

**KSK Mahanadi Power Company Limited**

CIN No : U40300TG2009PLC064062

**Works**

Near Nariyara Village,  
Akaltara Tehsil,  
Janjgir - Champa District,  
Chhattisgarh  
Tel (Site): 07817-284001

**Registered Office**

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Ref.:MoEF&amp;CC,NPUR/BPSN/2500108/1384

27<sup>th</sup> Nov. 2019

To  
The Addl. Principal Chief Conservator of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Regional Office (WCZ), Ground Floor, East Wing,  
New Secretariat Building Civil Lines,  
Nagpur-440001  
Maharashtra

**Sub:** -Six Monthly Status of Compliance for Environmental Clearance granted to **6x600 MW** Coal Based Thermal Power Project located in village: Nariyara, Tehsil-Akaltara, District-Jangir, Champa, Chhattisgarh by M/s KSK Mahanadi Power Company Limited,- Reg.

**Ref:** - i) Ministry's Letter No. - J13012/44/08 -IA.II (T), Dt. 19.10.2009  
ii) Re-validation Letter No. - J-13012/44/2008-IA.II (T), Dt. 19.04.2018.


Sir,

With reference to the above subject, please find herewith the enclosed Environmental Clearance Compliance Report of last six month updated status i.e from **April-2019 to September-2019**.

For favour of your kind information and record please.

Thanking You.

Your's sincerely,  
For **KSK Mahanadi Power company Limited**

  
CD. M. V. R. N. Achougale  
(Authorized Signatory)

**Copy to:** (1) The Member Secretary, CEGB, Atal Nagar, Raipur, Chhattisgarh.  
(2) The Regional Officer, CEGB, Bilaspur, Chhattisgarh.

**Encl:** Six Monthly Environmental Clearance Compliance Report- **Apr'19 to Sept'19**.

**KSK MAHANADI POWER COMPANY LTD.  
(6x600 MW Coal Based Thermal Power Plant)  
at Village- Nariyara, District -Janjgir-Champa,  
Chhattisgarh.**

**Six Monthly Compliance Status for Specific  
Conditions of Environmental Clearance Accorded,  
Amendment and Extended of Validity vide Ref. Letter  
No- J13012/44/08 -IA.II(T) Dated 19.10.2009 & Ref.  
Letter No- J-13012/44/2008-IA.II (T), Dated 19.04.2018**



***FOR PERIOD:  
APR. 2019***

***TO***

***SEPT. 2019***

S. No.	Condition	Compliance Status
1	Two tri-flue stacks of 275m height should be provided.	Two nos. of RCC stacks already been provided for all the six units. The height of both the stacks is 275 meters from the ground level.
2	COC of 5 shall be maintained	Cycle of Concentration 5 has been maintained.
3	To utilize fly ash generated from the power plant, the proponent should explore the possibility of setting up either its own cement plant /grinding unit and/or a brick manufacturing unit of 50,000/1,00,000 bricks/day capacity, and explore other possibilities of utilizing the fly ash in full form the stipulated period.	<p>As per Fly Ash Notification S.O. 2804(E), 3rd November, 2009, Fly Ash has been utilized by operational units with following manner:</p> <ul style="list-style-type: none"> <li>i) For 7<sup>th</sup> Year operation of <b>Unit#3</b>, 100% of Fly Ash has been utilized against the target of 100%.</li> <li>ii) For 6<sup>th</sup> year of operation of <b>Unit#4</b>, 100% of Fly Ash has been utilized against the target of 100%</li> <li>iii) For 2nd year of operation of <b>Unit#2</b>, 70% of Fly Ash has been utilized against the target of 70%</li> </ul> <p>Long term action plan is enclosed as <b>Annexure-I</b></p>
4	For post project monitoring, the proponent should set up piezometric monitoring station around the ash pond.	<p>4 Nos. of Piezometric wells have been provided around the ash pond area.</p> <p>Images of Piezometers is enclosed as <b>Annexure-II</b></p>
5	From 4 <sup>th</sup> year onwards, the transportation of coal should be through rail only.	<p><u>Complying.</u></p> <ul style="list-style-type: none"> <li>i) A state of art Railway Infrastructural facilities have been developed to transport coal through rail mode in KMPCL.</li> <li>ii) As per EC amended by MoEF &amp;CC on 19.04.2018; Coal is being transported on the basis of following manner: <ul style="list-style-type: none"> <li>a) 70% domestic Coal is being transported by Rail mode and 30% by Road.</li> <li>b) 100% imported Coal is being transported through Railway mode.</li> </ul> </li> </ul>
6	The green belt to be provided should be of canopy type with three tiers.	<p>A green belt of 5/6 tiers, in 100 meter width is being developed, along the periphery of the plant boundary.</p> <p>Species selection has been made on the basis of local Climatological factors and soil characteristics.</p> <p>(i.e. Sisam, Peltiform, Satvan, Karanj, Siris, Simarua, Neem, Ganga imili, Pepal, Kadam, Cassia Siamia, Chinour, Arjuna, Mango, Bargad, Jamun, Amla, Gulmohar are being used in rows to maintain canopy type and strata)</p> <p>As on date, total <b>7,20,000nos.</b> of saplings have been planted within the Plant premises in an areas about <b>277</b> hectares i.e <b>33.3%</b> of total project area</p>

		( <b>828.46</b> Hectares). Out of which <b>4,26,310 nos.</b> of saplings has been survived and further plantation by causality replacement is under progress. Photos of the Greenbelt developed at site are attached as <b>Annexure-III.</b>
7	An amount of 64 crore as capital and Rs. 10 crore/annum as recurring should be earmarked for the activities to be taken up under CSR by the above proponent. Details of activities to be undertaken in this regard should be submitted.	As on date Rs. <b>53.53</b> Crores have been spent for CSR activities, the detail of the work activities under CSR is enclosed as <b>Annexure-IV.</b> Similarly the report has been communicated to MOEF and Regional Office, Bhopal including CECB, Raipur on regular basis.
8	High efficiency of Electrostatic Precipitator (ESP) with spare fields shall be installed to ensure that particulate emission does not exceed 50 mg/Nm <sup>3</sup> .	High efficiency ESP + Hybrid Fabric Filter combination, with 99.7% efficiency has installed for each Unit (600MW). Average emission of Particulate Matter from operational Units- 1, 2 & 3 are well within stipulated norms of 50mg/Nm <sup>3</sup> and 30 mg/Nm <sup>3</sup> . <b>Note:</b> Emissions from Unit-I and Unit-II have been designed to operate less than 50 mg/Nm <sup>3</sup> and in case of Unit-III, it is less than 30mg/Nm <sup>3</sup> . Average emission of Particulate Matter from operational Units- I, II & III are well within 20 to 50mg/Nm <sup>3</sup> . Details of stack emission are presented in <b>Annexure-V.</b>
9	Space provision shall be kept for retrofitting of FGD system, if required at a later date.	Space provisions have been made for installation of FGD system in Project lay out.
10	Adequate dust extraction 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.	Following provisions have been made to control the Fugitive emissions: <ul style="list-style-type: none"> <li>➤ Pulse Jet type bag filters have been installed at all the Transfer points and on coal conveyor system meant for Coal transport from CHP area to boiler area.</li> <li>➤ 44 Nos. of Rain guns with Water spraying system has been installed in the Coal yard area.</li> <li>➤ 172 Nos. Dust Suppression System &amp; 28 Nos. Dry Fog System has been working in different raw material transfer points and handling section to control fugitive emission at CHP area.</li> </ul> <p>Fly ash silo top is mounted with 2 Nos. of Bag filters to arrest fugitive dust, similarly Water spraying system has been provided to mitigate fugitive dust from the dust prone area.</p>

11	A Sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	STP having capacity of 2x25m <sup>3</sup> /Hr., is under operation, for treating Domestic waste water. The treated waste water is being reused for green belt and horticulture purpose.
12	Rainwater harvesting should be adopted. Central Ground Water Authority/board is consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance and details shall be furnished.	<ul style="list-style-type: none"> <li>➤ Rain water harvesting structures have been constructed as per approved plan of CGWB.</li> <li>➤ Rain water harvesting pond has been constructed with a capacity of 06Lakh CUM, abandoned bore wells have been converted in to rain water recharge wells and Percolation structures have been constructed in low lying areas.</li> </ul> <p>Details are enclosed as <b>Annexure-VI</b></p>
13	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season.	Adequate provision for dust suppression system-water sprinkling arrangement has been incorporated in the project in all dust vulnerable areas including coal storage yard and being operated regularly to minimize fugitive emissions. All safety measures have been adopted to check/minimize any incidents of fire and especially in summer season. Two full-fledged fire tenders are available at site.
14	Storage facilities for auxiliary liquid fuel such as LDO/HFO/LSHS shall be made in the plant area where risk is minimum to the storage facilities. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place. Sulphur content in the liquid fuel not exceed 0.5%	On Site Disaster Management Plan has been approved by factory Inspector and the same is being implemented during operation of the power plant.
16	Regular monitoring of ground water in and around ash pond area including heavy metals (Hg,Cr,As,Pb) shall be carried out, records maintained and six monthly reports shall be furnished 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.	Regular Monitoring of ground water in and around ash dyke areas is being done to have checked the heavy metals into the ground water.
17	A greenbelt of adequate width and density shall be developed around the plant periphery covering 1/3 <sup>rd</sup> of the project area with local species.	A green belt of 5/6 tiers, in 100 meter width is being developed, along the periphery of the plant boundary.  Species selection has been made on the basis of local Climatological factors and soil characteristics.  (i.e. Sisam, Peltophorum, Chatian, Karanj, Siris, Simarua, Neem, Arjun, Ganga emali, Pipal, Kadam, Cassia siamia, Chinour, Kahua, Mango, Bargad, Jamun, Amla, Gulmohar are being used in rows to



		maintain canopy type strata) As on date, total <b>7,20,000nos.</b> of saplings have been planted within the Plant premises in an areas about <b>277</b> hectares i.e <b>33.3%</b> of total project area ( <b>828.46</b> Hectares). Out of which <b>4,26,310 nos.</b> of saplings has been survived and further plantation by causality replacement is under progress. Photos of the Greenbelt developed at site are attached as <b>Annexure-III.</b>
18	First Aid and sanitation arrangements shall be made available for the drivers and other contract workers during construction phase.	Adequate arrangement for first aid, sanitation and safe drinking water has been provided for all drivers and contractor workers during construction activities.
19	Regular monitoring of ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , Hg, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately.  The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	Regular ambient air quality monitoring of ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , CO, PM10 and PM2.5 is being carried out in the impact zone and the details are being submitted on monthly basis to CECB, Chhattisgarh. The values are well within the prescribed limits
20	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 /office of Municipal Corporation/Gram Panchayat concerned and on the company's web site within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	The Public Notice of Environmental Clearance has been published in two local newspapers namely- The Haribhumi and DanikBhaskar on 23.10.09 which are widely circulated in the region.  Enclosed as <b>Annexure -VII</b>  Complied
21	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParisad / 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  Environmental Clearance letter has been placed in the website of the company.
22	The proponent shall upload the status of compliance of the stipulated EC conditions,	Status of compliance of EC conditions has been uploaded as stipulated and is being updated

	including results of monitoring 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, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	regularly on Six monthly basis.
23	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Half yearly report for the period of October. 2018 to March. 2019 has been submitted vide Letter No. MoEF&CC, NPUR/PDKN/2500108/606 Dtd. 23.05.2019. Enclosed as <b>Annexure-VIII</b>
24	<b>The environment statement</b> for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MOEF by e-mail.	Environment Statement for the Financial year 2018-19 has been submitted vide KMPCL letter no.- CECB, BILAS/PDKN/2500108/117 Dtd. 09.09.2019. Enclosed as <b>Annexure-IX</b>
25	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	An Environment Management cell has been setup, headed by Sr. General Manager.
26	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report, 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.	A complete set of documents has been submitted to Regional Office of the Ministry vide Letter Ref No. MOE&F, BHPL/AGRY/1160201/1147 Dated 09.12.2009.
27	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.	As submitted in the EIA report separate amount of Rs. 1246 Cr. has been provided for pollution control, treatment and monitoring systems.

28	<p>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.</p>	<ul style="list-style-type: none"> <li>• Date of financial closure: Feb, 2010.</li> <li>• Date of start of land development work Nov, 2009.</li> <li>• Unit No.-3 (1x600MW) is under operation since Sep 2013</li> <li>• Unit No.-4 (1x600MW) is under operation since Sep 2014</li> <li>• Unit No.-2 (1x600MW) is under operation since Feb 2018</li> <li>• Work is in progress on fast track basis for other remaining units.</li> </ul>
29	<p>Full cooperation shall be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bangalore/the CPCB/the SPCB who would be monitoring the compliance of Environmental status.</p>	<p>Noted &amp; agreed. Being complied as per the requirements of CPCB and CECB Raipur, Chhattisgarh.</p>
<b>Additional conditions as per EC Amended &amp; Extended of Validity on 23.09.2015</b>		
30	<p>The total project area shall comprise of 828.46 Ha as stipulated while issuing the EC</p>	<p>Complied</p>
31	<p>An amount of Rs 64 crores as capital and Rs 1.83 Crores /annum (or the amount as per the CSR policy of GOI whichever is higher) as recurring costs should be earmarked for CSR activities to be undertaken in this regard shall be submitted.</p>	<p>As on date <b>Rs.53.53 Crores</b> has been spent for CSR activities, the detail of the work activities under CSR is enclosed as <b>Annexure-IV</b>. Similarly the report has been communicated to MOEF and Regional Office, Bhopal including CECB, Raipur on regular basis.</p>
32	<p>Continuous online monitoring system for stack emissions, ambient air quality and effluent discharge for various relevant parameters shall be put in place at the earliest, if already done and compliance to be reported to this ministry including its RO</p>	<p>Continuous online monitoring system for stack emissions is already installed &amp; working w.r.t operational Units No. 3, 4 &amp; 2. Online monitoring data is already showing at main gate display board and website-portal of KMPCL. 4 CAAQMS have been installed inside the plant premises. Continuous Effluent Monitoring systems have been installed in Guard Pond. Photos attached as <b>Annexure-X</b></p>
33	<p>Harnessing solar power within the premises shall be carried out and the status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.</p>	<p>Options of Harnessing of Solar power at available roof tops within the premises of is being explored out and details will be submitted shortly</p>



34	<p>A long term study of radio activity and heavy metals contents on coal to be used shall be carried out through reputed institute and results thereof analyzed every two year and reported along with monitoring reports. Therefore mechanism for an in built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.</p>	<p><b>Long term study of radio will be carried out through reputed institute. However, the following measures have been taken to minimize the leaching if any in coal yard and ash storage systems</b></p> <ol style="list-style-type: none"> <li>1. 300mm CC Flooring has been done in Coal yard area.</li> <li>2. Construction of garland drain, all along the Coal yard, from where waste water is collected and after treatment in ETP, the water is being reused for dust suppression</li> </ol> <p><b>Following measures has been implemented for Ash Dyke area, to check the leaching of Heavy metals into the ground water table :</b></p> <ol style="list-style-type: none"> <li>1. Both Bottom &amp; Fly ash Dykes has been floored with 0.75Micron LDPE.</li> <li>2. Four No's of piezometric Wells have been constructed, along the periphery of ash Dykes, for regular monitoring of Quantity &amp; Quality of ground water to assess the contamination or leaching of heavy metals from ash dyke area</li> </ol>
35	<p>Mercury emissions from stack shall be monitored on periodic basis.</p>	<p>Stack Emissions monitoring is being done monthly intervals for SO<sub>2</sub>, NO<sub>x</sub>, CO &amp; Particulate matter. Mercury and other heavy metals and reports submitting to SPCB.</p>
36	<p>Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.</p>	<p>Following provisions have been made to control the Fugitive emissions:</p> <ul style="list-style-type: none"> <li>➤ Pulse Jet type bag filters have been installed at all the Transfer points meant for Coal transport from CHP area to boiler area.</li> <li>➤ 44 Nos. of Rain guns with Water spraying system has been installed in the Coal yard area.</li> <li>➤ 172 Nos. Dust Suppression System &amp; 28 Nos. Dry Fog System has been working at different raw material transfer points and handling section to control fugitive emission in CHP area.</li> </ul> <p>Fly ash silo top is mounted with 2 Nos. of Bag filters to arrest fugitive dust, similarly</p> <p>Water spraying system has been provided to mitigate fugitive dust from the dust prone area.</p> <p>Apart from that a thick green belt is already developed around plant boundary to arrest fugitive emission from non-point sources.</p>
37	<p>No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting</p>	<p>Adequate measures had been implemented to take care of natural drainage system.</p>

	up/operation of the power plant.	
38	Fly ash shall not be used for agricultural purpose. No Mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such as that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the state pollution control board.	Complied
39	Details of 100% Fly ash utilization plan as per latest Fly ash Notification of GOI along with firm agreements/ MOU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method/ mechanism of bottom ash.	<p>As per Fly Ash Notification S.O. 2804(E), 3rd November, 2009, Fly Ash has been utilized by operational units with following manner:</p> <p>i) For 7<sup>th</sup> Year operation of <b>Unit#3</b>, 100% of Fly Ash has been utilized against the target of 100%</p> <p>ii) For 6<sup>th</sup> year of operation of <b>Unit#4</b>, 100% of Fly Ash has been utilized against the target of 100%</p> <p>iii) For 2nd year of operation of <b>Unit#2</b>, 70% of Fly Ash has been utilized against the target of 70%</p> <p>Long term action plan is enclosed as <b>Annexure-I</b></p>
40	Green belt shall also be developed around the ash pond and above the green belt around the plant boundary.	<p>For green belt, more than 30000 saplings have been planted all around the ash dyke area, covering area of approx. 25 Ha.</p> <p>A green belt of 5/6 tiers, in 100 mtr width is being developed, along with the periphery of the plant boundary.</p> <p>Species selection has been made on the basis of local Climatological factors and soil characteristics.</p> <p>(i.e. Sisam, Peltiform, Satvan, Karanj, Siris, Simarua, Neem, Ganga emili, Pepal, Kadam, KesiaSamia, Chinour, Arjuna, Mango, Bargad, Jamun, Amla, Gulmohar are being used in rows <b>to maintain canopy type and strata</b>)</p> <p>As on date, total <b>7,20,000nos.</b> of saplings have been planted within the Plant premises in an areas about <b>277</b> hectares i.e <b>33.3%</b> of total project area (<b>828.46</b> Hectares). Out of which <b>4,26,310 nos.</b> of saplings has been survived and further plantation by causality replacement is under progress. Photos of the Greenbelt developed at site are attached as <b>Annexure-III.</b></p>
41	An environment Cell comprising of at least one expert in environment science/Engg. Ecology, occupational health and social science, shall be created preferably at	Environment Cell is already established which includes Environment Engineer, Environmental scientist, Ecologist, Horticulturist and social science experts from inception of project operations.

	project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the head of the cell shall directly report to the Head of the plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.	Environmental cell head is directly reporting to plant. EMD cell basic responsibility is to implement environmental compliance conditions of MOEFCC and CFE and CFO and also implement environmental measures.
42	CSR schemes identified based on public hearing issues and need based assessment shall be implemented in consultation with the village panchayat and the district administration starting for the development of project itself. AS part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programs.	CSR schemes already identified based on public hearing issues and need based assessment & implemented in consultation with the 4 village panchayat and the district administration. Also Company already provided separate budget for community development activities.
43	For proper and periodic monitoring of CSR activities, a CSR Committee or a social audit committee or suitable credible external agency shall be appointed.  CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final	Regular monitoring of CSR activities is being done by Plant authorities and also appraised to District administration.
44	The project proponent shall formulate a well laid corporate environment policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.	Corporate Environmental policy will be finalized as per laws and regulations. At present the environmental affairs has been evaluated by the environmental cell headed by Environmental Officer.
45	All other conditions in this Ministry's letter of even no. dated 19.10.2009 and amendment dated 24.01.2012 shall remain the same.	Agreed & complied.
<b><i>Additional conditions as per EC Amended on 26.05.2016</i></b>		
46	The Sulphur and ash content coal shall not exceed 0.6% and 36% as per EC. For imported coal, the same shall not exceed 0.8% and 25% respectively or as per the MoU/FSA, whichever is lower.	Complied for both Sulphur and Ash contents. Average Sulphur and Ash content of coal has been used in KMPCL are 0.4% and 34% respectively.
47	Imported coal transport shall be by rail only	Complied. 100% imported coal has been transported through rail mode.

48	Necessary action shall be taken for compliance of the Operating & Proposed Units to the standards for TPPs notified on 07.12.2015.	Complied for Particulate Matter emission and specific water consumption for all operational Units has been achieved within in the prescribed standard. For achievement of SO <sub>2</sub> & NO <sub>x</sub> limit, FGD installation design and planning is in the line of requirement. The dead line of completion of project has been assigned by CPCB is upto 31 March2022.
<b><i>Additional conditions as per EC Amended and Extended of validity on 19.04.2018</i></b>		
50	<p>i) As forward e-auction is a participation and shall not guarantee the PP to confirm coal sourcing, therefore, on confirmation of sourcing of e-auction of coal blocks/ basket of coal mines, the PP shall inform the details of coal procurement and shall limit the coal transportation by road for 3.54 MTPA ( 50% of linkages) domestic coal procured.</p> <p>ii) The remaining quantity of 8.02 MTPA domestic coal and 2.6 MTPA imported coal shall be transported by rail only. A fresh reference shall be made to the Ministry for any change in mode of transport.</p>	Noted & Complied.

# **ANNEXURE - I**



### Action Plan for FLY ASH UTILIZATION in KSK Mahanadi Power Company Limited., Nariyara, CG

( in million Tones)

S. No	Item Description	Sept 2015 – Aug 2016	Sept 2016 – Aug 2017	Sept 2017 – Aug 2018	Sept 2018 – Aug 2019	Sept 2019– Aug 2020	Sept 2020 – Aug 2021
1	Expected Total generation of fly ash in million tonnes per annum	1.50	2.00	2.50	2.50	2.72	2.72
a	Use in Stowing and filling up of abandoned coal and other mineral mines	0.10	0.30	0.50	0.33	0.10	0.10
b	Use in filling up of abandoned stone quarry mines	0.05	0.10	0.15	0.15	0.15	0.15
c	Use in Fly Ash in brick manufacturing	0.05	0.05	0.05	0.10	0.18	0.18
d	Road development in surrounding areas	0.10	0.10	0.10	0.09	0.08	0.08
e	Use in Cement manufacturing	1.10	1.55	1.80	1.83	2.21	2.21
2	Expected Total Fly Ash Utilization	1.40	2.00	2.50	2.50	2.72	2.72
3	Expected Fly Ash Utilization (%)	93%	100%	100%	100%	100%	100%

# **ANNEXURE - II**

PIEZOMETRIC BOREWELLS in KSK-MPCL

PZ-1



PZ-2





PZ-3



PZ-4





# **ANNEXURE - III**

**GREEN BELT DEVELOPMENT IN M/S KMPCL IN FY 2019-20**

**Plantation Details:**

Year	Areas of Plantation Inside Plant Premises.	Species	As on date total nos. of plantation.	Area Covered By Plantation (Ha.)
Upto FY 2018-19	Boundary Plantation Tarod Side, Labour Colony Road/Nursery area, Labour Colony Road to Time Off, Main Gate area, Guard Pond area, NH ROAD-Tarod Boundary, Avenue Plantation (DM Plant internal road) and NH ROAD-Banahil Boundary	Sisam, Peltiform, Satvan, Karanj, Sirus, Simarua, Neem, Ganga imili, Pepal, Kadam, Cassia, Siamia, Chinour, Arjuna, Mango, Bargad, Jamun, Amla, Gulmohar	3,99,910 nos.	277 hectares i.e 33.3% of total project area (828.46 Hectares)
FY 2019-20			26,400nos.	
<b>Total</b>			<b>4,26,310 nos.</b>	

**Photographs for Plantation:**

**Near boundary wall Tarod side**



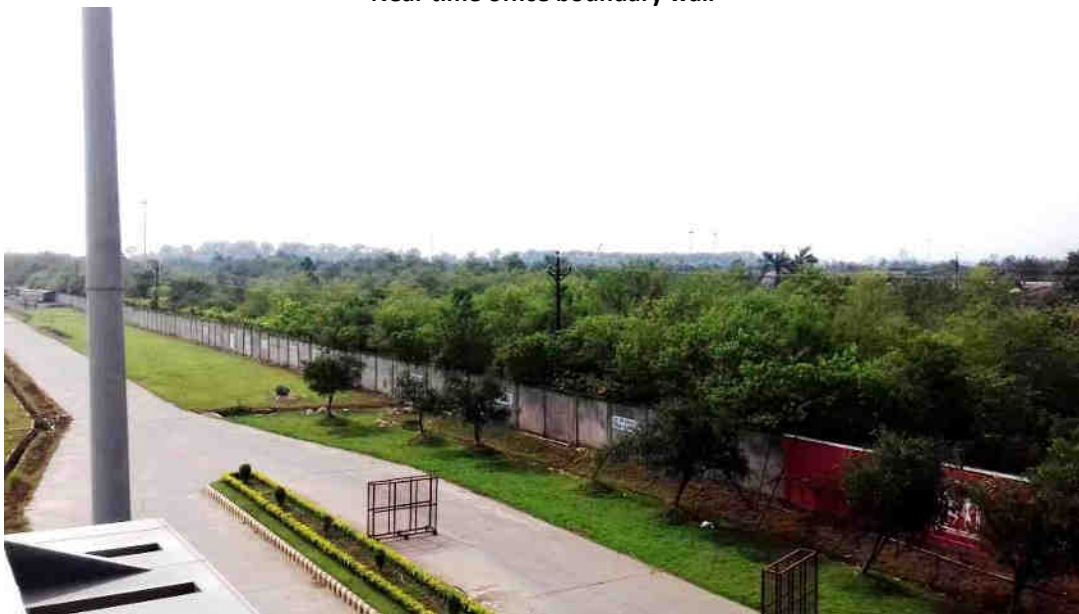
**Near Nursery**



**Ash dyke area**



**Near time office boundary wall**





**Near Reservoir gate boundary wall**



**Main gate to weigh bridge road**



**Around railway track**

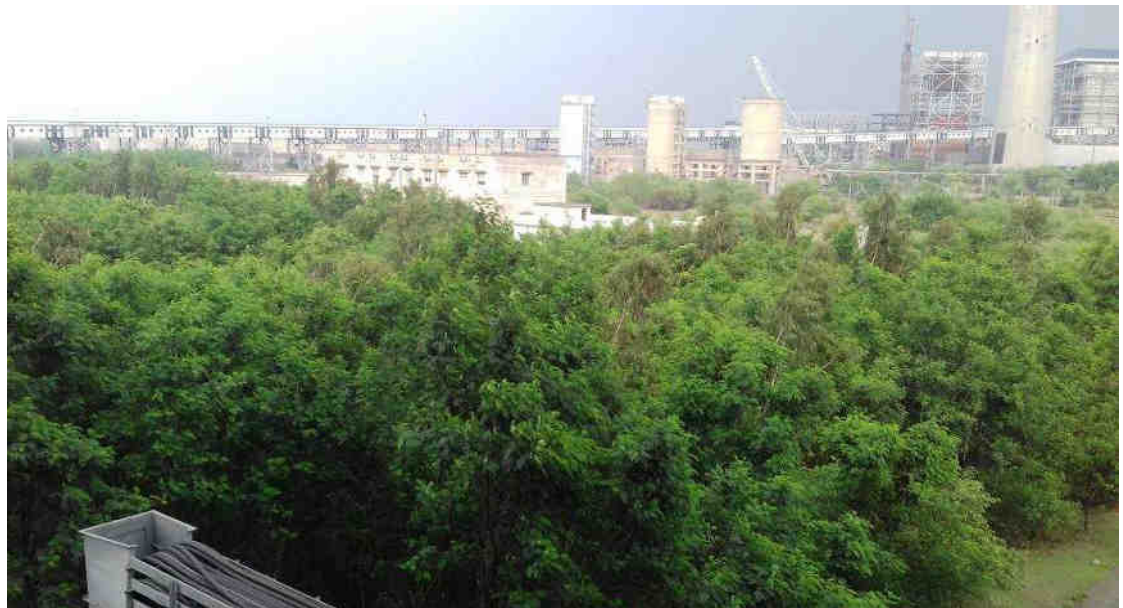




**Around Coal yard**



**In & around CHP area**



**CHP area**







**DM plant road side**



**Reservoir road side**



**Main Gate road side**





**Main gate road side**



**Garden development in & around the plant premises**



**CHP Control Room**





**Reservoir side**



**In front of Cooling Tower**



**In front of CCR**



**Near Guard pond**



**Reservoir side**



**Nursery**





# **ANNEXURE - IV**

# **KSK Mahanadi Power Company Limited**

## **Corporate Social Responsibility – Expenditure from Apr.2019 to Sept. 2019**

Sl.no.	Focus Area	Till Mar.-2019	Apr.-2019 to Sept-2019	Total
a1	<b>Education</b>	32621732	21510	32643242
a2	<b>Health Care</b>	269493433	817198	270310631
a3	<b>Sustainable Development</b>	25929073	358384	26287457
a4	<b>Infrastructure Development</b>	159163292	884586	160047878
a5	<b>Cultural &amp; Community Support</b>	19722740	18060	19740800
a6	<b>Miscellaneous expenses</b>	6680069	232177	6912246
	<b>Sub Total - (a)</b>	513610339	2331915	515942254
b	<b>Cost of Ambulance - (b)</b>	512710	0	512710
c	<b>Total - ( c) = (a+b)</b>	514123049	233177	514356226
d	<b>Corporate Donations - (d)</b>	21000000	0	21000000
	<b>Grand Total</b>	<b>535123049</b>	<b>233177</b>	<b>535356226</b>

# **CORPORATE SOCIAL RESPONSIBILITY**

## **HALF YEARLY PROGRESS REPORT (April to September 2019)**



**KSK MAHANADI POWER COMPANY LIMITED**  
(GROUP COMPANY OF KSK ENERGY VENTURES LIMITED)

(Quarterly news archive of Corporate Social Responsibility programs)

## A. EDUCATION & CAPACITY BUILDING

### Adolescent Care : Girls using sanitary pads through vending machine installed at 06 Govt. Schools

Sanitary napkin dispensing machines and incinerators are not only ensuring that girls stay in school but also providing environment conservation. KSK Mahanadi Power Company Limited installed 06 sets at Govt. Schools of Project Affected villages. These have been fitted at the 04 High Schools, 02 Higher Secondary Schools and at 01 Girls hostel, the students living in hostel no



Sanitary Pad Vending Machine at Govt. Girls High School Nariyara

longer have to panic in the case of an emergency. The machines have especially been sponsored for the girl student convenience and to ensure proper disposal of sanitary napkin after use. Girls have to slip an Rs.5 coin (already provided in a set of 20 Coins) in the vending machine that has been fitted outside the girl's bathroom or a separate girl's common room to receive a sanitary napkin. The incinerator has been installed inside the bathroom and the School has made it compulsory for students to dispose of their pads there. There are total 1400 pads used by the strength of 703 students.

Usability of Sanitary Pad Napkins in Govt. Schools by Adolescents – During the period from April 19 to Sep.19				
Si.	Village	School Name	No. of Students	No. of Pads used
1	Nariyara	Govt. Girls High School, Sanjay Nagar	164	400
2	Nariyara	Govt. Higher Secondary School, Sanjay Nagar	106	230
3	Nariyara	Govt. Pre Metric Girls SC Hostel, Irrigation Colony	50	140
4	Amora	Govt. Higher Secondary School, loader Colony	189	150
5	Pakariya	Govt. High School Pakariya	52	230
6	Dongakohroud	Govt. High School, School Para	142	250
<b>Total</b>			<b>703</b>	<b>1400</b>

## Progress report of E-learning center and smart class in 6 Government primary schools at project affected villages.

KSK Mahanadi Power Company Limited Nariyara started an E-Learning and Smart Classes at Janshiksha Kendra of Nariyara, Taroud, Rogda, Amora, and Dongakohroud villages in govt. primary school. Objective of this program is to provide online education to children through computer, Internet and TV screen. Modern



E-Learning & Smart Class Mass Education Center Nariyara

teaching methods and technology adopted for providing education to small children's. E-Learning and smart Classes started in Plant affected villages such type of modern Technology is adopted in govt. primary schools in district. There is improvement in growth of student. The main purpose of the E-learning smart classes is to guide the students' in studies, the student is watching the TV screen and is quickly recalling his textbook. Headmaster and teacher staff of Govt. Schools thanked KMPCL Power Company limited for the E-Learning smart classes.

E-Learning and Smart Classes Progressive Report During the period from April 19 to Sep.19			
Si.	Village	School Name	No of Beneficiary Students
1	Nariyara	Mass Education Center _ Nariyara	521
2	Taroud	Govt. Janpad Primary School, Santoshi Mandir	245
3	Taroud	Govt. unnayan Primary School, Arjun Nagar	102
4	Rogda	Govt. Primary School	111
5	Amora	Govt. Primary School - Nawapara	135
6	Dongakohroud	Govt. Primary School — indira aavaas	58
<b>Total</b>			<b>1172</b>



## B. HEALTH CARE

### Organized 55 Rural Health Camps in Project affected villages

During the half yearly period from April 19 to September 19 total 55 Rural Health Camps organized in our project affected villages. Camps organized one on every fortnightly basis in Nariyara, Banahil, Taroud, Murlidih, Amora, Rogda, Akaltara, Latiya, Pakariya, Kharoud and Dongakohroud



Organized Rural Health Camp at Nariyara village



Organized Rural Health Camp at Nariyara village

village. During this camp we provided health services to 1665 villagers. During the summer and Rainy season, villagers affected from several diseases, most of them were found of like Fever, Dysentery, Diarrhea, Skin Disease, Anemia, Constipation, Dyspepsia and Worm infection. During health camp medicines has been freely distributed to patient by CSR medical team.

Sl	Village	No. of Camps	Male	Female	Child	Total
1	Nariyara	8	133	90	70	293
2	Taroud	5	67	37	40	144
3	Rogda	5	54	38	24	116
4	Amora	6	59	50	59	168
5	Murlidih	4	65	41	54	160
6	Pakariya	5	63	28	26	117
7	Latiya	5	63	36	32	131
8	Akaltara	4	40	37	34	111
9	Banahil	6	77	31	29	137
10	Dongakohroud	6	93	96	74	263
11	Kharoud	1	14	5	6	25
<b>Total</b>		<b>55</b>	<b>728</b>	<b>489</b>	<b>448</b>	<b>1665</b>

## Emergency Ambulance Service provided to 191 villagers

The CSR department of KSK Mahanadi Power Company Limited is providing ambulance facilities to the persons of affected villages during emergency. Any kind of accident, urgency or emergency is informed to the CSR Department. Seeing the situation and availability of vehicle CSR ambulance is being provided. This is a 24 hours 7 days facility means our ambulance is always ready to provide services for any kind of emergency at village level. During the first quarter of the year total 191 people received benefit of emergency ambulance services. Villagers are getting larger benefit of this emergency ambulance service.

Sl	Village	Person Benefitted
1	Nariyara	89
2	Taroud	21
3	Rogda	15
4	Amora	7
5	Banahil	10
6	Jhalmala	19
7	Murlidih	2
8	Latiya	8
9	Akaltara	8
10	Other	12
<b>Total</b>		<b>191</b>

## Organized 01 School Health Check-up Camp at Taroud village

KSK Mahanadi Power Company Limited organized school Health Check-up camp at Taroud village. During this camp total 70 students were examined, weight and height of children are measured and keep in our records. Malnourished and weak children are identified. Such children were advised and given counseling for better health and hygiene practices. Free medicines were also distributed to the required children. During these camps



Organized School Health Camp at Taroud village

school staff provided their extended support to make the camps successf

Sl	Date	Village	Name of Anganwadi center	Boys	Girls	Total
1	13.08.2019	Taroud	Govt. Primary School, Arjun Nagar	33	37	70
<b>Grand Total</b>				<b>33</b>	<b>37</b>	<b>70</b>

## Organized Anganwadi Health Check-up Camp at Taroud, Amora and Rogda villages

KSK Mahanadi Power Company Limited organized Anganwadi Health Check-up camp during the first quarter of the year at Taroud, Amora and Rogda villages. During this camp total 79 students were examined, weight and height of children's are measured and keep in records. Malnourished and weak children are identified. Such children were advised and given counselling for better health and hygiene practices. Free medicines were also distributed to the required children. During this



Organized Anganwadi Health Check-up Camp at Rogda village

camp Anganwadi staff provided their extended support to make the camps successful along with CSR Department KMPCL.



Organized Health Camp at Bhatpara Anganwadi of Taroud village

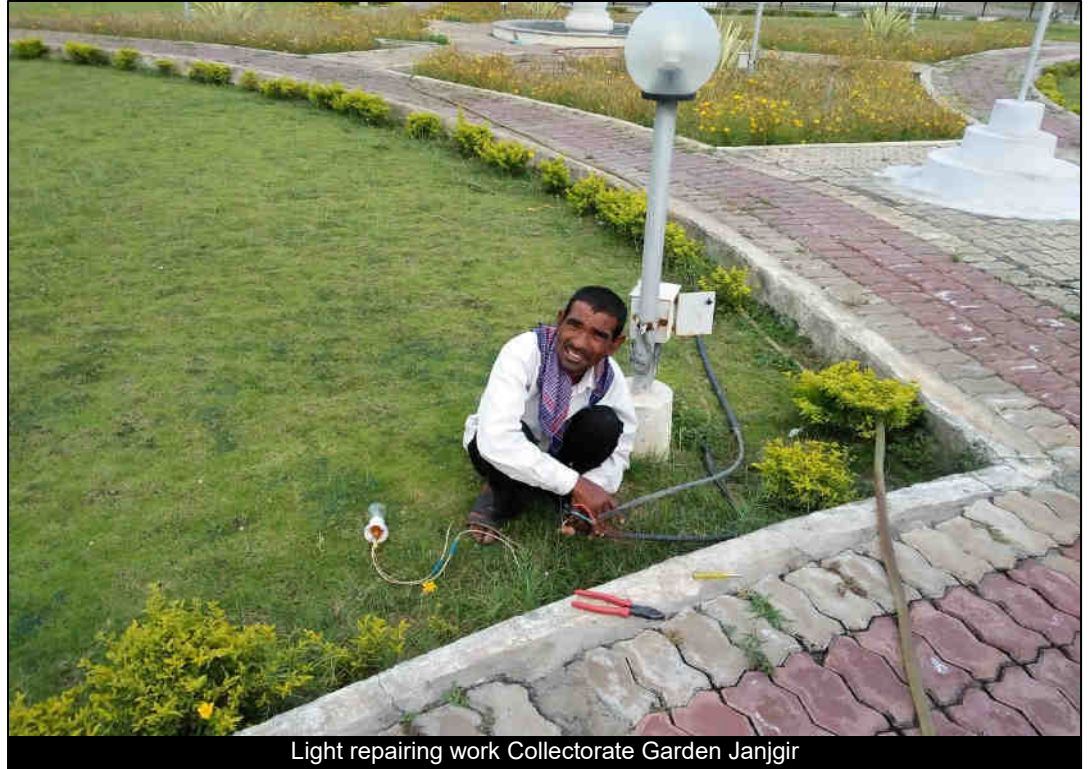
Si	Date	Village	Name of Anganwadi center	Boys	Girls	Total
1	12.04.2019	Amora	Anganwadi center Nawapara & Bastipara	17	24	41
2	17.04.2019	Taroud	Anganwadi center Bastipara	10	7	17
3	10.05.2019	Rogda	Anganwadi center No 01	9	12	21
<b>Grand Total</b>				<b>36</b>	<b>43</b>	<b>79</b>



## C. SUSTAINABLE DEVELOPMENT

### Light repairing work Collectorate Garden Janjgir

Due to Malfunction of light and wiring in the garden located in the Collectorate premises; the beauty of the collectorate campus garden was not visible at night therefore Nazir Department Requested to the CSR Department of KMPCL for repairing in the light. Underground Wiring and light has been Repaired in the garden by KMPCL CSR Department. Now collectorate campus garden is looking beautiful.



Light repairing work Collectorate Garden Janjgir



Light repairing work Collectorate Garden Janjgir



## Animal Husbandry Support Services

KSK Mahanadi Power Company Limited provided support for animal husbandry services in our affected villages. During transition of season, animal becomes affected from infections. A trained veterinary support staff is caring animals from different diseases. The veterinary services are improved now in the project villages. Farmers are getting better veterinary services for agricultural activities. During the first quarter of the year, total 34 animals are treated. Villagers are happy by getting service from KMPCL.

Sl.	Date	Beneficiaries	Village	Animal	Disease	Medicines
1	2 .04. 2019	Bhujbal Yadav	Nariyara	Cow	Kinni Peshwa	Butox
2	3 .04. 2019	Rajkumar Yadav	Nariyara	Cow	Kinni Peshwa	Butox
3	5 .04. 2019	Fagu Ram Yadav	Nariyara	calf	Kinni Peshwa	Butox
4	8 .04. 2019	Kirtan	Nariyara	calf	Kinni Peshwa	Butox
5	9 .04.2019	Mahesh Karsh	Nariyara	Cow	weakness	Neurobionics, Calcium
6	10 .04.2019	Sanjay Sahu	Nariyara	Cow	Kinni Peshwa	Butox
7	12 .04.2019	Raju Sahu	Nariyara	calf	Kinni Peshwa	Butox
8	14 .04.2019	Mani Ram	Nariyara	Cow	Pain & Swelling	Penicillin, Dressing, Avil
9	16 .04.2019	Manohar	Nariyara	Cow /Calf	Kinni Peshwa	Butox
10	20 .04.2019	Ramlal	Nariyara	Cow	Pain & Swelling	Prednisolone, Budsu, Avil
11	23 .04.2019	Lala Sahu	Nariyara	calf	Fever	Dexamethasone, Paracetamol
12	25 .04.2019	Sanjay Kumar	Nariyara	Cow	Pain & Swelling	Prednisolone, Budsu, Avil
13	3 .05. 2019	Ra.05.an	Nariyara	Cow /Calf	Kinni Peshwa	Butox
14	5 .05. 2019	Avadhesh	Nariyara	Cow	Fever	Dexamethasone, Paracetamol
15	7 .05. 2019	Ramcharan	Nariyara	Ox	Pain & Swelling	Butox
16	9 .05. 2019	Narendra	Rogda	calf	Diarrhea	Imodium tab, Gentamicin, Avil
17	11.05.2019	Yougal Kishor	Rogda	calf	Wound	Neurobionics, Calcium, Penicillin
18	14 .05.2019	Mahendra	Nariyara	Cow	weakness	Neurobionics, Calcium
19	18 .05.2019	Pavan Kumar	Sonsari	calf	Fever	Dexamethasone, Paracetamol
20	20 .05.2019	Badri Prashad	Nariyara	Cow	Pain & Swelling	Penicillin, Dressing, Avil
21	25 .05.2019	Megha Ram	Nariyara	Cow	Pain & Swelling	Butox
22	29 .05.2019	Gopichand	Nariyara	Cow	Indigestion	Prednisolone, Budsu, Avil
23	01.06.2019	Mahesh Karsh	Nariyara	calf	weakness	Calcium, Toby weight
24	04.06.2019	Mannu Patel	Nariyara	Cow	Fever	Oxy, Malakasis, Evil
25	06.06.2019	Ra.05.an	Rogda	calf	Fever	Oxy, Malakasis, Evil
26	10.06.2019	Nirmal chand	Nariyara	Cow	Fever	Gentamycin, Malakasis, Dexa
27	14.06.2019	Raju Yadav	Nariyara	Cow	Kinni Peshwa	Albandazole, Butox
28	17.06.2019	Pamod Singh	Nariyara	Calf	Diarrhea	Albandazole, Sulfa bolas
29	19.06.2019	Gajanad Patel	Nariyara	Cow	Fever	Gentamycin, Malakasis, Dexa
30	22.06.2019	Prakas Patley	Nariyara	Cow	Fever	Gentamycin, Malakasis, Dexa
31	24.06.2019	Santosh Dhiwar	Nariyara	Cow	Pain & Swelling	Buds, Mega sum, Dexa
32	26.06.2019	Hriday Lal	Rogda	OX	Pain & Swelling	Prednisolone, Buds, Avil
33	27.06.2019	Sushil Nirmalker	Jhalmala	calf	Kinni Peshwa	Albandazole, Butox
34	28.06.2019	Jeevan Tandan	Nariyara	OX	Pain & Swelling	Prednisolone, Buds, Avil



Veterinary support Beneficiary Narendra Rogda

## D. INFRASTRUCTURE DEVELOPMENT

### Installation of LED street light (04 Nos) at Nariyara village

In the evening in ward no.07 and 10 in Nariyara village. Villagers are facing difficulties in walking so sarpanch gram panchayat has requested to install street light. The CSR department has been installation of 04 Nos street light from AWC to Sanjay tripathi House ward no 07 (3 Nos) and Patharra para community building ward no 10 (1 Nos) In the Nariyara Village. Villagers are very happy and thanked Kmpcl for this good work



Installation of LED Street light at Ward 07 and 10 Nariyara village

## Repairing of 27 Govt. and KMPCL Handpumps at Nariyara, Taroud, Amora, Banahil and Rogda villages

During this period, CSR department of KMPCL repaired 27 Govt. & KMPCL hand pumps of Nariyara, Taroud, Amora, Rogda & Banahil villages. These hand pumps were earlier installed by KMPCL at project affected village. Handpumps were damaged and require repairing works in these villages. During the half year period from April to September 2018. Villagers are happy by getting Handpumps repaired and receiving uninterrupted drinking water supply.



Repairing of Handpump ward No 02 Nariyara village

Si.	Village	Details of CSR Work	Place
1	Nariyara	KMPCL Handpump	Near Raghvendra Vyas House ward No 2
2	Nariyara	KMPCL Handpump	Near Govt. Higher Secondary school, Sanjay Nagar,
3	Nariyara	KMPCL Handpump	Near Vicky Cloth Center ward No. 03
4	Nariyara	KMPCL Handpump	Near Mahaveer Sahu House ward No. 2
5	Nariyara	KMPCL Handpump	Near Govt. Higher Secondary school, Sanjay Nagar,
6	Nariyara	Govt. Handpump	Near Muktidham
7	Taroud	Govt. Handpump	Near Bajrang Chowk Ward no 12
8	Taroud	KMPCL Handpump	Near AWC Canal Road Ward No 01
9	Taroud	Govt. Handpump	Gayitri Rice mill ward no 20
10	Taroud	Govt. Handpump	Near Bajrang Chowk Ward no 12
11	Taroud	Govt. Handpump	Arjun Nagar Ward No 01
12	Taroud	Govt. Handpump	Arjun <b>nagar</b> Near Community Building ward No 1
13	Taroud	KMPCL Handpump	Sahu Para Ward No 13
14	Taroud	Govt. Handpump	Near Kamal Kant Yadav House Ward No 06
15	Taroud	Govt. Handpump	Near panna Nayak house Ward no 18
16	Taroud	Govt. Handpump	Near Vidya Panch House ward No 05
17	Taroud	Govt. Handpump	Govt. Handpump Bajrang chowk ward no 12
18	Taroud	KMPCL Handpump	KMPCL hand pump Nayak Mohalla ward no 15
19	Taroud	Govt. Handpump	Govt. Handpump Gayitri Rice mill ward no 20
20	Amora	KMPCL Handpump	Near Amanara
21	Amora	KMPCL Handpump	Near Panchayat Bhawan
22	Amora	KMPCL Handpump	Near Cultural Stage (Ward 17)
23	Banahil	KMPCL Handpump	Jhalmala Road Ward No 10
24	Banahil	KMPCL Handpump	Mahamaya Mandir Ward No 07
25	Banahil	KMPCL Handpump	Near Jageshwar Yadav House Ward No 05
26	Rogda	KMPCL Handpump	Near School Ward No 10
27	Rogda	KMPCL Handpump	Near School Ward No 10





Repairing of Handpump Ward No 12 Taroud



Repairing of Handpump Ward No 10 Rogda

### Shifting and Installation of Submersible pump (3HP) word no 18 Near Mukti Dham Nariyara

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for shift the submersible pump (3HP) at Near Mukti Dham ward No 18 Nariyara. This Submersible pump (3HP) was used to Sagar Para supply drinking water. Water level in Sagar Para Nariyara has been down few days, and villagers were unable to get the drinking water. As per request the KMPCL CSR department



Shifting and Installation of Submersible pump (3HP) word no 18 Near Mukti Dham Nariyara

has shifted the submersible pump (3HP) to near Mukti Dham ward No 18. Now villagers are getting regular and interrupted drinking water supply.



## Repairing of Submersible Pump(7.5HP) at Patharra para ward No 10 Nariyara

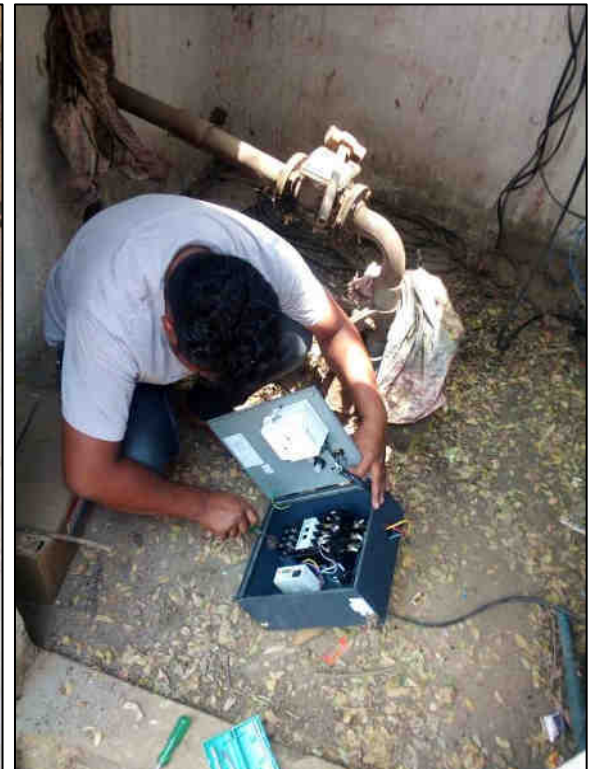
Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for the repair and installation of submersible pump (7.5 HP) at Patharra para ward No 10 Nariyara. This Submersible pump (7.5 HP) is used to supply drinking water in Villagers Nariyara and became defunct few days, and villagers were unable to get the drinking water. As per request KMPCL has repaired and installation of submersible pump (7.5 HP). Now villagers are getting regular and interrupted drinking water supply.



Repairing of Submersible Pump (7.5HP) at Patharra para ward No 10 Nariyara

## Repairing of Panel and wire Submersible Pump (3HP) at Near Panjab National Bank ward No 10 Nariyara

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for the repair and installation of Repairing of Panel and wire Submersible Pump (3HP) at Near Panjab National Bank ward No 10 Nariyara. This Submersible pump (3HP) is used to supply drinking water in Villagers Nariyara and became defunct



Repairing of Panel and wire Submersible Pump (3HP) at Near Panjab National Bank ward No 10 Nariyara

few days, and villagers were unable to get the drinking water. As per request KMPCL has repaired and installation of Repairing of Panel and wire Submersible Pump (3HP) at Near Panjab National Bank ward No 10 Nariyara. Now villagers are getting regular and interrupted drinking water supply.

## Roof Repairing Work Govt. Middle School Pakariya Village

During the first quarter of the year, head Master Of Govt. Middle School Pakariya had requested to repair the roof of extra room so that extra classes for Student will be facelifted the roof was damaged and Students were not able to study in rainy Session So CSR Department of KMPCL has repaired the extra room the Student And Had Master Given Thanks.



Roof Repairing Work Govt. Middle School Pakariya Village

## Repairing of pipe line main valve at OHWT Amora

To provide better drinking water supply Govt. PHE Department is structuring Drinking Water Project in Amora village. One Overhead Water Tank (OHWT) of 1 lakh litter capacity is constructed of ward 6 Sidhbaba Mohalla, Amora village and established submersible pump and constructed pump house and connected it to water pipe line supply.



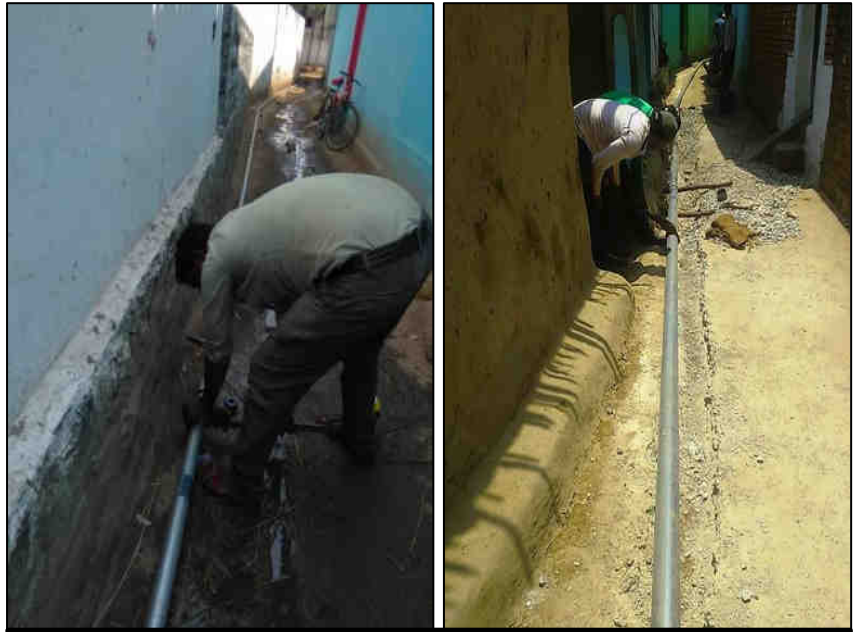
Repairing of pipe line and main valve of OHWT-Amora

Last month main valve of OHWT was found damaged with leakage so people were not getting proper water supply. As per the request of Sarpanch Gram panchayat KSK Mahanadi Power Company Limited has successfully installed 01 Nos of main valve work sorted out the problem of supply drinking water.



## Pipeline Extension work 300 meter ward no.4, 5, 6, 13, and 16 at Nariyara village

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for Extension of pipeline in ward no 4, 5, 6, 13, and 16 total 300 meter in the village. Nariyara is Main Project affected village .There is shortage of drinking water in the village. The water Level here is down and the drinking water is saline. As per request of Sarpanch immediately 300 meter pipeline Extension work has been done during the first quarter of the year. CSR Department of KMPCL. Now Villagers are getting regular water supply. The details in the pipeline Extension are as follows-



Pipeline Extension work ward no. 4, 5 at Nariyara village

Si.	Place	Length in Meters
1	Near Dilip Rathore house to Orgesh Shandilya House in ward no 05	80
2	Near Dilip Rathore house to Upendra Shandilya House in ward no 06	85
3	Near Johan House to Hemlal Sahu House in ward no 13	70
4	Near Ashok Rathore house to Sukhdhan Rathore House in ward no 04	40
5	Main Road to Ghnaram Nirmalker House in ward no 16	25
<b>Total Length in meter</b>		<b>300</b>



Pipeline Extension work 300 meter ward no. 6, 13, and 16 at Nariyara village

## Pipeline Extension work 160 meter ward no. 20 at Taroud village

Sarpanch Gram panchayat Taroud has requested to KMPCL CSR Department for Extension of pipeline in Near AWC center No 04 to Hari sahu House ward no 20 total 160 meter Extension Work in the village. There is shortage of drinking water in the village. The water Level here is down and the drinking water is saline. As per request of Sarpanch immediately 160 meter pipeline Extension work has been During the first quarter of the year CSR Department of KMPCL. Now Villagers are getting a regular water supply.



Pipeline Extension work 160 meter ward no. 20 at Taroud village

## Repairing of pipe lines of drinking water supply at Rogda Village

To strengthen Drinking Water supply in Rogda KSK Mahanadi Power Company limited implementing Drinking Water Project. In this, an overhead Water tank is constructed at Bastipara, Bore well drilling submersible Pump installation, Pump house construction is completed. In few wards there were some leakages in water pipe lines so that water supply is being affected. Drinking water Seeing the need and importance of work, CSR department repaired the pipe lines of water supply in OHWT Now sufficient drinking water is available to the people of this wards. Villagers are happy by getting drinking water supply in their house.



Repairing of pipe lines of drinking water supply at Rogda Village



## Repairing of Submersible Pump(5HP) at OHWT Rogda

Sarpanch Gram panchayat Rogda has requested to KMPCL CSR Department for the repair and installation of submersible pump (5 HP) at OHWT Rogda. This Submersible pump (5 HP) is used to supply drinking water in Village Rogda and became defunct from few days, and villagers were unable to get the drinking water. As per request KMPCL has repaired and installation of submersible pump (5 HP). Now village are getting regular and interrupted drinking water supply.



Repairing of Submersible Pump (5HP) at OHWT Rogda

## Leveling work OHWT at Amora village

During the first quarter of the year, the CSR department of KMPCL has done Leveling work at Govt. OHWT Amora. Sarpanch Gram panchayat Amora has requested CSR Department for the Leveling Work at OHWT Amora. Leveling work has completed successfully with Murum and stone dust by CSR Department. Now Villagers are happy and thanked to CSR department of KMPCL for this work.



Leveling work OHWT at Amora village

## Repairing Panel and wire of Submersible Pump (5HP) at Bastipara OHWT Rogda

Sarpanch Gram panchayat Rogda has requested to KMPCL CSR Department for the new installation of Panel and wire Submersible Pump (5HP) at Bastipara OHWT Rogda. This Submersible pump (5HP) is used to supply drinking water in the Village, it became defunct from few days, and villagers were unable to get the drinking water. As per request KMPCL has new installation of Panel and wire Submersible Pump (5HP) at Bastipara OHWT Rogda.



Repairing Panel and wire of Submersible Pump (5HP) at Bastipara OHWT Rogda

Now villagers are getting regular and interrupted drinking water supply.

## Installation and repairing work of 6 Nos Street light at Police Station Mulmulla

During the first quarter of the year, CSR department of KMPCL has installed and repaired 06 nos of Street lights at Police Station Mulmulla. Police station Mulmulla has requested for repairing works. Due to defunct street lights there was a black out in front of police station. The CSR Department of KMPCL has completed the work successfully at Police station Mulmulla.



Installation and repairing work of 6 Nos Street light at Police Station Mulmulla





Installation and repairing work of 6 Nos Street light at Police Station Mulmulla

### Fitting of 04 Nos ceiling Fan and Electrification at Govt. Middle School Rogda Village

During the first quarter of the year, in course of CSR activities, KMPCL found that there are 04 ceiling fans required at Govt. Middle School of Rogda Village. Due to humidity students feel very hot in summer and rainy seasons. School required ceiling fan with complete electricity fitting. As per request by students and teaching Staff CSR department provided 04 ceiling fans along with complete wiring and its installation. Students and Teacher staff thanked CSR department of KMPCL for providing such kind of infrastructural support.



Fitting of 04 Nos ceiling Fan and Electrification at Govt. Middle School Rogda Village



## D. CULTURAL AND COMMUNITY SUPPORT

### Organized "World Environment Day" Program in neighbouring 02 villages

As part of the World Environment Day programme, Tree Plantation, Environment Awareness Rally, Seminar and Drawing competition, for school students of Govt. Primary School Taroud and Amora were held ahead in the function and prizes were distributed to the winners of this various competitions by the Chief Guest and other dignitaries. Speaking on the occasion, MR Prafool Tiwari stressed upon need to preserve and conserve the environment. He said that man depends on nature for his living as such through it, receives his requirements. He also pointed out that it is the duty of each and every citizen to protect the environment. Mr. Vivek Pandey speeches about the



Tree Plantation Govt. Middle School Bus Stand Taroud



"World Environment" Awareness Rally Govt. Middle School Bus Stand Taroud

importance of environment and how each living being is a vital component of this environment, Significance and varied themes of World Environment Day were conveyed to the audience by KMPCL CSR team. This Program was Organized the guidance of DR.G.K. Ojha Sir Manager CSR department. To mark the occasion, the programme concluded by planting saplings around the Playground in front of School Campus. On this occasion present Mr. Kuldip sahay Patle Sarpanch representative, MR. Ranvir Singh Panch, Mr. Puniram Panch, Mr. Santosh Markam and

Villagers were present. Similarly World Environment Day celebrated in Govt. Primary School Nawapara Amora village by organizing tree plantation activity and Drawing and poster competition, for school students also participated in the tree plantation around the School campus along with the prominent person and Panchayat member in the village.



"World Environment" Seminar Govt. Middle School Bus Stand Taroud



"World Environment": Awareness Rally Amora



"World Environment": Tree Plantation Taroud

# **ANNEXURE - V**



**Annexure V**

<b>Particulate Matter Emission's Result (mg/Nm<sup>3</sup>)</b>			
<b>Month</b>	<b>Unit # 3 (600 MW)</b>	<b>Unit # 4 (600 MW)</b>	<b>Unit # 2 (600 MW)</b>
Apr-19	35.8	37.1	25.4
May-19	28.8	32.0	21.7
Jun-19	Shutdown	29.6	20.8
Jul-19	Shutdown	31.5	22.3
Aug-19	34.8	31.2	21.6
Sep-19	31.4	36.2	24.3
<b>Average</b>	<b>32.7</b>	<b>32.9</b>	<b>22.6</b>

# **ANNEXURE - VI**

Images of rain water harvesting measures implemented during project stage:



Figure 1- Recharge Well No 1



Figure 2 Recharge Well No 2





Figure 3 Recharge Well No-3



Figure 4 Recharge Well No-4

**Storm water collection well for recharge the ground**



Run Off Collection Tank



Largest RWH Structure-  
Reservoir-3



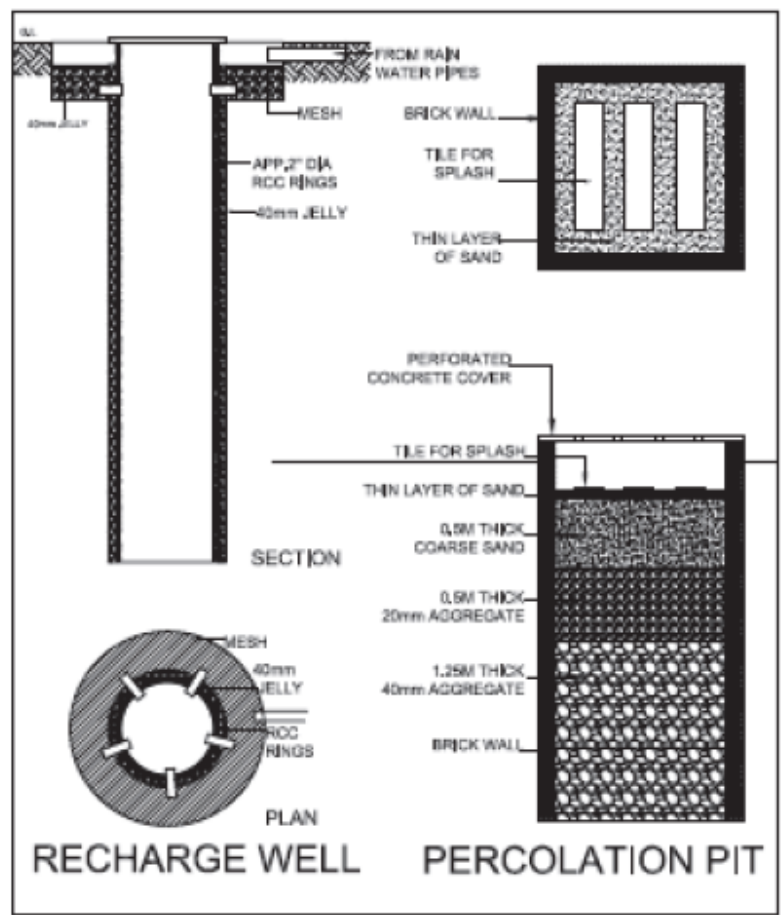


**Image of Project Site- At Present ( Source : Google Earth)**



**PROPOSED RWH STRUCTURES DURING OPERATION PHASE:**





The recharge well and a percolation pit



### Annual Runoff Calculations:

Annual Run off Calculations				
Catchment	Area (Sq.Mtrs)	Run-Off Coeff.	Av. Annual Rainfall(mm)	Total Run off pers annum ( KL)
Total Road area	131753	0.9	1157	137194.3989
Other Open area	1948247	0.6	1157	1352473.067
Total Site area	2080000			1489667.466

### RECHARGE WELL CALCULATIONS

#### Volume of one recharge well:

**Description Qty units**  
**Diameter** 1.5 m  
**Radius** 0.75 m  
**Depth** 6 m  
**Volume** 10.59 cubic meters

Total of 147 recharge wells with a combined volume of 1579.027 cubic meters Over and above this, we can assume a 30% recharge rate.

This means that even while the well is filling up with rainwater, at the same time recharge is happening. Therefore the effective capacity will be 30% more

**Effective recharge capacity- 2052.735 cubic meters**

# **ANNEXURE - VII**

कार्तिक सुकत पक्ष-5, 2066

**बिलासपुर**

बिलासपुर

**आम सूचना**

सर्व संबंधितों को सूचित किया जाता है कि वर्षा पावर कंपनी लिमिटेड को प्रस्तावित 6x600 मेगावाट कोयला आधारित ताप विद्युत परियोजना ग्राम- सरिरा, तहसील अकलतरा, जिला जांघौर-चाम्पा (छ.ग.) को स्थापना हेतु पर्यावरण स्वीकृति पत्र क्रमांक-J13012/44/08-IA, II (T) के माध्यम से पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) द्वारा प्रदान की गई है। इस पत्र की प्रतिलिपि का अवलोकन छ.ग. पर्यावरण संरक्षण मंडल के कार्यालय तथा पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) की वेबसाइट <http://envfor.nic.in> पर भी किया जा सकता है।

विकास एवं पर्यावरण विभाग  
8-2-293/A/43/A, Road No. 22, Jubilee Hills  
हैदराबाद

**आम सूचना**

सर्वसाधारण को सूचित किया जाता है कि भारत सरकार के वन एवं पर्यावरण के द्वारा गठित छ.ग. राज्य स्तरीय पर्यावरण प्रभाव निर्धारण प्राधिकरण के आदेश क्रमांक 275/SEIAA-CG/EC/Mining/BSP/72/09 dated 16.10.2009 के द्वारा मेरुस अग्रवाल मिनरल्स बिलासपुर को ग्राम खरकेना, तहसील तखतपुर, जिला- बिलासपुर (छ.ग.) की डोलोमाइट खदान (5.70 हेक्टेयर) पर खनन हेतु पर्यावरणीय स्वीकृति प्रदान कर दी गयी है। उक्त पर्यावरणीय स्वीकृति आदेश की एक प्रति छ.ग. प्रदूषण नियंत्रण बोर्ड रायपुर के समक्ष सुरक्षित है तथा उक्त आदेश को छ.ग. राज्य स्तरीय पर्यावरण प्रभाव निर्धारण प्राधिकरण की वेबसाइट [www.envfor.nic.in](http://www.envfor.nic.in) पर भी देखा जा सकता है।

अतः सर्वसाधारण को सूचित हो।  
अधिकृत हस्ताक्षरकर्ता  
मेरुस अग्रवाल मिनरल्स  
लाजपतरायनगर, बिलासपुर (छ.ग.)

अत्यंत महत्वपूर्ण सूचना  
सर्वसाधारण को सूचित किया जाता है कि वर्षा पावर कंपनी लिमिटेड को प्रस्तावित 6x600 मेगावाट कोयला आधारित ताप विद्युत परियोजना ग्राम- सरिरा, तहसील अकलतरा, जिला जांघौर-चाम्पा (छ.ग.) को स्थापना हेतु पर्यावरण स्वीकृति पत्र क्रमांक-J13012/44/08-IA, II (T) के माध्यम से पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) द्वारा प्रदान की गई है। इस पत्र की प्रतिलिपि का अवलोकन छ.ग. पर्यावरण संरक्षण मंडल के कार्यालय तथा पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) की वेबसाइट <http://envfor.nic.in> पर भी किया जा सकता है।

**सभी अतिथियों का शांत दिनांक : 23.10.2009**  
**स्थान : शा. बालक उ.मा शांत**  
**सौजन्यमठकेदार सुयश वि**

49  
सर्वसाधारण को सूचित किया जाता है कि वर्षा पावर कंपनी लिमिटेड को प्रस्तावित 6x600 मेगावाट कोयला आधारित ताप विद्युत परियोजना ग्राम- सरिरा, तहसील अकलतरा, जिला जांघौर-चाम्पा (छ.ग.) को स्थापना हेतु पर्यावरण स्वीकृति पत्र क्रमांक-J13012/44/08-IA, II (T) के माध्यम से पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) द्वारा प्रदान की गई है। इस पत्र की प्रतिलिपि का अवलोकन छ.ग. पर्यावरण संरक्षण मंडल के कार्यालय तथा पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) की वेबसाइट <http://envfor.nic.in> पर भी किया जा सकता है।

दूसरा स्थान मिल  
अशोक को

**बिलासपुर**

विद्युत परियोजना को स्थापित करने के लिए वर्षा पावर कंपनी लिमिटेड को प्रस्तावित 6x600 मेगावाट कोयला आधारित ताप विद्युत परियोजना ग्राम- सरिरा, तहसील अकलतरा, जिला जांघौर-चाम्पा (छ.ग.) को स्थापना हेतु पर्यावरण स्वीकृति पत्र क्रमांक-J13012/44/08-IA, II (T) के माध्यम से पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) द्वारा प्रदान की गई है। इस पत्र की प्रतिलिपि का अवलोकन छ.ग. पर्यावरण संरक्षण मंडल के कार्यालय तथा पर्यावरण एवं वन मंत्रालय, भारत सरकार (MOEF) की वेबसाइट <http://envfor.nic.in> पर भी किया जा सकता है।

**आम सूचना**

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अधिकृत हस्ताक्षरकर्ता  
(विशेष कुमार अग्रवाल)  
मेरुस अग्रवाल मिनरल्स  
लाजपतरायनगर, बिलासपुर (छ.ग.)

**आम सूचना**

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क्र.सं.	विवरण	प्रकार	मूल्य
1	...	...	...
2	...	...	...
3	...	...	...
4	...	...	...
5	...	...	...



# **ANNEXURE - VIII**

**Works**

Near Naiyara Village,  
Akaltara Tehsil,  
Janjgir - Champa District,  
Chhattisgarh  
Tel (Site) : 07817-284001

**Registered Office**

8-2-293/82/A/431A  
Road No.22, Jubilee Hills  
Hyderabad - 500033  
Tel : +91-40-23559922-25  
Tel : +91-40-23558701  
Fax: +91-40-23559930

Ref.:MoEF&CC,NPUR/PDKN/2500108/606

23<sup>rd</sup> May. 2019

To

The Addl. Principal Chief Conservator of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Regional Office (WCZ), Ground Floor, East Wing,  
New Secretariat Building Civil Lines,  
Nagpur-440001  
Maharashtra

**Sub:** - Six Monthly Status of Compliance for Environmental Clearance granted to 6x600 MW Coal Based Thermal Power Project located in village: Nariyara, Tehsil-Akaltara, District-Jangir, Champa, Chhattisgarh by M/s KSK Mahanadi Power Company Limited,- Reg.

**Ref:** - i) Ministry's Letter No. - J13012/44/08 -IA.II (T), Dt. 19.10.2009  
ii) Re-validation Letter No. - J-13012/44/2008-IA.II (T), Dt. 19.04.2018.

Sir,

With reference to the above subject, please find enclosed herewith our Status on Compliance to Environmental Clearance from **October-2018 to March-2019**.

For favour of your kind information and record please.

Thanking You.

Your's sincerely,  
For KSK Mahanadi Power company Limited

  
(Authorized Signatory)



**Copy to:** (1) The Member Secretary, CECB, Atal Nagar, Raipur, Chhattisgarh.  
(2) The Regional Officer, CECB, Bilaspur, Chhattisgarh.

**Encl:** Six Monthly Environmental Clearance Compliance Report- Oct'18 to Mar'19.

# **ANNEXURE - IX**





## KSK Mahanadi Power Company Limited

CIN No. : U40300TG2009PLC06462

**Works**  
Near Naiyara Village,  
Akaltara Tehsil,  
Janjgir - Champa District,  
Chhattisgarh  
Tel (Site) : 07817-284001

**Registered Office**  
8-2-293/82/A/431A  
Road No.22, Jubilee Hills  
Hyderabad - 500033  
Tel : +91-40-23559922-25  
Tel : +91-40-23558701  
Fax: +91-40-23559930

**Ref. No: CECB,BILAS/PDKN/2500108/ 1117**

**Date: 09.09.2019**

**To**  
**The Regional Officer,**  
**Chhattisgarh Environment Conservation Board,**  
**Vyapar Vihar, Near Pt. Deendayal Upadhyaya Park,**  
**Bilaspur, Chhattisgarh.**

**Sub:** - Submission of Environmental Statement in Form-V for last Financial Year 2018-19-Reg.

- Ref:** -i) Consent for Operation No. – 763/TS/CECB/2015 Dt. 22.05.2015  
ii) Renewal Consent for Operation No.1602/TS/CECB/2018 (Air) and 1600/TS/CECB/2018 (Water) Dtd.14.05.2018 Dtd. 14.05.2018  
iii) Environmental Clearance No. (Amendment & Extended of Validity)-13012/44/2008-IA.II (T) Dt.19.04.2018 & J-13012/44/2008-IA.II (T), Dt.19.10.2009  
iv) Rule-14 of Environmental (Protection) Rule, 1986

**Sir,**

In inviting references to the above on the mentioned subject, please find herewith the enclosed 'Environmental Statement in Form-V' for last Financial Year **2018-19** with duly filled-up under Rule-14 of the Environmental (Protection) Rules, 1986 for operational Units-**3, 4 & 2 (3 x 600MW)** of M/s KSK Mahanadi Power Company Limited.

Submitted for your kind Perusal and records please.

Thanking You,  
Yours faithfully,

For **KSK Mahanadi Power company Limited**

**(Authorized Signatory)**



**Copy to:** i) The Member Secretary, CECB, Sector-19, Atal Nagar, Raipur, Chhattisgarh.  
ii) The Addl. PCCF(C), MoEF &CC, Regional Office (WCZ), Nagpur, Maharashtra

**Encl:** Environmental Statement in **Form-V- FY 2018-19.**

# **ANNEXURE-X**

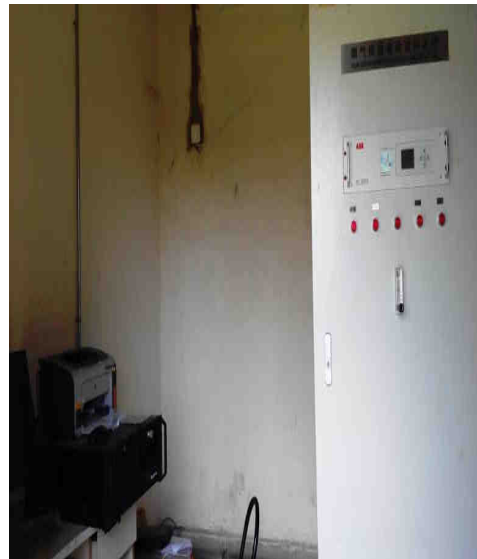
## Photographs of Online Monitoring equipments installed in KMPCL

### 1. CEMS installed at Stack-I, II & III.

#### Dust Monitor

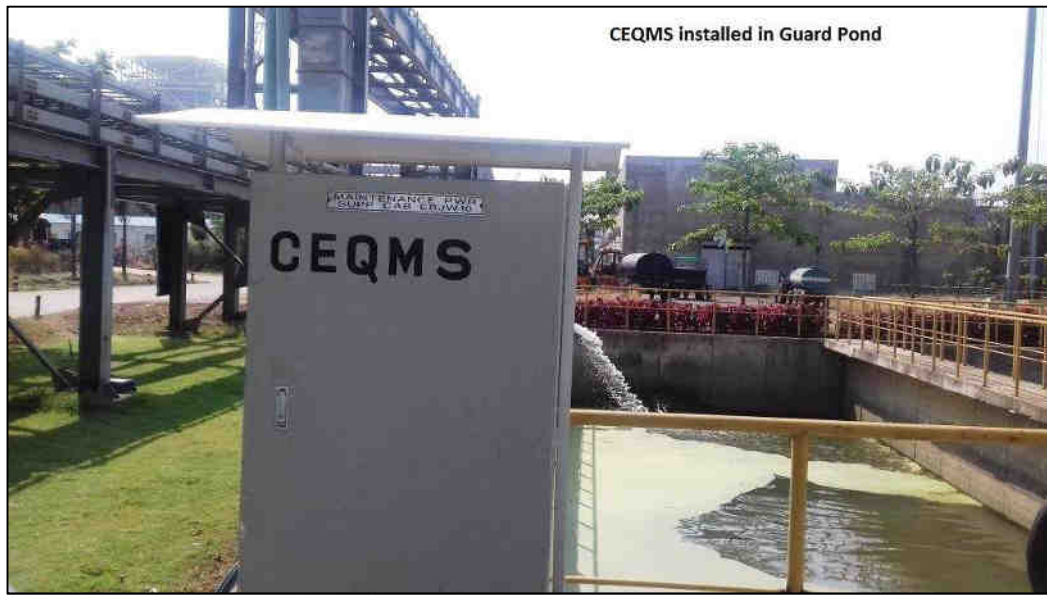


#### SO<sub>2</sub>, NO<sub>x</sub> & CO Analysers and Dust Monitor





## 2. CEQMS installed in Guard Pond Water.



**3. CAAQMS installed at 04 different locations inside Campus.**

**I) CAAQMS-1 installed in Main Gate**



**ii) CAAQMS-2 installed near Switch Yard.**



**iii) CAAQMS-3 installed at Sub-station.**



iv) CAAQMS installed at Camp office.



Display Board showing online status of Environmental Parameters at Main Gate

