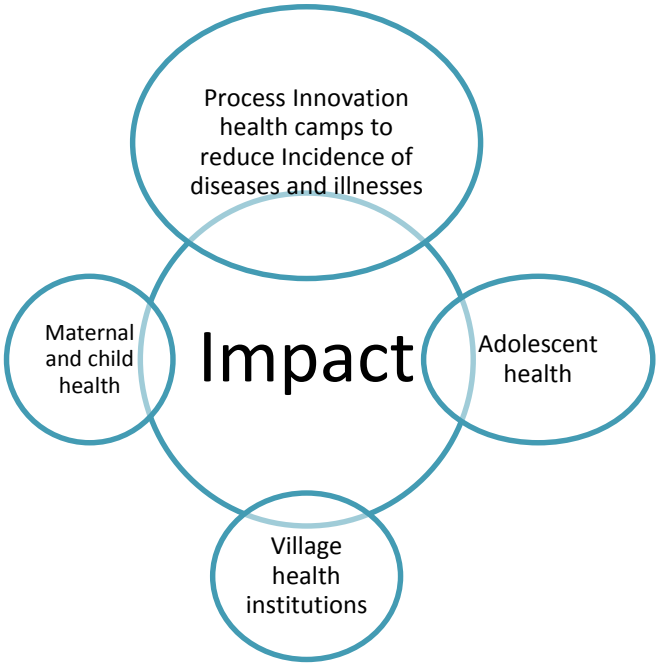
2. Adolescent Girls group Meet are a platform to discuss and share about the issues particularly health issues of adolescent girls. Eighty –two Adolescent Girls group Meet were organised and was widely participated.

3. Supportive Supervisions conducted were 162 in number.

4. Village Health Committee meetings were conducted regularly. Seventy-nine meetings were held to enable community participation in health interventions.

Impact

Interventions and activities undertaken in the area of health have been effective in impacting people's health. These are evident in the aspect of maternal and child health, adolescent health, Village health institutions and incidence of diseases and illnesses.



a. Process Innovation through the regular conduct of health camps has been successful in identifying diseases and illnesses that the community members succumb to and coordinate measures for their treatment. Timely identification has thus enabled to save several lives.

b. Adolescent girls became aware about menstrual health and hygiene, importance of balanced diet and intake of nutrients in their foods.

c. Village health committee meetings facilitated bottom-up community engagement in the planning and implementation of healthcare services. The VHCs promoted community-based health interventions which in turn proved to be effective towards promoting acceptability and utilization of health services incidence of diseases and illnesses has declined as people are now adopting preventive measures, adhering to hygienic practices, accessing the health services and undergoing regular health check-ups.

d. Access to Maternal and child health services improved. Health check-ups of pregnant women helped to identify their health needs and also to monitor the ANC, delivery and PNC services are availed by them. Coverage of immunisation of children also improved.

Capacity Building Programme

Capacity building is considered to be important as it involves a set of actions that an organization takes to improve its ability to perform successful in its chosen area. Despite the many initiatives taken under CSR community members continue to face significant capacity challenges undermining their ability to effectively or fully carry out the actions they are intended to pursue. These challenges include:

- A lack of knowhow on integrated farming, livelihood generation, functioning and role of local governance institutions.
- Fragmentation of information, and lack of training in farming approaches
- A lack of skills and organizational or institutional capacity
- A lack of established systems, and processes new or existing bodies or entities would use to efficiently and effectively plan, manage and coordinate

The management team well recognises that improving capacity building on the ground through enhanced trainings and skill building with sustained resource provisions is critical to success of the development interventions.

Problems

Lack of capacity is manifested in the functioning of the institutions, ability to execute activities and also in the implementation of activities particularly when new initiatives are to be started.

Causes

Lack of skill and knowledge about modern methods and techniques of agricultural practices, initiation of new livelihood opportunities, poor capacity of the village institutions is among the key causes for low capacity.

Objectives

- To enable successful implementation of agricultural and livelihood opportunities.
- To strengthen village institutions
- To inculcate capacities for providing safe drinking water

Strategy

A mixed strategic approach has been pursued which can broadly be categorised into institutional and programmatic aspects. Under the institutional aspect the strategy has been to strengthen the gram Sabha and SSS groups that form the backbone for providing support to implement and monitor activities on the ground. As for the programmatic aspect the strategy

has been to improve integrated farming, improved agricultural practices, up scaling horticulture and promoting livelihood particularly mushroom cultivation.

Activities

S. No	Key Activities	Number
1.	SS S Meeting	15
2.	Gram Sabah Meeting	137
3.	Agriculture and Horticulture	32
4.	Mushroom Cultivation Training	42
5.	Safe Drinking water	31
6.	Integrated Training in Ram Krishna Mission	34

Altogether 137 Gram Sabha meetings and 15 (Samasya Samadhan Samooh (SSS) meetings were held to make them aware about their roles and responsibilities in supporting the smooth implementation of the various agricultural and livelihood opportunities. Similarly, 32 capacity building initiatives on agriculture and horticulture and 42 trainings on Mushroom Cultivation and 34 trainings on Integrated farming through the Ram Krishna Mission organisation were conducted. Thirty-four trainings related to safe drinking water were held.

Impact

Impact of the capacity building initiatives has been observed in the following areas:

1. Process Innovation through effective functioning of the village institutions namely Gram Sabha and SSS groups. Gram Sabhas are the backbone of all village level institutions. They have a key role in the governance of the village affairs. A conducive and peaceful environment for undertaking development measures in the villages is necessary. Gram Sabhas have been effective in fulfilling these needs. The SSS groups are a sub group functioning under the guidance of the GS. They are active in problem identification and its solution.

2. The trainings on agricultural and horticultural practices have contributed to the adoption of improved farming practices and techniques which in turn have resulted in the increased production of crops and horticultural produce.

3.Income from the farm produce in insufficient to meet all the financial requirements of the households. The trainings on mushroom cultivation have led to the production of mushroom at the household levels. Income from the sale of mushroom has helped to supplement the farm income and also to meet various exigencies.

4. Access and availability of safe drinking water has been ensured due to the trainings provided on safe drinking water.

Livelihood Activities

Introduction

More than seventy percent of the households in the project villages derive their livelihoods from small scale agriculture and allied activities. Sub optimal performance in agriculture has been resulting in lower incomes for the families. Improved productivity of agriculture and allied activities has a direct effect on the income and quality of life of the families. Therefore any measure to improve the prosperity and human development of the families in the project area must focus on improving their livelihoods.

Problems

The families engaged in small scale agriculture and allied activities lack information, resources and low-cost techniques leading to low production and income. Other factors like damage to crops from diseases, erratic weather, grazing by cattle add to their burden. Thus the various types of losses make the returns on their livelihood inadequate to break out of the poverty trap.

Causes

Low productivity in agriculture and horticulture is due to poor access to irrigation, soil nutrient (carbon, nitrogen, zinc, phosphorus) depletion, delays in planting and availability of quality seeds. The marked decrease in soil nutrients has noticeably affected crop yield per hectare. Imbalanced fertilizer use is the root cause of poor crop yields and poor soil fertility status. Micronutrient deficiencies in soils are also emerging as yield limiting factors.

Objectives

- To enhance income of households through productive agriculture and horticulture
- To enable assured income from animal husbandry
- To improve household income through fishery
- To promote community involvement in social forestry
- To strengthen women's organisation through self-help groups

Strategy

The strategic approach for developing livelihood of the communities in the project area comprises of farm and allied activities. The thrust is appropriate as communities have traditionally engaged in agriculture and possess land. The diagram below depicts the strategy adopted.

Activities

The activities undertaken for promotion of livelihoods were aligned to the objectives and strategy adopted.

1.

S. No	Key Activities	Number
1.	S H G Meeting	147
2.	Artificial Insemination	81
3.	Animal health Camps	1
4.	Kitchen Garden	485
5.	Mushroom Cultivation	120
6.	Social Forestry	227
8.	Cow / Goat Bens	2
9.	Fish Jera to Fisherman	40
10.	SRI Transplantation	60

Empowerment of women and strengthening their livelihoods was given priority. One hundred and forty-seven meetings of the self-help groups were held.

2. Animal Husbandry which yields higher returns on income was also focussed upon. Activities like Artificial Insemination of 81 cattle, one animal health camp and two Cow / Goat Bens were done.

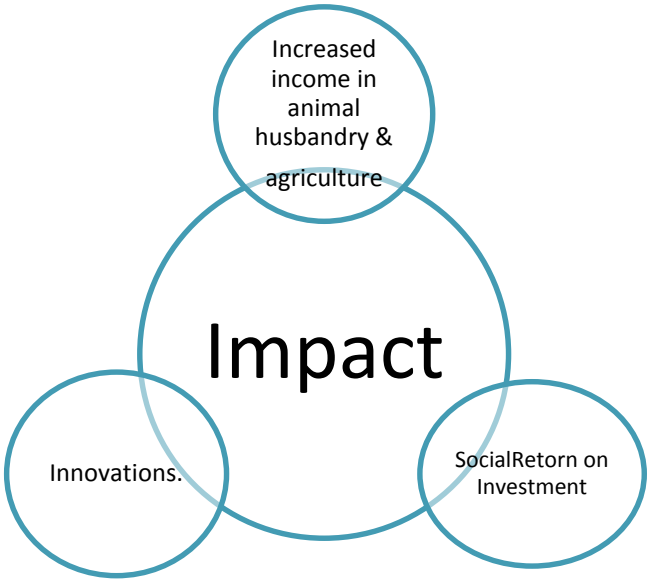
3. Horticulture through 485 Kitchen Gardens was widely taken up. Vegetables, herbs and fruits were grown in these gardens.

4. Social Forestry was taken up with 227 plantations being done by the community

5. Fishery was promoted by the distribution of fish seeds to 40 persons in the project area

Impact

The coherent and coordinated approach to livelihood generation has yielded positive results. Households have been able to improve production in all the livelihoods taken up by them. The increased production has yielded enhanced incomes for the households.



- **Income Level enhancement (village wise)-**The implementation of livelihood generation opportunities be it animal husbandry/SRI/Mushroom cultivation have directly led to an increase in income for each of the households with the amounts ranging from twenty-five thousand to fifty thousand for the marginal farming household and at least fifty to seventy-five thousand for the small farming household.
- **Social Return on Investment** –Financial investments made by Usha Martin Limited have directly and indirectly yielded social returns in the following manner:
    - improved natural resource management i.e., ecologically balanced use of land and water for agriculture
    - adoption of organic farming which not only conserves and restores the soil but also leads to production of healthy agricultural produce and provides to nutritional requirements
    - Women, farmers and youth have been organised not only for improving livelihoods but also deal with local issues like children's education, protection and conservation of forest, protection of women and girls from violence, mentoring youth on scientific agricultural and horticultural practices

- Observing the benefits that have accrued to the community members it can be stated that the Social return on Investment has been at least three times more than the financial investment made by the company

- **Innovations in Livelihood generation**
  - System of Rice Intensification (SRI). The project team identified sixty small and marginal farmers who practice traditional agriculture and spread nine villages. The aim of the intervention was to improve the standard of living of the farmers through sustainable agriculture technology and women empowerment. Meetings of SHGs and farmers were held which was followed by training and certification on SRI. Seedlings were planted with a spacing of 10 x 10 inch on the main field to promote the production of more tillers. As a result, each plant produced around 40-55 tillers. Organic manure was used to increase fertility of the land. Due to the adoption of SRI method paddy yield not only doubled but the quality of seed also improved significantly.
  - **Mushroom cultivation/Fishery and Kitchen Garden**
  - Mushroom cultivation- Mushroom cultivation has become a very lucrative pursuit in recent years. The project team understanding its remunerative potential provided training and introduced its cultivation among a hundred and twenty community members. It takes about three months to harvest about a kg of mushrooms, which we sold at Rs 300. It is round-the-year production.

  - Fishery-Aquaculture has the potential to generate income and create jobs, especially to the local youth. Being small and less risky, small-scale aquaculture can be adopted easily by resource-poor farmers. Usha Martin Limited decided to promote pisciculture, as a sustainable livelihood. The project team encouraged the fish farmers to enhance the pond carrying capacity, involve farm family, improve resource utilization, integrate different components in the fish farming and optimally utilize farm areas and farm wastes (Cow manure, vermi composting) to enhance the farm income for the family livelihood and better sustainability. Fish seedlings were distributed among forty fish farmers.

  - **Kitchen Garden:** Observing the availability of vacant space in the back yard of most households, and poor nutrition among women and children the project team of Usha Martin Limited oriented the women and asked them about their

interest on the concept of building a vegetable garden in their house hold. The SHG women showed interest in the concept and thereafter the process was initiated. Training was given as to how the beds should be maintained and a seasonal calendar was provided to identify the time of each vegetable which could be grown. The bed size was modified based on the amount of land which the beneficiary has in the backyard. As a result of this innovation Women are growing vegetables in all seasons and these are now being consumed by the family members and also sold in the market

Education Activities

Introduction

Education is the most powerful tool for the development of human being. No society can gain momentum without education. This is the reason why Usha Martin Limited CSR has given utmost priority to education of children in the project area. In order to strengthen the implementation of Sarva Shiksha Abhiyan (SSA) the project has focused on making Village Education Committees functional and effective. The Government scheme (SSA) has developed a hierarchical system for school education in our country. There are different governmental bodies at different levels, like National Council of Education Research and Training (NCERT) at national level, State Council of Education Research and Training (SCERTs) at state level, District Institute of Educational Training (DIETs) at district level, Block Resource Centre (BRCs) at block level and Cluster Resource Centre (CRCs) at cluster level to improve the quality, functioning and to make decentralized system in school education. Such a decentralized system of school education is functional and has no major problem at any stage. As we all know that school is a miniature society because learners of the school come from the adjoined society. Local issues, local problems and local management can be handled easily and effectively by local people. Since, parents/ guardians of the students are also local people, they will help the school seriously in all issues and problems if they are involved in the policies and decisions of school activities. Keeping in mind such benefits of community participation for improving the quality, functioning and to make primary education more decentralized, VEC has been constituted in each village and SMC has been constituted each government primary/ upper primary/ aided school in India.

The geographical condition of the project area is quite diverse. In such scenario, this is very difficult for any official to reach each and every school regularly. But only due to these reasons, schools cannot be left at their own fate. Keeping in mind such unfavourable conditions, some provisions have been made by the government to run schools properly with the help of community participation. The provision of village education committee (VEC) in each village was made to achieve the objectives of universal elementary education. VEC has been given some powers as well as some responsibilities for the development of school. RTE Act, 2009 makes provisions for the formation of SMC in each government primary/ upper primary/ aided school which receives grants from government. SMC has been given powers as well as responsibilities in RTE Act, 2009 to help the schools and to handle local problems and issues related to the schools. Since, VECs and SMCs are village level bodies comprising of community members therefore, people have so many expectations from these two bodies regarding the development of schools.

While it is important to make regulatory bodies functional multiple interventions are required to ensure that children stay in school and learn basic skills .One such key intervention is the School Sanitation and Hygiene Education which is recognised as a medium to promote children's right to health and clean environment and to influence a generational change in health promotion behaviour and attitudes. It is now known that not only the quality of teaching but also the environment, especially the availability of safe drinking water and sanitation together with good hygiene practices, influence learning

Problems

Schools in the project villages face quite a number of problems that hinder the optimal learning of children. Problems of school infrastructure, teacher availability, teaching learning material involve higher financial resources and are mostly dealt by the government. However, issues like functioning of VECs, School sanitation and hygiene and computer education remain largely unaddressed.

Causes

- Lack of adequate teachers hampers the execution of School sanitation and hygiene programme and also the provision of computer education.
- VECs become redundant due to lack of proper guidance, training and mentoring

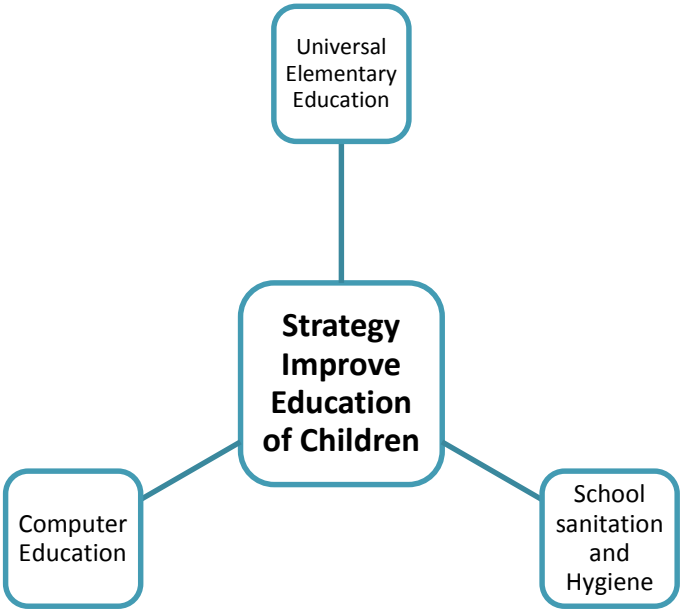
Objectives

The key objectives of the initiatives on education are

- Promotion of school sanitation and hygiene
- Enable children to be proficient in use of computers
- Achieve universal elementary education

Strategy

As per the stated objectives the strategy designed to achieve it comprised of three components namely 1. Universal Elementary Education, 2.School Sanitation and Hygiene and 3.Computer education



Activities

S. No	Key Activities	Number
1.	Village Education Committee	41
2.	Sanitation Program	7
3.	Computer Education	16

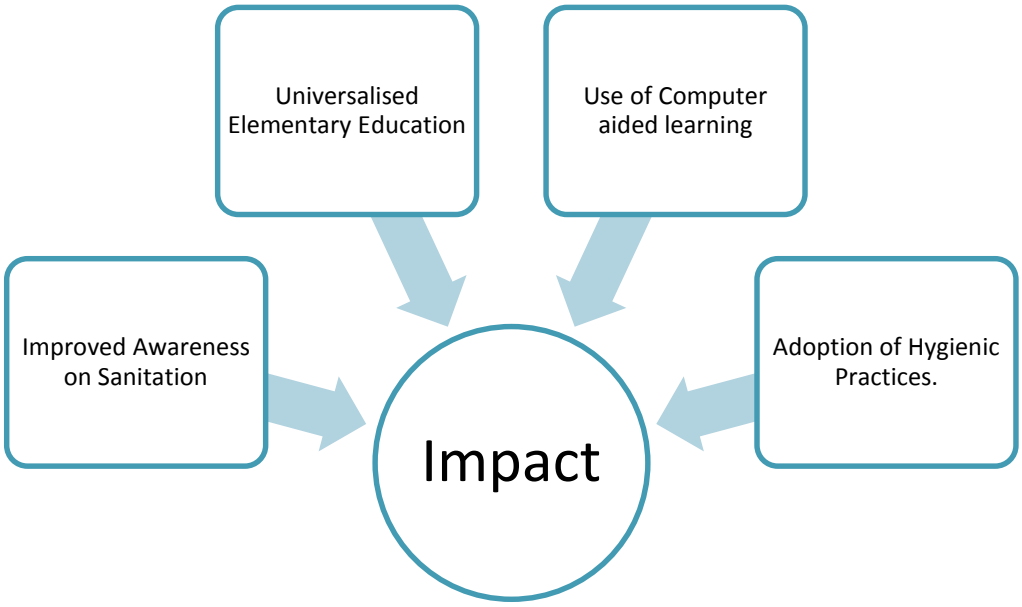
1. Village Education Committees were activated by conducting 41 meetings. Regular participation of its members and discussions on achieving universal elementary education of all children in the project area were held.

2. Under the School sanitation and hygiene programme seven events were organised in collaboration with the schools .Students were made aware about the importance of hygiene, hand washing and safe drinking water

3. Computer education -16 9Whether schools, trainings, students?

Impact

The initiatives under education have brought about four visible changes in the education of children. The impacts are:



a. Universalised Elementary Education. The role of Village Education Committees has been predominantly in areas related to accessibility and participation of children, particularly girls. Enrolment in the first three classes have increased considerably. Enrolment of girls has been perceptibly high. There is a visible change in the attitudes towards girls' education since last few years.

b. Use of Computer aided learning. Students were made aware of the use of computers and their confidence and self-esteem were boosted by gaining adequate knowledge of computers. The training has empowered the students with computer skills that would help them in their academic endeavours.
c. Adoption of Hygienic Practices. Students have greater awareness about the need for adopting hygienic practices in their day to day lives.
d. Improved Awareness on Sanitation. Children have developed understanding on importance of using toilets, and hand washing

Government Convergence

The basic objective of convergence of different CSR initiatives with Government schemes is to establish synergy among different programmes so that benefits to the community can be optimised. Secondly, appropriate convergence strategies will bring enhanced social and economic opportunities for the target mass in the project locations which will strengthen the welfare and livelihood of the people. It is expected that through convergence, there would be additional resource support to project from different other schematic provisions of Government which will contribute to realise the project outputs.

Problems

Although numerous activities are undertaken unless all the components for a particular I initiative is completed the desired outcomes cannot take place. For example, in agriculture unless all its components from seeds, soil, irrigation, fertiliser, labour etc. are provided the desired yield will not take place.

Causes

Activities are conducted in silos and there is lack of knowledge and information of activities which can help in complimenting a particular activity.

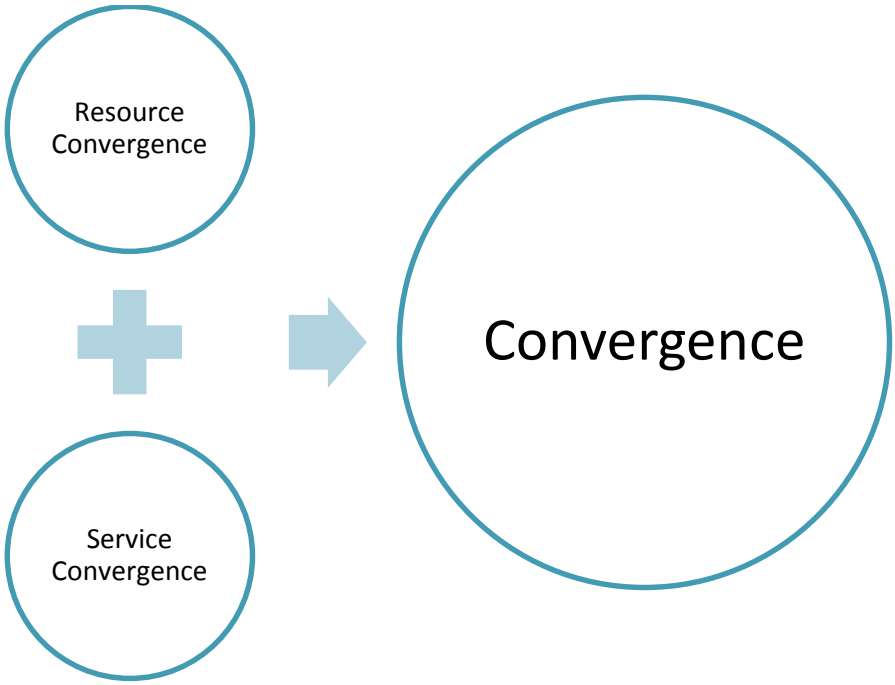
Objectives

- To transform activities and outputs into outcomes
- To ensure sustainability of the various initiatives
- To complement government resources

Strategy

The approach to convergence has been conceived at two different levels, irrespective of schemes / programmes / departments i.e. convergence at resource level and convergence at service delivery level. Both types of convergence would be beneficial depending upon the factors like nature of the programme/schemes, departmental

priorities etc. In some cases, specific to the nature of the scheme/programme, convergence could be of both the types while in some other cases, it would be either resource based or service-based convergence.



The perspective on convergence adopted by the project team was guided by the activities undertaken in the sector of NRM, Health, and Capacity Building and Livelihood generation.

Resource based convergence could be made possible only after planning of resources covering required resource base, availability of resources from own sources, identification of resource gap and finalising the additional resource requirements.

Service based Convergence. This type of convergence will not necessarily look at resource contribution from other schemes / programmes; rather it would look at different services offered by different departments, either under different programmes / schemes or under its core functions. For example, agricultural extension services offered by agriculture department, health care services offered by ICDS and NRHM, social security services offered by Rural Development Department etc. Convergence at the service delivery level not necessarily demands resource dovetailing. Rather, it is basically guided by the emerging needs of the people/SHG in a given project location where other departments / programmes / schemes will make available their services. The required services from different departments / programmes / schemes would be need based and people would be utilising those services, as per their need, for attending a better quality of life.

Activities

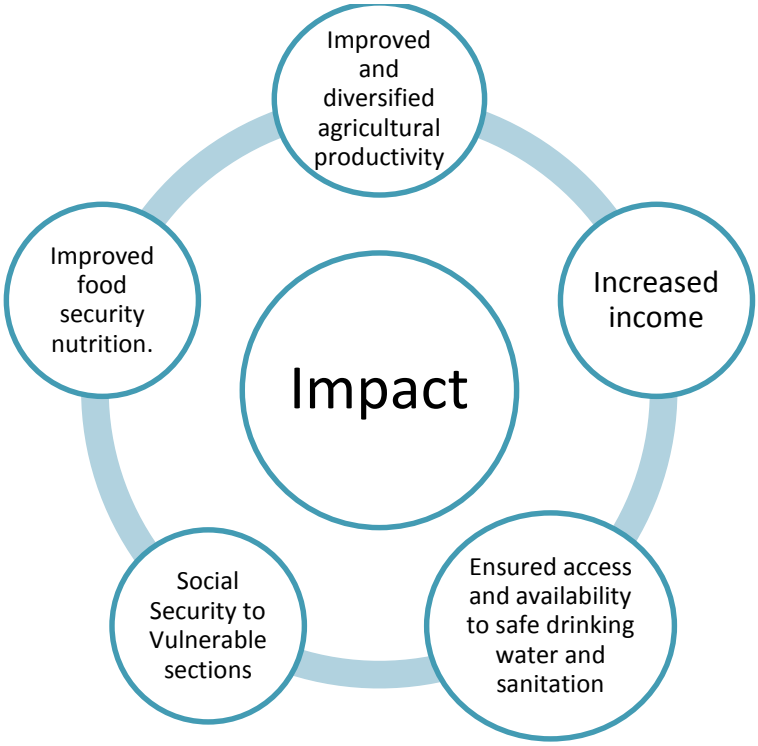
S. No	Key Activities	Number
1.	Health Card	20
2.	Old Age Pension	45
3.	Widow Pension	18
4.	Handicapped Aid	3
5.	Agriculture Mechanism	7
6.	Toilet Construction	23
8.	Lal Cards	16
9.	P M Ashirwad Yajna	519
10.	Jal Minar Installation	20
11.	C M Jan Dhan Yojna	15
12.	HIV AIDS Awareness	3
13.	Multi cropping	337
14.	Ujjawalla Gas	52
15.	Certificate to SRI	8
16.	Crops Insurance	215
17.	Soil Testing Training	4
18.	Fishery Training	7
19.	Chan Mung Distribution	57
20.	SRI Training	37
21.	SRI Transplantation	60
22.	Pea and Dhan Distribution	66

The activities undertaken by the project team has led to convergence in the following sectors

1. Agriculture. As observed earlier maximum thrust has been given on sustainable NRM, agriculture and agriculture-based livelihoods. Reaching benefit to 519 persons under the P M Aashirwad Yojana, Multi cropping of 337 and crop insurance of 215 community members are significant in number. Emphasis has been made to converge with schemes for the cultivation of cereals and pulses. Boosting production of rice through SRI method also remained a priority.
2. Convergence in health was achieved through the health card and awareness on HIV /AIDs
3. Social Security benefits were provided to the aged and widowed (45 and 18 respectively)

4. Food security for the vulnerable families was enabled through convergence with the Antyoday Ann Yojana
5. Piped drinking water and sanitation facilities was provided through construction of toilets and installation of water tanks called Jal Minar
6. Clean fuel to women under the Ujjawala scheme of the central government has been beneficial in reducing the household drudgery of women
7. Final inclusion of families through the PM Jan Dhan Yojana facilitated the opening of bank accounts and receipt of cash transfers.

Impact- Convergence of training and scheme and its impact analysis



The interventions focussed on converging with the government schemes and training have brought about perceptible changes thereby impacting people's lives and conditions in the following manner:

1. Improved and diversified agricultural productivity-The interventions under CSR and convergence with government schemes have led to crop diversification like cultivation of cereals like wheat and pulses. There is enhanced production of rice and other crops. Fruits and vegetables are also being grown.
2. Increased income –The diversified and increased crop production has resulted in surplus crop yield which were sold in the market.

3. Ensured access and availability to safe drinking water and sanitation-Construction of individual toilets and installation of Jal Minar have ensured the people sanitation and safe drinking water.
4. Social Security to Vulnerable sections-The various livelihood generation opportunities is being taken up by youth, women and farmers. However, the aged persons are incapable of engaging in these physically demanding activities. Hence care has been taken to ensure that they do not get deprived of their basic needs. Accordingly, forty-five older persons have been enrolled for receiving old age pension. Similarly widowed women are also extremely vulnerable and the burden of the family is on their shoulders. Eighteen widows have been linked with the pension scheme.
5. Improved food security nutrition-Sixteen households who were suffering from extreme deprivation lacking two square meals a day have been linked with the Antyoday Ann Yojana wherein they are provided food grains at a highly subsidized rate of Rs.2/- per kg. for wheat and Rs.3/- per kg for rice.

Quality Check Matrix

On the basis of the above observation, it is required to check the quality of the programme whether each stage of proposed operation was properly followed or not. To do this, we have prepared the quality check matrix to know about the inconsistency existed between the stated governance statement and actual plan of action. It will also help us to locate the source of instability in the process of implementation. It will also help to understand about the lacuna in the process of overall supervision and would help them to revise their future plan of action.

Quality Criteria	**Scoring Category**				
	Fully	**Partly**	**Fairly**	**Hardly**	**Not at all**
Is there a relevant governance statement that describes the CSR programme of UML?	**Yes**				
Did stakeholders participate in creating the governance statement?	**Yes**				
Are the values of the programme clearly stated?	**Yes**				
Are the programme rules clearly listed?	**Yes**				
Are the programme rules covering every aspect of the planning?			**Yes**		
Are the programme rules following strictly by each of the stake holders?			**Yes**		
Is there any lack of co-ordinations found among different stakeholders in the phases of Operation?			**Yes**		
Whether proper timeline/ calendar was followed at the outset of the financial year/ phase of Operation?			**Yes**		
Is UML consistently providing fund?	**Yes**				
Do the stakeholders know about the organization?	**Yes**				
Is there effective dialogue among stakeholders?		**Yes**			
Are stakeholders satisfied with the programme?		**Yes**			
Are stakeholders appropriately involved in the Execution of the programme?	**Yes**				

The Quality matrix check clearly highlights some critical issues. A governance statement can emerge out of the same. A well-developed plan is extremely essential to ensure systematic implementation of the programme across the villages. For any development programme, it is pertinent that the stakeholders are continually engaged and involved in the planning process. There is fair amount of stakeholder involve in the planning. It has to be excellent category for the execution of successful programmes.

R**ecommendations**

Strong record keeping

Regular, accessible information is the bedrock of a social audit. Steps must be taken by UML to computerize record management at every level of the implementation chain so that information requests for social audits can be easily responded to.

Effective follow-up and grievance redressal

UML is implementing diverse and numerous activities. In the course of undertaking the activities grievances are bound to take place. It is suggested that UML should build a grievance redressal system that is empowered to take quick action for such a system to work steps must be taken to bring all relevant departments involved in CSR on board with the social audit process.

Community and institutional structures

More organised and detailed information on the size and structure of community and institutional structures, their local and regional linkages, commercial diversity, leadership capability and characteristics would go a long way in enabling UML to inculcate the components of sustainability in their initiatives.

Community resources

The strategies and focussed approach to NRM and Livelihood generation has brought about change in the social, environmental and health status of the community. However, in order to measures the quantifiable results UML should document the change in community infrastructure, land use pattern and effects on cultural resources.

Linkage of core values with social, environmental and health indicators

All activities of UML are driven by some core values which it seeks to promulgate through its interventions on the ground. Therefore, it would be useful for UML to develop clarity by establishing linkages between its core values and social, environmental and health indicators. This process can be initiated by looking at the active participation of the Institutions in creating formal, informal and societal structures for managing resources networks and forums which in turn can be gauged through indicators on Number of formal, informal and social institutions created or strengthened, networks and forums for maximising social benefits and concerns, community contributions (both financial and non-financial)

Success Story

Mango and Litchi Plantation: Horticulture transformation in Angara

FACTSHEET	
PLACE OF IMPLEMENTATION	**Village – Angara, BajnathTola**
IMPLEMENTING AGENCY	**Usha Martin Limited**
SECTOR(S)	**Horticulture and Agriculture**
YEAR OF LAUNCH	**2016**

Background

Kapil Mahto is like any other youth with aspirations for making a successful career and earning a decent income. However, being the son of a poor farmer carving out his dream life appeared to be a mammoth task. Besides his studies he used to help his father in the field. But no matter how hard he worked his family would struggle making ends meet. When thinking of cultivating new crops he would give up the idea as his family didn't have the capital for investing. Still come what may ,Kapil never gave up on his dream.

Intervention

The project team of Usha Martin Limited visited village Angara, Bajnath Tola in pursuit of their goal to improve the natural resource management and securing livelihood opportunities for the families in the project area. During one such visit Kapil interacted with them and was motivated to take a new road to success. After attending several meetings and learning about the potential of mango and lithchi plantation by using the unutilised barren land Kapil made up his mind to chart a new pathway as a progressive farmer.

Observing his keen interest, the project team of Usha Martin Limited got him registered for attending the training conducted by the Agriculture Department in Palandu. After completing the training Kapil returned to his village and identified the land wherein, he would begin plantation of mango and litchi. In the beginning, he had to improve the quality of soil as the land was barren and consisted of rock and hard soil. Here again he got the technical support from the project team of Usha Martin Limited. Once the land was prepared saplings were provided to him. He used the available water resource for drip irrigation system to irrigate mango and litchi trees.

Impact

The barren land used for plantation of mango and litchi has become lush green with healthy growth of the fruit trees. Since the past four years the plants have been growing steadily under the watchful care of Kapil. In another year or so the plants will start bearing fruits and fetch Kapil a good income

.Thus with the development intervention of Usha Martin Limited ,Kapil has begun his journey to fulfil his aspirations

Key Learning

The Usha Martin Limited project experiment has demonstrated a successful model for demystifying the potential of converting barren land into a lucrative livelihood opportunity specially for households who possess unproductive land but do not undertake its cultivation

Banana Plantation with Optimum Irrigation

FACTSHEET	
PLACE OF IMPLEMENTATION	**Village – Chatra**
IMPLEMENTING AGENCY	**Usha Martin Limited**
SECTOR(S)	**Horticulture**
YEAR OF LAUNCH	**2016**

Background

Asha Devi as the first name connotes 'hope' is a strong willed and determined lady who wants to provide the best resources for her family. Asha is a multi-tasker managing her domestic chores and also working in the field .Asha wondered how she would make her life fruitful. The land which her family possessed produced food grains for less than a year. She had a deep interest in farming and yearned to explore her limited knowledge to expand the agricultural activities and earn a higher income

Intervention

The project team of Usha Martin Limited visited village Chatra and held meetings with the Self-

Help Groups of women. Asha Devi was an active member of a self-help group formed and nurtured by the project team of Usha Martin Limited. The SHGs were grappling with the challenge of taking up new livelihood opportunities. Based on their vision and approach for promoting agriculture-based livelihoods the project team enlightened the group members about the possible avenues for new livelihoods. Asha Devi's desires resonated closely with the project team interventions. Together they planned to undertake banana plantation on a large scale.

The plan was realised and Asha Devi started Banana plantation in 1.67 acres of land. Her land was barren. Armed with the technical knowhow from Usha Martin Limited she left no stone unturned to make the lands fertile. She used drip irrigation system to irrigate the

Impact

The hard labour of Asha Devi coupled with the support and inputs Usha Martin Limited bore fruit. The banana plantation thrived and flourished. Now she is getting very good yield from her Banana plantation and is satisfied that she has succeeded in carving a fulfilling life for herself and her family.

Key Learnings

The horticulture sector in the project area has emerged as economically rewarding and the most viable option in the diversification of agriculture in today's time. In fact horticulture is heading for a drastic transformation as most of the horticultural crops have advantage overthe traditional crops in generating rural employment, enhancing rural income and have high potential to tap larger markets.

SRI-Innovative Farming Method

FACTSHEET	
PLACE OF IMPLEMENTATION	**Village – Janum**
IMPLEMENTING AGENCY	**Usha Martin Limited**
SECTOR(S)	**Agriculture**
YEAR OF LAUNCH	**2018**

Background

Gobardhan Munda was just an unknown young tribal farmer who toiled in his fields from dawn to dusk. For him agriculture was just a traditional occupation in which his family had been engaged for a long time. The produce from the farm mostly comprised of staple crops and a few quantity of vegetables for household consumption. Deficiencies in soil nutrient and pest control were treated with chemical fertilisers and the old method of transplanting was followed.

Intervention

The turning point came when the project team of Usha Martin Limited visited village Janum and came into contact with Gobardhan Munda. During his farming operations Gobardhan Munda used to have several concerns about the adverse impact of the heavy use of chemical fertilisers and pesticides on the land and produce. Through his interactions with the project team of Usha Martin Limited he realised that his concerns were not without fault.He was exposed to an alternative and eco-friendly method of farming when he received a training on appropriate agricultural practices .He learnt the System of Rice Intensification popularly called (SRI), which is a farming methodology aimed at increasing the yield of rice produced in farming. It is a low water, labour-intensive, method that uses younger seedlings singly spaced and typically hand weeded with special tools Gobardhan Munda took to this method and initially started farming in one acre of land. Observing the manifold increase in

production he used the method in three acres of land. He switched to using organic pesticides called "Jivamrit Pesticides" to prevent damage to crops from different types of pests.

Impact

The adoption of SRI technique had a positive impact on rice yield and income and this indicates that the rice yield and household income was relatively higher for Gobardhan Munda than for those farmers who were practising the traditional method. He also profited with seeds which helped him save money and would like to continue with SRI next year.Gobardhan Munda also stated that health risks by use of chemical pesticides are reduced with SRI

Key Learnings

SRI holds the potential to provide a solution to the issue of low productivity of rice. Farmerscan improved their yields significantly with SRI compared to their traditional grown rice fields.

JalMinar

FACTSHEET	
PLACE OF IMPLEMENTATION	**Village – Tati**
IMPLEMENTING AGENCY	**Usha Martin Limited**
SECTOR(S)	**Water and Sanitation**
YEAR OF LAUNCH	**2019-20**

Background

Water and sanitation complement each other and is essential for a healthy life.. However, the households in village Tati were facing multiple hurdles due to lack of both. Women bore the maximum brunt as they had to struggle not only to fetch water for domestic and drinking purposes from afar but were also vulnerable to external harm while going for open defecation.

Intervention

Identifying the impediments that were limiting the access of water and sanitation for the households and women, children and aged in particular the project team of Usha Martin introduced a community led integrated approach to water and sanitation to address both the issues. They intervened through the project of Jal Minar wherein an overhead water tank run on solar energy was constructed. This enabled the surrounding households to get access to piped water supply. Individual household toilets were constructed to ensure sanitation facilities. While rainwater is collected for bathing and sanitation piped water is used for drinking

Impact

The construction of Jal Minar and toilets have ensured access to water and sanitation to households in village Tati. Women have been relieved of the burden of fetching water and also feel protected from harm as they no longer have to go out at odd hours for defecting. Through the collection of rain water households have improved sanitation and hygienic practices .The incidence of illnesses too has got reduced through the use of safe drinking water.

Key Learnings

The community driven integrated approach to the construction, use and maintenance of Jal Minar and promotion of sanitation is a model for sustainable interventions in villages lacking the basic facilities of water and sanitation.

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Innovation in livelihood generation-Mushroom Cultivation

FACTSHEET	
PLACE OF IMPLEMENTATION	**Village – Mahilong**
IMPLEMENTING AGENCY	**Usha Martin Limited**
SECTOR(S)	**Livelihood Generation/Innovation**
YEAR OF LAUNCH	**2020**

Background

Promotion and development of agro-based enterprises in the rural sector can play an important role in diversification of economic activities and generation of employment opportunities for the farmers. Recognising the potential Mushroom cultivation as an emerging livelihood opportunity which uses agriculture residue as raw material to yield protein the project team of Usha Martin Limited decided to introduce it in the project villages. The success story of Poonam Pushpa Toppo who confidently took up mushroom cultivation is a testimony of its potential as lucrative livelihood opportunities for several more women in the surrounding villages.

Poonam Pushpa Toppo of village Mahilong used to be engaged in different types of farming activities without proper skill and adopted old traditional methods. Being young and energetic Poonam wanted to be an entrepreneur, start her own farm based small business and earn sufficient income. However, she lacked guidance and skill for undertaking a new and enterprising livelihood activity

Intervention

Opportunity knocked at her door when the project team of Usha Martin Limited decided to introduced Mushroom cultivation in her village. Along with other women Poonam also received training on mushroom cultivation from bed preparation to

harvesting. During training the trainees were given practical demonstration on bed preparation, cutting, wetting sterilizing straw. After the training the trainees were supplied with spawn and polythene. Proper follow up taken by the field staff for better management. Poonam adopted the proper process.

Impact

The findings that emerged from the social audit show that the project's development objectives have been achieved: community members engaged in mushroom cultivation have been enabled to make better informed decisions about it. Their incomes have improved due the high price of mushrooms in the market. In the case of Poonam, sheis harnessing a very good yield of mushroom. She is earning up to fifty thousand annually from its sale. This has not only stabilized her income but it has also become a means of healthy nutritional lifestyle for her and her family.

Key Learnings

Mushrooms can be successfully grown without access to land, and can provide a regular income throughout the year. Cultivation is also independent of weather, and can recycle agricultural by-products as composted substrate which, in turn, can be used as organic mulch in growing other horticultural crops, including vegetables. Mushroom cultivation is highly combinable with a variety of other traditional agricultural and domestic activities, and can make a particularly important contribution to the livelihoods of the disabled, of women and the landless poor who, with appropriate training and access to inputs, can increase their independence and self-esteem through income generation

Good Practices

Usha Martin Foundation has taken very good practice to publish monthly magazine which is indicates the way of working among the community also proud of other Organization those who have involved with Usha Martine Limited.

Media Coverage


रांची, बुधवार 23.10.2019 प्रभात खबर 02

पहल ● उषा मार्टिन के सीएसआर से जुड़कर अपनी जिंदगी बदल रहे हैं ग्रामीण

जैविक सब्जी की खेती कर आत्मनिर्भर बन रहीं महिलाएं

प्रमुख संवाददाता ▷ रांची

रासो से प्रेरित होकर परंपरागत छोड़ वैकल्पिक खेती अपना रहे हैं ग्रामीण


चर्चा. उषा मार्टिन के निदेशक बृजकिशोर झंवर ने कहा

ज्ञान और तकनीक के तालमेल से ही विकास

संवाददाता ▷ रांची

ग्रामीणों से मिलते उषा मार्टिन के निदेशक बृजकिशोर झंवर.

10 समूहों के बीच बांटे गये मशरूम के बीज


लाइफ@ रांची — रांची, मंगलवार 26.11.2019 18

उषा मार्टिन — मेगा मेडिकल कैंप में डॉ मोना सिंह ने कहा

होमियोपैथी से भी गंभीर बीमारी का इलाज संभव

महिलाओं को दी सलाह

अनगड़ा पंचायत के हाहे गांव में मेगा मेडिकल कैंप लगाया गया.

पशु चिकित्सा शिविर लगाया गया, मवेशियों का इलाज


लाइफ@ रांची — रांची, गुरुवार 21.11.2019 16

प्रशिक्षण शिविर — उषा मार्टिन व एसबीआइ के प्रशिक्षण शिविर में डीजे बसु ने कहा

मशरूम उत्पादन है आय बढ़ाने का माध्यम

लाइफ रिपोर्टर @ रांची

मशरूम के एक पैकेट की लागत 70 रुपये

बागवानी और ऑर्गेनिक खेती पर होगा प्रशिक्षण

प्रशिक्षण शिविर में ग्रामीणों को जानकारी देते उषा मार्टिन के पदाधिकारी.

Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

CERTIFICATE OF ACCREDITATION

ENVIRONMENTAL LABORATORY OF CPP

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

2X10 MW CPP, Usha Martin Ltd., Tatisilwai, Ranchi, Jharkhand

in the field of

TESTING

Certificate Number TC-5404

Issue Date 31/03/2017

Valid Until 30/03/2019

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL

Annex 12

O/C

usha martin
Usha Martin Limited
(Wire Ropes & Speciality Products Division)
Works : Tatisilwai - 835 103, Ranchi, Jharkhand,
Ph.: (00 91 651) 226 52 41/3051400/430, Fax : (00 91 651) 3051409/410

Ref No. UML/NKP/11-12/010

Date : 26th April, 2011.

To,
The Deputy Commissioner,
Ranchi.

Sub : Environment Clearance for installation of 2x10MW Coal based Captive Thermal Power Plant at Vill : Tatisilwai, district Ranchi in Jharkhand.

Dear Sir,

We are enclosing herewith photocopy of the Environment Clearance received by our company for installation of 2x10 MW coal based Thermal Power Plant at Tatisilwai from Government of India, Ministry of Environment & Forest vide their letter no. J-13012/122/2008 – I.A.II (T) dated 07/04/2011 for your kind perusal and information please.

Thanking you,

Yours faithfully,
For USHA MARTIN LIMITED

N K Patodia

(N. K. Patodia)
Assistant Vice President.

Encl : As above.

C C The District Industries Centre
Ratu Road, Ranchi.

Ranchi Municipal Corporation,
Kutchery, Ranchi.

The Zila Parishad, Ranchi.

The Chottanagpur Chamber of Commerce & Industries,
Ranchi.

Along with photocopy of one set of the above mentioned letter

The Gram Panchayat,
Vill : Tati, Ranchi.

The Gram Panchayat,
Vill : Haratu, Ranchi.

The Regional Officer,
Jharkhand State Pollution Control Board,
Tipudana, Ranchi

Jharkhand State Pollution Control Board, A Hatia, Ranchi-834003

Lloyd's Register — Certified as an approved Manufacturer by Lloyd's Register of Shipping
DNV — Certified as an approved Manufacturer by Det Norske Versitas
Certified by the American Petroleum Institute Licence number 9A - 0017
ABS TYPE APPROVAL PROGRAME — Certified as an approved Manufacturer by American Bureau of Shipping

Usha martin Limited, 2X10 MW CPP

Display Board at CPP main Gate

DEOKI BIJAY & Co.
Chartered Accountants

406, Trade Centre, Mackey Road, Mahavir Chowk, Ranchi - 834 001 (JHARKHAND)
Ph : +91-651-2210437, 2208686. E-mail : dbc_rnc@yahoo.com

TO WHOM IT MAY CONCERN

This is to certify that M/s Usha Martin Ltd., Tatisilwai, Ranchi has invested **Rs. 118,07,41,595.00** (One Hundred Eighteen Crores Seven Lakhs Forty one Thousand Five Hundred and Ninety Five Only) for 2Nos. of 10 MW Captive Power Plant as on 31.03.13. Out of two units, one unit was commissioned in March 2012 & second unit was commissioned in December 2012.

This certificate has been issued on the basis of records and information as made available to us.

For Deoki Bijay & Co.
Chartered Accountants
F. R. No.-313105E

DEOKI BIJAY & CO. RANCHI CHARTERED ACCOUNTANTS

CA. Niraj Poddar
(Partner)
Membership No.- 401067
Place: Ranchi
Date: 23.04.2013

F. No.J-13012/8/2009-IA.II (T)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Aliganj, Jorbagh Road
New Delhi-110 003

Dated 11th November, 2020

Office Memorandum

Sub: Amendment in Environmental Clearance for change in coal source by Thermal Power Plants- reg.

The Environment Impact Assessment (EIA) Notification dated 14th September, 2006 under the Environment (Protection) Act, 1986 mandates the requirement of prior Environmental Clearance to the projects/activities listed in the schedule to the said Notification. The Environmental Clearances are granted for Thermal Power Projects as per the capacities mentioned in the Schedule of the EIA Notification, 2006.

2. The Environmental Clearance (EC) has been granted based on a specific coal source such as a specific coal mine (domestic coal), or Imported coal, or blend of Imported coal and domestic coal. The Environmental Clearance has stipulated a condition that an amendment in EC is to be sought from the Ministry in case of change in fuel source.

3. The Ministry has been receiving several proposals regarding change in coal source, viz. change in domestic coal due to change in fuel linkages/auctions, and switching from imported coal to domestic coal. The linkage period granted through short-term linkage and e-auctions vary from 3 months to 1 year, making Project Proponents to approach the Ministry for granting amendment in EC each time there is change in coal source. In each amendment process, new conditions are being stipulated by making old conditions redundant.

4. The Ministry of Power (MoP) vide Policy Advisory dated 28.4.2020 encouraged all the power generating companies who are using imported coal (part/full) to switch over to domestic coal to the extent possible. The MoP has also set up a mechanism to deal with difficulties faced by the power companies in obtaining required quantity, quality of domestic coal including logistic bottlenecks.

5. The present process of dealing with change in coal source is to apply at PARIVESH, subsequent appraisal by the Expert Appraisal Committee (EAC), processing of EAC recommendations and granting the amendment to the EC. The whole process would approximately take about 2-3 months.

6. The various environmental impacts due to change in coal source viz. increased ash quantity and its management, increased emissions, and impacts of transportation have already been addressed and adequate mitigation measures have been stipulated by the Ministry vide Notifications dated 7.12.2015, 28.6.2018 and 21.5.2020.

7. In order to simplify the procedure for change in coal source and encourage Thermal Power Plants to use domestic coal, **the Ministry has decided the following procedure**:

All the Thermal Power Plants (including Captive Power Plants) having Environmental Clearance can change the coal source (from imported to domestic, domestic to domestic, and domestic to imported) including Lignite, directly through e-auctions/short term linkage/long term linkage/other linkage options of Ministry of Coal or any organisation recognised for allotting coal linkages, without seeking the amendment in Environmental Clearance, subject to the following conditions and thereby making earlier conditions in the EC regarding coal source redundant:

a) Details regarding change in source (location of the source, proposed quantity, distance from the power plant and mode of transportation), quality (Ash, Sulphur, Moisture content and Calorific value) shall be informed to the Ministry and its concerned Regional Office. The quantity of coal transported from each source along with the mode of transportation shall be submitted as part of EC Compliance Report.

b) The applicable flue gas emissions standards for Particulate Matter, Sulphur Dioxide, Oxides of Nitrogen and Mercury shall be complied inline with Ministry's Notification vide S.O. 3305(E) dated 7.12.2015 and subsequent emissions. A progress of implementation and its compliance shall be submitted as part of Compliance Report.

c) Ash content in the Coal and Coal transportation is governed by the Ministry's Notification vide S.O. 1561(E) dated 21.5.2020. As far as possible, Coal transportation shall be done by rail/conveyor or other eco-friendly modes. However, road transportation is allowed with tarpaulin covered trucks till the railway/conveyor belt infrastructure is made available. A progress (Physical and financial) of rail connectivity from nearest railway siding or conveyor connectivity to the power plant shall be submitted in the EC compliance report.

d) Additional ash pond is not allowed due to increase in ash content in the raw coal as against the ash pond permitted in the Environmental Clearance. The 100% flyash utilisation is to be achieved within 4 years in line with Flyash Notifications dated 14.9.1999, 27.8.2003, 3.11.2009 & 25.1.2016 and amended time to time or extant regulations on Fly ash Utilisation.

e) In case of exceptional circumstances, project proponents may approach the Ministry for seeking permission to use an emergency ash pond with cogent reasons, if any.

f) The details regarding monthly generation, utilisation and disposal of flyash (including bottom ash) shall be submitted to the Ministry and its Regional Office.

This issues with the approval of the Competent Authority.

(Dr. S. Kerketta)
Director, IA Division

To

1. All the Thermal Power Plants.

2. The Chairman/Member Secretaries of all the Expert Appraisal Committees.
3. The Chairman /Member Secretaries of all the SEIAAs/SEACs.
4. The Chairman/Member Secretaries of all SPCBs/UTPCCs.
5. The Deputy Director General of Forest of all ROs of MoEF&CC.
6. All the Officers of I.A. Division.

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change.
2. PS to Hon'ble MoS (EF&CC).
3. The Joint Secretary, Ministry of Coal.
4. The Joint Secretary, Ministry of Power.
5. Sr. PPS to Secretary (EF&CC).
6. Sr. PPS to AS (RA) / AS (RSP).
7. Sr. PPS to JS (GM)/ JS (SKB)/JS (AKN).
8. Website of MoEF&CC/ Guard file.

Compliance Status of Office Memorandum on dated 11th Nov'20 against File No: J-13012/8/2009-IA.II (T)

Usha Martin Ltd, 2x10MW CPP, Tatisilwai, Ranchi

Respected Sir,

We have noted the content and hereby submitting the compliance status for your record.

Point No: 7

In order to simplify the procedure for change in coal source and encourage Thermal Power Plants to use domestic coal, the Ministry has decided the following procedure:

All the Thermal Power Plants (including Captive Power Plants) having Environmental Clearance can change the coal source (from imported to domestic, domestic to domestic, and domestic to imported) including Lignite, directly through e-auctions/short term linkage/long term linkage/other linkage options of Ministry of Coal or any organisation recognised for allotting coal linkages, without seeking the amendment in Environmental Clearance, subject to the following conditions and thereby making earlier conditions in the EC regarding coal source redundant:

A) Details regarding change in source (location of the source, proposed quantity, distance from the power plant and mode of transportation), quality (Ash, Sulphur, Moisture content and Calorific value) shall be informed to the Ministry and its concerned Regional Office. The quantity of coal transported from each source along with the mode of transportation shall be submitted as part of EC Compliance Report.

UML Compliance Status: Complied. Proposed planning for FY21-22 is furnished for record.

Year	Proposed Coal Source	Proposed Qty	Mode of transportation	Proposed Ash %	Proposed Sulphur %	Proposed GCV (kcal/Kg)
2021-22	Through e-auction, CCL & JSMDC Coal Mines & also Coal from TATA West Bokaro, Jamadoba & HEC, Ranchi etc.)	0.183 MTPA	Road, Vehicles are fully covered with tarpaulin	Range : 34 to 40%	< 0.2%	Range : 4500 to 4000

B) The applicable flue gas emissions standards for Particulate Matter, Sulphur Dioxide, Oxides of Nitrogen and Mercury shall be complied in line with Ministry's Notification vide S.O. 3305(E) dated 7.12.2015 and subsequent emissions. A progress of implementation and its compliance shall be submitted as part of Compliance Report.

UML Compliance Status: Complied. Report submitted.

C) Ash content in the Coal and Coal transportation is governed by the Ministry's Notification vide S.O. 1561(E) dated 21.5.2020. As far as possible, Coal transportation shall be done by rail/conveyor or other eco-friendly modes. However, road transportation is allowed with tarpaulin covered trucks till the railway/conveyor belt infrastructure is made available. A progress (Physical and financial) of rail connectivity from nearest railway siding or conveyor connectivity to the power plant shall be submitted in the EC compliance report.

UML Compliance Status: Complied. Report submitted.

D) Additional ash pond is not allowed due to increase in ash content in the raw coal as against the ash pond permitted in the Environmental Clearance. The 100% flyash utilisation is to be achieved within 4 years in line with Flyash Notifications dated 14.9.1999, 27.8.2003, 3.11.2009 & 25.1.2016 and amended time to time or extant regulations on Fly ash Utilisation.
UML Compliance Status: Complied. Fly Ash Utilization Report submitted.

E) In case of exceptional circumstances, project proponents may approach the Ministry for seeking permission to use an emergency ash pond with cogent reasons, if any.
UML Compliance Status: CPP utilized 100% generated fly ash in past years and report submitted.

F) The details regarding monthly generation, utilisation and disposal of flyash (including bottom ash) shall be submitted to the Ministry and its Regional Office.

UML Compliance Status: Complied.

We trust the information furnished by us shall meet your requirement.

Thanking You

Yours faithfully,
For **Usha Martin Limited**

(Authorized Signatory)

CPP (2 X 10MW)
USHA MARTIN LTD.
PATRATU WAI, RANCHI
JHARKHAND, PIN-[illegible]