

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

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

23rd 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
Maharastra

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.

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:
OCT. 2018
TO
MARH.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.	As per Fly Ash Notification S.O. 2804(E), 3rd November, 2009, Fly Ash has been utilized by operational units with following manner: i) For 6 th Year operation of Unit#3 , 100% of Fly Ash has been utilized against the target of 100%. ii) For 5 th year of operation of Unit#4 , 100% of Fly Ash has been utilized against the target of 100% iii) For 2nd year of operation of Unit#2 , 70% of Fly Ash has been utilized against the target of 70% Long term action plan is enclosed as Annexure-I		
4	For post project monitoring, the proponent should set up piezometric monitoring station around the ash pond.	4 Nos. of Pizometric wells have been provided around the ash pond area. Images of Piezometers is enclosed as Annexure-II		
5	From 4 th year onwards, the transportation of coal should be through rail only.	 Complying. i) A state of art Railway Infrastructural facilities have been developed to transport coal through rail mode in KMPCL. ii) As per EC amended by MoEF &CC on 19.04.2018 on the basis of Coal transportation, status for the same as follows: a) 70% domestic Coal is being transported by Rail mode and 30% by Road. b) 100% imported Coal is being transported through Railway mode. 		
6	The green belt to be provided should be of canopy type with three tiers.	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, Peltoform, 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) As on date, total 3,99,910 nos. of saplings have been planted within the Plant premises in an areas about 274 hectares i.e 33% of total project area (828.46 Hectares) and further plantation is in		



		progress. Photos of the Greenbelt developed at site are attached as Annexure-III.		
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. 53.51 Crores have been spent for CSR activities, the detail of the work activities under CSR is enclosed as Annexure-IV . 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 ³ .	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/Nm3 and 30mg/Nm3. Note: Emissions from unit-I and Unit-II have been designed to operate less than 50 mg/Nm3 and in case of Unit-III, it is less than 30mg/Nm3. Average emission of Particulate Matter from operational Units- I, II & III are well within 20 to 50mg/Nm3. Details of stack emission are presented in Annexure-V.		
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: 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. 44 Nos. of Rain guns with Water spraying system has been installed in the Coal yard area. 172 Nos. Dust Suppression System & 28 Nos. Dry Fog System has been working in different raw material transfer points and handling section to control fugitive emission at CHP area. 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.		
11	A Sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	poperation, for treating bornestic waste water.		



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.	 Rain water harvesting structures have been constructed as per approved plan of CGWB. 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 Details are enclosed as Annexure-VI 		
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.	Regular Monitoring of ground water in and around ash dyke areas is being done to have checked the heavy metals into the ground water.		
	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.			
		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.		
17	A greenbelt of adequate width and density shall be developed around the plant periphery covering 1/3 rd of the project area with local species.	(i.e. Sisam, Peltraforms, Satvan, Karanj, SirisSimarua, Neem, 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 3,99,910 nos. of saplings have been planted within the Plant premises in an areas about 274 hectares i.e 33% of total project area (828.46 Hectares) and further plantation is in progress.		



		Photos of the Greenbelt developed at site is attached as Annexure-III.		
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_2 , NOx , 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 ₂ , NOx, 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 e a		
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 http://envfor.nic.in .	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 Annexure -VII 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, 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,	Status of compliance of EC conditions has been uploaded as stipulated and is being updated regularly on Six monthly basis.		



	the respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM,SO2, NOx (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.	
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 Apr. 2018 to Sept. 2018 has been submitted vide Letter No.MoEF&CC,NPUR/PDKN/2500108/1592 Dtd. 30.11.2018. Enclosed as Annexure-VIII
24	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 EC conditions and shall also be sent to the respective Regional Offices of MOEF by e-mail.	Environment Statement for the Financial year 2017-18 has been submitted vide KMPCL letter noCECB,BILAS/PDKN/2500108/692 Dtd.22.05.2018. Enclosed as Annexure-IX
25	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	
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	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.	 Date of financial closure: Feb, 2010. Date of start of land development work Nov, 2009. Unit No3 (1x600MW) is under operation since Sep 2013 Unit No4 (1x600MW) is under operation since Sep 2014 Unit No2 (1x600MW) is under operation since Feb 2018 Work is in progress on fast track basis for other remaining units. 		
29	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.	Noted & agreed. Being complied as per the requirements of CPCB and CECB Raipur, Chhattisgarh.		
	Additional conditions as per EC Amende	ed & Extended of Validity on 23.09.2015		
30	The total project area shall comprise of 828.46 Ha as stipulated while issuing the EC	Complied		
31	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.	As on date Rs.53.51 Crores has been spent for CSR activities, the detail of the work activities under CSR is enclosed as Annexure-IV . Similarly the report has been communicated to MOEF and Regional Office, Bhopal including CECB, Raipur on regular basis.		
32	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	Continuous online monitoring system for stack emissions is already installed & working w.r.t operational Units No. 3, 4 & 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 Annexure-X		
33	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.	Options of Harnessing of Solar power at available roof tops within the premises of is being explored out and details will be submitted shortly		



		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			
	A long term study of radio activity and	1. 300mm CC Flooring has been done in Coal yard area.			
34	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	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			
	for an in built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall	Following measures has been implemented for Ash Dyke area, to check the leaching of Heavy metals into the ground water table:			
	be put in place.	 Both Bottom & Fly ash Dykes has been floored with 0.75Micron LDPE. Four No's of Pizzo metric Wells have been constructed, along the periphery of ash Dykes, for regular monitoring of Qty& Quality of ground water to assess the contamination or leaching of heavy metals from ash dyke area 			
35	Mercury emissions from stack shall be monitored on periodic basis.	Stack Emissions monitoring is being done monthly intervals for SO2, NOx, CO & Particulate matter. Mercury and other heavy metals and reports submitting to SPCB.			
	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.	Following provisions have been made to control the Fugitive emissions:			
		Pulse Jet type bag filters have been installed at all the Transfer points meant for Coal transport from CHP area to boiler area.			
		44 Nos. of Rain guns with Water spraying system has been installed in the Coal yard area.			
36		172 Nos. Dust Suppression System & 28 Nos. Dry Fog System has been working at different raw material transfer points and handling section to control fugitive emission in CHP area.			
		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.			
		Apart from that a thick green belt is already developed around plant boundary to arrest fugitive emission from non-point sources.			
37	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.	Adequate measures had been implemented to take care of natural drainage system.			



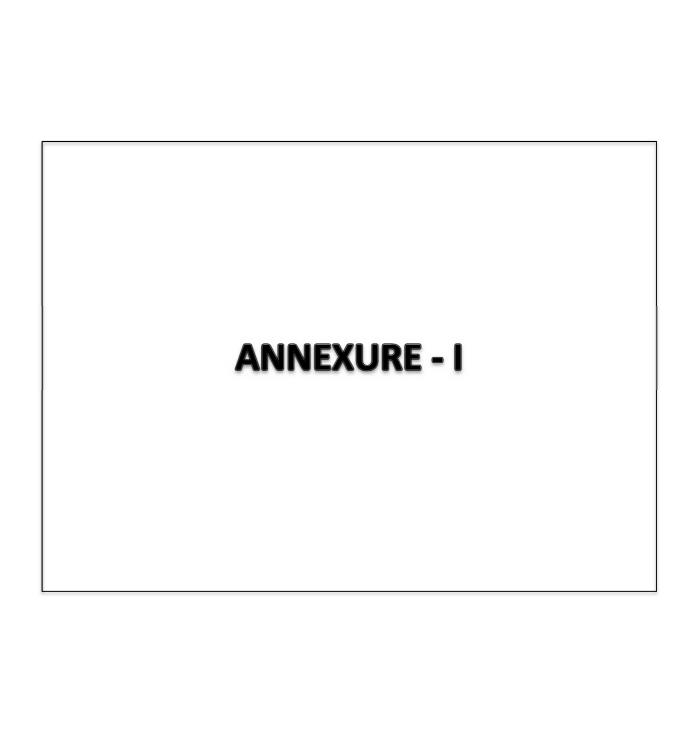
38	Fly ash shall not be used for agricultural purpose. No Mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such as that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, 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
	Details of 100% Fly ash utilization plan as	As per Fly Ash Notification S.O. 2804(E), 3rd November, 2009, Fly Ash has been utilized by operational units with following manner: i) For 6th Year operation of Unit#3, 100% of Fly
	per latest Fly ash Notification of GOI along with firm agreements/ MOU with	Ash has been utilized against the target of 100%.
39	contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method/ mechanism of bottom ash.	ii) For 5th year of operation of Unit#4, 100% of Fly Ash has been utilized against the target of 100%
		iii) For 2nd year of operation of Unit#2, 70% of Fly Ash has been utilized against the target of 70%.
		Long term action plan is enclosed as Annexure-I
	Green belt shall also be developed around the ash pond and above the green belt around the plant boundary.	For green belt, more than 30000 saplings have been planted all around the ash dyke area, covering area of approx. 25 Ha.
		A green belt of 5/6 tiers, in 100 mtr width is being developed, along with the periphery of the plant boundary.
		Species selection has been made on the basis of local Climatological factors and soil characteristics.
40		(i.e. Sisam, Peltoform, Satvan, Karanj, Siris, Simarua, Neem, Ganga emili, Pepal, Kadam, KesiaSamia, Chinour, Arjuna, Mango, Bargad, Jamun, Amla, Gulmohar are being used in rows to maintain canopy type and strata)
		As on date, total 3,99,910nos. of saplings have been planted within the Plant premises in an areas about 274 hectares i.e 33% of total project area (828.46 Hectares).
		Photos of the Greenbelt developed at site is attached as Annexure-III.
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 project site itself and shall be headed by	Environment Cell is already established which includes Environment Engineer, Environmental scientist, Ecologist, Horticulturist and social science experts from inception of project operations. Environmental cell head is directly reporting to



	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.	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.
	Additional conditions as per EC Amende	ed on 26.05.2016
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 SO2 & NOx limit, FGD installation design and planning is in line of requirement. The dead line of completion of project has assigned by CPCB is upto 31 March2022.
	Additional conditions as per EC Amende	ed and Extended of validity on 19.04.2018
50	 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. 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. 	Noted & Complied.



KSK Mahanadi Power Company Limited



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
а	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
С	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
е	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%



PIZZOMETER BOREWELLS AT KSK-MPCL













GREEN BELT DEVELOPMENT IN M/S KMPCL IN FY2018-19

Plantation Details:

Year	Areas of Plantation Inside Plant Premises.	Species	As on date total nos. of plantation.	Area Covered By Plantation (Ha.)
Upto FY 2017-18 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, Peltoform, Satvan, Karanj,Sirus Simarua, Neem, Ganga imili, Pepal, Kadam, Cassia Siamia, Chinour, Arjuna, Mango, Bargad, Jamun, Amla, Gulmohar	3,80,330 nos. 19,580 nos.	274 hectares i.e 33% of total project area (828.46 Hectares)
	Total	3,99,910 nos.		

Photographs for Planation:













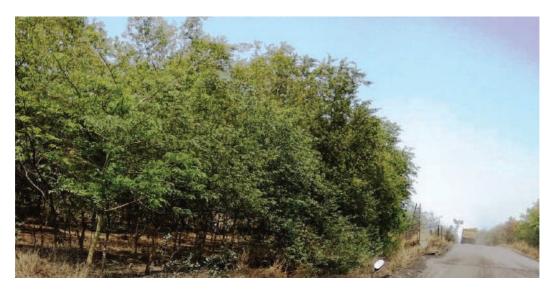






































KSK Mahanadi Power Company Limited

Corporate Social Responsibility – Expenditure from Oct.2018 to Mar. 2019

SI.no.	Focus Area	Till Sept2018	Oct2018 to Mar2019	Total
a1	Education	31965855	655877	32621732
a2	Health Care	265414655	4078778	269493433
а3	Sustainable Development	24811572	1117501	25929073
a4	Infrastructure Development	158892659	270633	159163292
a5	Cultural & Community Support	19488003	234737	19722740
а6	Miscellaneous expenses	6407460	272609	6680069
	Sub Total - (a)	506980204	66,30,135.00	513610339
b	Cost of Ambulance - (b)	512710	0	512710
С	Total - (c) = (a+b)	507492914	66,30,135.00	514123049
d	Corporate Donations - (d)	21000000	0	21000000
	Grand Total	52,84,92,914	6630135	535123049

CORPORATE SOCIAL RESPONSIBILITY

HALF YERLY PROGRESS REPORT (October 2018 to March 2019)



KSK MAHANADI POWER COMPANY LIMITED

(GROUP COMPANY OF KSK ENERGY VENTURES LIMITED)

CSR Half Yerly Progress Report : October to March 2019

KSK Power from knowledge

(Half Yearly news archive of Corporate Social Responsibility programs)

Oct to Mar. 2019

A. EDUCATION & CAPACITY BUILDING

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

Sanitary dispensing napkin machines and incinerators are not only ensuring that girls stay in school but also providing environment conservation. Mahanadi Power Company Limited installed 06 sets at Govt. Schools of Project Affected village. These have been fitted at the 03 High Schools, 02 Higher Secondary Schools and at 01 Girls hostel, the students living in hostel no longer have to panic in the case of an emergency. machines have especially been



sponsored for the girl student convenience and to ensure proper disposal of sanitary napkin after use. Girls have to slip a 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. Half yearly period from October to March 2019 there are total 3965 pads used by the strength of 680 students.

Us	Usability of Sanitary Pad Napkins in Govt. Schools by Adolescents Half yearly period from October to March 2019					
Si.	Village	School Name	No. of Students	No. of Pads used		
1	Nariyara	Govt. Girls High School, Sanjay Nagar	158	370		
2	Nariyara	Govt. Higher Secondary School, Sanjay Nagar	121	310		
3	Nariyara	Govt. Pre Metric Girls SC Hostel, Irrigation Colony	50	200		
4	Amora	Govt. Higher Secondary School, Loader Colony	219	350		
5	Pakariya	Govt. High School Pakariya	68	230		
6	Dongakohroud	Govt. High School, School Para	64	210		
	Total			3965		

E-Learning & Smart Classes started at Taroud, Rogda, Amora & dongakohroud village

KSK Mahanadi Power Company Limited started an E-Learning and Smart Class at Janshiksha Kendra of Taroud, Rogda, Amora, and Dongakohroud village. Objective of this program is to provide online education to children through computer, Internet and TV screen. Modern teaching methods and technology adopted for providing education to small children. Taroud, Rogda, Amora, and Dongakohroud is the Government school in the district



where such type of modern E-Learning and smart Classes started, School teaching staff and villagers thanked KMPCL and appreciated CSR Department for providing complete infrastructure for modern education. KSK Mahanadi Power Company Limited provided 4 Branded Computer set with UPS, LED Screen, Computer table, 25 melded chairs along with Writing pad mounted. During the inaugural ceremony beautiful cultural programs were presented by students. Objective of this program is to provide online education to children through computer, Internet and TV screen. Modern teaching methods and technology adopted for providing education to small children's. E-Learning and smart Classes started in Plant affected 5 villages Nariyara, Taroud, Rogda, Amora, and Dongakohroud 6 schools 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 class is to guide the students' in studies, the student is watching the TV screen. The student is responding promptly to the question asked by the teacher. 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 month of Half yearly period from October to March 2019					
Si.	Village	School Name	No of Beneficiary Students		
1	Nariyara	Mass Education Center _ Nariyara	245		
2	Taroud	Govt. Janpad Primary School, Santoshi Mandir	248		
3	Taroud	Govt. unnayan Primary School, Arjun Nagar	104		
4	Rogda	Govt. Primary School	117		
5	Amora	Govt. Primary School - Nawapara	146		
6	Dongakohroud	Govt. Primary School — indira aavaas	59		
		Total	919		

Govt. Middle School Taroud at installed 1 HP Submersible Pump and Drinking Water Facility

The Head Master and teacher Staff Govt. Middle School Taroud had requested to Submersible Pump and Drinking water Facility from the CSR Department. Drinking Water Facility was a major problem in project affected Villages and School. Continuous efforts are being made for Continuous drinking water Facility in the villages and schools the **CSR** Department. by According to the request, 1HP Submersible pump and drinking

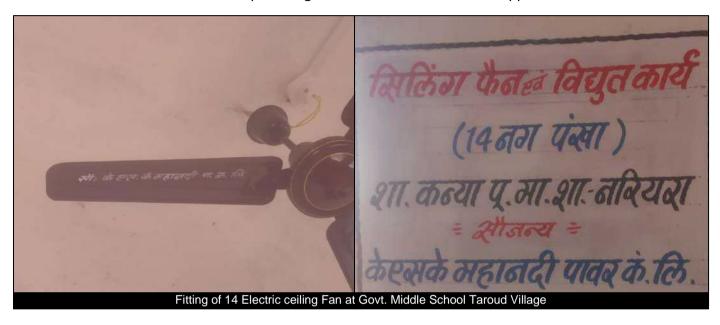


water facilities have been made available to the Govt. middle school Taroud by the CSR Department. Now the school will get regular water supply.



Fitting of 14 Electric ceiling Fan at Govt. Middle School Taroud Village

During the course of CSR activities, KMPCL found that there are 14 electric fans required at Govt. Middle School of Taroud Village. Students feel very hot during the humid summer and rainy seasons. Although electric facility is available in the school, but fan was required. As per request of students and teaching Staff CSR department provided 14 electric fans along with complete wiring and its installation. Students and Teacher staff thanked KMPCL for providing such kind of infrastructural support.



1 HP Submersible Pump installed in Govt. Primary School Murlidih

The Head Master and teacher Staff Govt. Primary School Murlidih had requested a Submersible Pump from the CSR Department. Drinking Water Facility was a major problem in project affected Villages and School. Continuous efforts are being made for Continuous drinking water Facility in the villages and schools by the CSR Department. According to request installation of 1 HP Submersible pumps in Govt.



Primary School Murlidih work was conducted by the CSR Department. Now the school will get regular water supply.

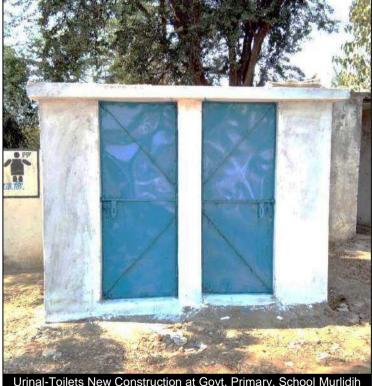
Urinal-Toilets new Construction and Repairing work at Govt. primary Schools Taroud, Murlidih And Banahil

KSK Mahanadi Power Company
Limited has provided support
for sanitation facility in Govt.
schools. In this sequence, Urinal
and Toilets are constructed
earlier at Govt. Primary School
Taroud, Murlidih and Banahil
villages, now there was the
requirement of Urinal-Toilets
new Construction and Repairing
work of toilets for student and
teaching staff. This Urinal-



Toilets new Construction and Repairing work is done by CSR department of KSK Mahanadi Power Company Limited. Now students and teaching staff are happy by getting Urinal-Toilets new Construction and Repairing work sanitation facilities in Govt. Primary School of Taroud, Murlidih and Banahil.





Fitting of Iron Door at Govt. Middle School Taroud

During the course of CSR activities, KMPCL found that there are Govt. Middle School Taroud it has been found that Iron made 2 doors Urinal and Toilets of School completely damaged,. As per the request of School Head master and Students KSK Mahanadi Power Company Limited CSR department feel the difficulties and accepted this proposal as priority CSR work and immediately started working on it has fabricated 2 numbers of iron doors and fitted in the Urinal and Toilets safe and secured.



Students and teaching staff thanked KMPCL for this infrastructural support to school.

Provided Furniture items at 03 Govt. School Murlidih & Nariyara villages.

The CSR department of KSK Mahanadi Power Company Limited has been requested by Head master and

teacher staff of Govt. Sankul Kendra / E-Learning & Smart Center Nariyara and Govt. Primary and middle School Murlidih for Table Almira and basic infrastructure. **CSR** Department of KSK Mahanadi Power Company Limited Office Table, Almira, water office chairs. Plastic jar, chairs. The main objective of this program is to keep the



school staff file safe, to make the office work easy and to provide clean water to the children's.



Millennium Program in Govt. Janpad Primary School Taroud

During this quarter from January to March 2019 Janpad Primary School Taroud has organized Millennium Program in which Collector Mr. Niraj Bansod, Mr. Ajit Vasant Zila panchayat CEO Janjgir — champa and Dr. Girish Kumar Ojha General Manager CSR were Chief Guest. This program was started by lighting the lamp by the Mr. collector Janjgir - Champa and cutting cake with the School Children. In this program, school children presented an amazing and beautiful presentation. CSR Department of KMPCL In this golden time, Distribution of



250 Nos writing materials(copy, pen and compass box) and the respected teacher, Anganwadi workers, Former and present students were shreephal and shawl honored by CSR Department of KMPCL was done.

8



B. HEALTH CARE

Organized 44 Rural Health Camps at Project affected villages

During this half yearly Period from October to March 2019 total 92 Rural Health Camps organized in our Project Villages. Camps organized once on every fortnightly basis in Nariyara, Taroud, Rogda, Amora, Murlidih, Latiya, Akaltara, Pakariya and Dongakohroud village. During these camps we provided health services to 3652 villagers. Due to winter season, villagers affected from several water related diseases, most of them were found of cold cough diseases like Fever, Dysentery, Diarrhea, Skin Disease, Anemia, Constipation, Dyspepsia and Worm



infection. During health camp medicines has been free distributed to patient by CSR medical team.

Si	Village	No. of Camps	Male	Female	Child	Total
1	Nariyara	8	135	143	133	411
2	Taroud	8	97	89	80	266
3	Rogda	10	150	93	85	328
4	Amora	9	117	137	119	373
5	Murlidih	7	159	115	157	431
6	Pakariya	9	94	89	90	273
7	Latiya	9	92	105	108	305
8	Dongakohroud	8	138	175	106	419
9	Akaltara	10	110	142	107	359
10	Banahil	9	121	100	78	299
11	Kharoud	5	110	52	26	188
Total		92	1323	1240	1089	3652

Organized 10 School Health Check-up Camps at Banahil, Amora and Pakariya village

KSK Mahanadi **Power** Company Limited organized school Health Check-up camp during this half yearly Period from October to March 2019 at Taroud, Amora, Nariyara, Dongakohroud, Akaltara, Rogda, Murlidih Pakariya and Banahil villages. During this camp total students were examined, weight and height children are measured and keep in records. our 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 school staff provided their extended support to make the camps successful.

Si	Date	Village	Name of School	Boys	Girls	total
1	29.10.2018	Banahil	Govt. Primary School Bus stand	59	77	136
2	29.11.2018	Amora	Govt. Primary School Nawapara	25	27	52
3	29.12.2018	Pakariya	Govt. High School Pakariya	33	63	96
4	22.02.2019	Taroud	Govt. Middle School Bus Stand	83	79	162
5	06.03.2019	Taroud	Govt. Janpad Primary School	8	9	17
6	07.03.2019	Amora	Govt. Primary School Nawapara	3	2	5
7	08.03.2019	Nariyara	Govt. Primary School irrigation Colony	2	4	6
8	11.03.2019	Dongakohroud	Govt. Primary School Indira Awas	1	2	3
9	9 12.03.2019 Akaltara Govt. Primary School Andhiyaripath		2	2	4	
10	10 15.03.2019 Rogda Govt. Middle School		4	7	11	
11	27.03.2019	Murlidih	Govt. Middle School	4	8	12
12	28.03.2019	Pakariya	Govt. Primary School	2	2	4
13	29.03.2019	Nariyara	Govt. Middle School Bajarpara	8	122	130
		Grand	234	404	638	

Organized Anganwadi Health Check-up Camp at Latiya village

KSK Mahanadi Power Company Limited organized Anganwadi Health Check-up camp March -2019 at Latiya village. During this camp total 47 students were examined, weight and height of children are measured and keep in records. Malnourished and weak identified. children are Such children were advised and given counselling for better health and hygiene practices. Free medicines were also distributed to the



required children. During these camps Anganwadi staff provided their extended support to make the camps successful along with CSR Department KMPCL.

Si	Village Name of Anganwadi center		Boys	Girls	Total
1	Latiya	Anganwadi center School Para		10	17
2	2 Latiya Anganwadi center Panchayat Bhawan		6	8	14
3	3 Latiya Anganwadi center Bastipara			12	16
	Grand Total			30	47

Emergency Ambulance Service provided to 120 Patients

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 this half yearly Period from October to March 2019 total 120 people received benefit of emergency ambulance services. Patients are getting larger benefits of this emergency ambulance services.

Si	Village	Person Benefitted	
1	Nariyara	56	
2	Taroud	14	
3	Rogda	9	
4	Banahil	7	
5	Murlidih	3	
6	Akaltara	9	
7	Jhalmala	8	
8 Others		14	
Total		120	

Provided Medical Equipments to Primary Health Center Nariyara

Government Primary Health Centre
Nariyara and Taroud is one of the health
centers providing primary health care in
the area, everyday numbers of patients
get primary treatment in this hospital.
During the course of CSR activities,
KMPCL found that there is need of some
medical equipment's for patients coming
for treatment in Primary Health Centre.
As per the request of Hospital Medical
staff, KSK Mahanadi Power Company to



Provided medical equipment's, i.e. Delivery Table, Delivery Light, and Hospital bed, Suction Machine etc.



Installation of 3 Nos CCTV Camera & 04 LED Flood light in Govt. Primary Health Center Nariyara

and Office Doctor Staff of Govt. Primary Health center Nariyara was **CSR** Requested of Department for the installation of CCTV Camera. For some days the incidents of theft Social bν elements in the primary health center were being carried out. According to the



request, CSR department has been installation of 03 Nos. CC TV Camera. For this work doctor and the office staff of Govt. Primary Health center has given thanks to the CSR department of KSK Mahanadi Power Company Limited Nariyara.



C. SUSTAINABLE DEVELOPMENT

Submersible Pump, Grass Cutter Repairing and Beautification at Collectorate Garden Janjgir

Earlier, KSK Mahanadi Company Power Limited has constructed a garden front of district Collectorate office Due to lake of maintenance this garden lost its beauty, most of the damaged, submersible pump repairing grass machine cutter repairing and Beautification work of



CSR Department. As per instruction received from District administration, KMPCL repaired and maintenance of this garden. New Grass is also being grown by replacing soil.

Light repairing work at 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 the CSR **KMPCL** for Department of repairing in the light. Underground Wiring and light has been Repaired in the garden. Work has been completed in Collectorate campus by KMPCL



CSR Department. Now collectorate campus garden is looking beautiful.

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 this half yearly Period from October to March 2019, total 24 animals are treated. Villagers are happy by getting service from KMPCL.

Si.	Date	Beneficiaries	Village	Animal	Disease	Medicines
1	2 Feb 2019	Badri Rathor	Nariyara	Cow	Swelling	Penial, Maalox, Avail
2	4 Feb 2019	Bhupendra Banjare	Nariyara	Calf	Kinni Peshwa	Obomectine, Tequila
3	6 Feb 2019	Ramesh Kewat	Nariyara	Cow	Fever	Paracetamol, Analgine, Dexa
4	8 Feb 2019	Shravan	Jhalmala	Cow	Fever	Paracetamol, Analgine, Dexa
5	10 Feb2019	Choturam	Rogda	Buffalo	Wound	Penicillin, Dressing, corbolic
6	14 Feb2019	Jai gurudev	Nariyara	Cow	Wound	Penicillin, Dressing, corbolic
7	16 Feb2019	Punidas	Nariyara	Cow	Kinni Peshwa	Obomectine, Tequila
8	19 Feb2019	Rajendra	Nariyara	Cow	Swelling	Tonofas, B-Complex
9	21 Feb2019	Lakhan	Rogda	Cow	Diarrhea	Megasulf, Pednisol, Dexa
10	24 Feb2019	Sureet	Nariyara	Ox	Swelling	Megasulf, Pednisol, Dexa
11	25 Feb2019	Bhisham	Amora	Goat	Constipation	Ketone, Bela mile, Avail
12	26 Feb2019	Lobhan	Nariyara	Cow	weakness	Tonofas, B-Complex
13	28 Feb2019	Sanjay	Nariyara	ох	Fever	Paracetamol, Analgine, Dexa
14	2 March 2019	Manoj Kumar	Nariyara	Cow	Fever	Dexamethasone , velamen
15	4 March 2019	Maharathi	Nariyara	Calf	Swelling	Mega pen, Prednisolone
16	9 March 2019	Makunda Yadav	Nariyara	Buffalo	Pain	Prednisolone, Budsu
17	12March 2019	Jeevan Tandan	Nariyara	Ox	weakness	Neurobionics, calcium
18	15 March2019	Gopal	Nariyara	Calf	Wound	Penicillin, Dressing, Avil
19	18 March2019	Yugal Kishor	Rogda	Calf	Wound	Penicillin, Dressing, Avil
20	20 March2019	Kanhaiya Yadav	Amora	Cow	Wound	Penicillin, Dressing, Avil
21	22 March2019	Satyapal	Nariyara	Calf	Wound	Penicillin, Dressing, Avil
22	24 March2019	Rakesh Kumar	Nariyara	Calf	Fever	Dexamethasone ,Paracetamol
23	26 March2019	Arjun Dhiwar	Nariyara	Buffalo	Pain & Swelling	Prednisolone, Budsu, Avil
24	29 March2019	Ram kumar Sahu	Nariyara	cow	Swelling	Prednisolone, Budsu, Avil





D. INFRASTRUCTURE DEVELOPMENT

Repairing of 15 Handpumps at Nariyara, Taroud, Amora and Banahil villages

During this period, CSR department of KMPCL repaired 15 hand pumps of Nariyara, Taroud, Amora and Banahil villages. This hand pumps were earlier installed by KMPCL at project affected village. Handpumps were damaged and require repairing works in these villages. Service of a meson and helper from project affected village received and these Handpumps repaired by them during the half year period from October to March 2019. Villagers are happy by getting Handpumps repaired and receiving uninterrupted drinking water supply.







SI.	Village	Details of CSR work	Place
1	Nariyara	Govt. Handpump	Ludiya para, ward No 04
2	Nariyara	Govt. Handpump	Ludiya para, ward No 04
3	Nariyara	KMPCL Handpump	Near Canal, Ward no. 20
4	Nariyara	KMPCL Handpump	Near Canal, Ward no. 20
5	Nariyara	KMPCL Handpump	Ward No 1, Near Dhananjai Rathor House
6	Nariyara	KMPCL Handpump	Ram Gudi, Ward No 12
7	Nariyara	KMPCL Handpump	Main Road, Ward No 16
8	Nariyara	KMPCL Handpump	Patharra Para, Ward no. 10
9	Taroud	KMPCL Handpump	Near Santoshi Mandir, Ward No 07
10	Taroud	KMPCL Handpump	Near Canal, Ward no. 03
11	Amora	KMPCL Handpump	Ward No 14, Near Ram Lal House
12	Amora	KMPCL Handpump	Aamanara Mohalla, ward No 03
13	Banahil	KMPCL Handpump	Near Mahamaya Temple, Ward No 07
14	Banahil	KMPCL Handpump	Near Chattan Para, Ward No 10
15	Banahil	KMPCL Handpump	Near Jhalmala Road , Ward No 11

Pipeline Extension work 1101 meter ward no. 3,5,7, 8,10,19 and 20 at Nariyara village

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for Extension of pipeline in ward no 3, 5, 7, 8, 10, 19 and 20 total 1101 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 1101 meter pipeline Extension work has been done during this half year period from October to March 2019. CSR Department of KMPCL. Now Villagers are getting regular water supply. The details in the pipeline Extension are as follows-



Si.	Place	Length in Meters
1	Main Road To Near Heena Kewat House Ward No 03	66
2	Near OHWT Patharapara To Badri Rathor House Ward No 07	255
3	Near Puniram House To Teras Shriwash House Ward No 10	200
4	Near Shatruhan House To Preetam Auto Center ward No 19	125
5	Near Shail Kumar House to Rekha Norge House ward No. 20	200
6	Near Bhaina House to Dukhiram House in word No. 05 55	
7	Near Ramayan Bai to Canal in ward No. 20	100
8	Near Suresh Sinha to Santosh Sinha in ward no. 8	100
	Total Length in meter	1101



Pipeline Extension work 638 meter ward no. 6,7, and 8 at Banahil village

Sarpanch Gram panchayat Banahil has requested to KMPCL CSR Department for Extension of pipeline in ward no 6, 7 and 8 total 638 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 638 meter pipeline Extension work has been done during this half year period from October to March 2019. CSR Department of KMPCL. Now Villagers are getting a regular water supply. The details in the pipeline Extension are as follows-



Si.	Place	Length in Meters
1	Cultural Stage To Raghu Veer Singh House Ward No 06	38
2	Near Dhajaram House to Shambhu Kewat House Ward No 7	100
3	Near Ram Prasad House to Sonu Satnami House Ward No 7	200
4	Near Lekh Ram House to Budhe Lal House Ward No 7	200
5	Near Bansi Kewat House to Soopath Kewat House Ward No 8	100
	Total Length in meter	638



Repairing of 02 nos. Submersible Pumps at Near Ram Guddi & Ludhiya para at Nariyara village

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for repairing and installation submersible pump at of near Ram Gudi campus ward No 5 - 6 & near hanuman temple Ludiya para ward No 4 Nariyara. This Submersible pump is used to supply drinking water in Villagers Nariyara and became defunct last few days, and villagers were unable to get the



drinking water. As per request KMPCL has repaired and installation of submersible pump. Now villagers are getting regular and interrupted drinking water supply.



Installation of 02 submersible pumps (1 HP) at Ward 12 Mahant Gudi & Ram Gudi at Nariyara village

Water availability is a major problem in affected project villages. Nariyara is main affected village of KMPCL CSR Department and having major drinking water problem in various wards and muhalla Problem of Drinking water in the Village. Villagers had requested from the CSR Department of KMPCL to installation of 1 HP 02 submersible pumps in Mahant Gudi & Ram Gudi ward no.12, to solve the drinking water problem. Gram Panchayat also showed interest for electricity bill Payment. By seeing

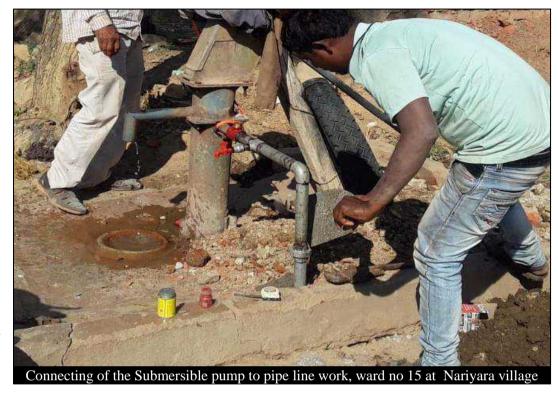


the problem of villagers KMPCL has been installed a 02 submersible Pump of 1 HP capacity in a Mahant Gudi & Ram Gudi ward no 12 during this half year period from October to March 2019. Sarpanch and villagers given thanks to KMPCL for providing such kind of infrastructural support.



Connecting of the Submersible pump to pipe line work, ward no 13, 14 and 15 at Nariyara village

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for Connecting the pipeline to the Submersible pump in the ward Number 13, 14 and 15 wards so that the Mohalla do not have any drinking water shortage. In view of Sarpanch requests and need of villagers, the KMPCL CSR department has completed the work of Connecting Submersible pump to the pipeline. Now



uninterrupted supply of water to the villagers will continue. Sarpanch has given thanks to KMPCL CSR department.



Pipeline repairing work 700 meter at Banahil village

CSR department of KMPCL have done pipe line repairing work from Akaltara Main Branch canal to Kaushal Sagar Pond (700 meter) at Banahil Village during this half year period from October to March 2019. Water Level is down in Banahil village. Ponds and hand pump is dry during this summer season. Villagers were facing problem for daily uses and animal health care. Earlier KMPCL CSR department has done pipe line expansion from Akaltara



main branch canal to Kaushal Sagar Pond (700 Meter), but this pipe line was leaked from few days, so water supply was interrupted. CSR department has replaced old damaged pipes with new pipes and all repairing work was completed by expert pipe line mechanic. Recently villagers are using this pipe line for Kaushal Sagar Pond and also for irrigation purpose.

Repairing of pipe lines for drinking water supply at Nariyara Village

To strengthen Drinking Water supply in Nariyara, KSK Mahanadi Power Company limited is implementing Drinking Water Project. For this, an overhead Water tank is constructed at Patharra para, Bore well drilling submersible Pump installation, along with Pump house is completed. In this sequence 7683 Meter water pipe-line expanded across the village. In few wards there were some leakages in water pipe lines so water supply was interrupted. Seeing the need and



importance of work, CSR department repaired the pipe lines for water supply in ward 1 and 2 at Sanjay Nagar. Now

sufficient drinking water is available to the people of these wards. Villagers are happy by getting drinking water supply in their houses.

Shifting and Installation of Submersible pump word no 6 Kewat Mohalla at Nariyara village

Sarpanch Gram panchayat Nariyara has requested to KMPCL CSR Department for shift the submersible pump at Kewat Mohalla ward No 06 Nariyara. This Submersible pump was used at Mahant Gudi for supply of drinking water. Water level in Mahant Gudi Nariyara has been down few days, and villagers were unable to get the drinking water. As per request the KSK Mahanadi Power Company limited has shifted the submersible pump to



Kewat mohalla Ward No 06. Now villagers are getting regular and uninterrupted supply of drinking water.

Electrification in community building Patharrapara ward No 10 at Nariyara village

During this half year period from October to March 2019. In the course of CSR activities, Department found that there was 8 electric fans at need of community building ward no 10 at patharrapara Nariyara. ln Community **Program** During summer and rainy season villagers have hot and humidity Problem simultaneously. As per aspirations of sarpanch gram panchayat and **CSR** by the Villagers request department provided 8 electric fans



and complete wiring Fitting and its installation. Now Sarpanch and Villagers are happy and thanked KMPCL for this support



E. CULTURAL AND COMMUNITY SUPPORT

Financial support for fixing Tiles and Wall panting at Chandi Dai Temple at Nariyara village.

Sarpanch Gram panchayat Nariyara has requested KMPCL CSR Department for fixing Tiles and Wall panting at Chandi Dai Temple. It is a famous temple of Chandi Dai in Nariyara village. Villagers have deep faith in this temple and every year in the month of Chaitra and in the month of kuwar the Navratri festival organized enthusiasm in every year. Mahanadi Power Company Limited CSR Department has



provided financial support for Tiles and complete wall painting this year.

Distributing of Sports Item in Cricket tournament at Murlidih

Sarpanch Gram panchayat Murlidih has requested KMPCL CSR Department for financial support for cricket Tournament . CSR department of KMPCL has distributed sports item as financial support to cricket Tournament Murlidih. Now Sarpanch and Villagers are happy and thanked KMPCL for this support.

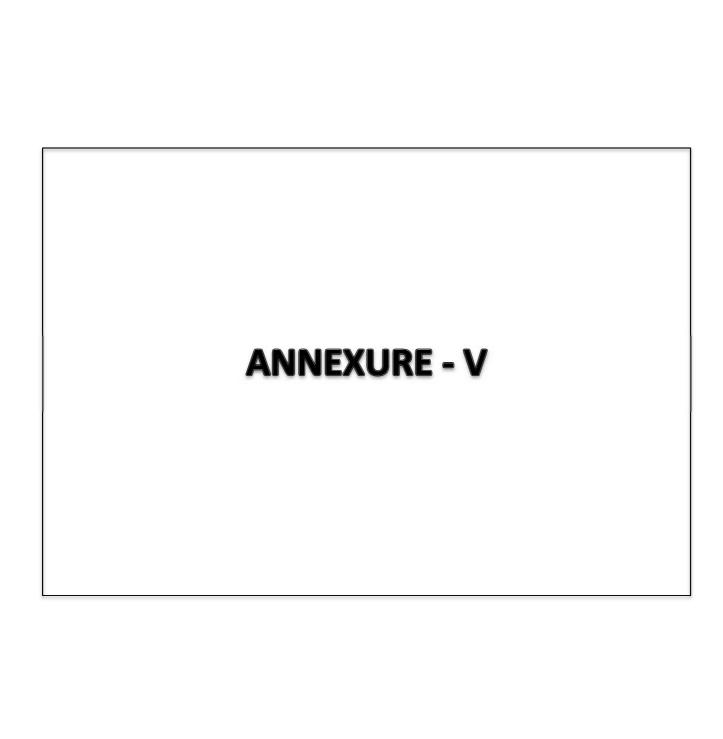


Provided Support for Organizing Kabaddi Tournament at Taroud

KSK Mahanadi Power Company Limited provided financial assistance to promote local games and sports in project affected villages. Regional Level Kabaddi Tournament is organized every year by Jai Maa Mankeshari Khel Samiti, likewise this Jai Maa year Mankeshari Kabaddi Samiti and Gram Panchayat Taroud requested **KMPCL** to provide financial assistance to organized Kabaddi



tournament at Taroud Village. There are total 36 team participated in Kabaddi tournament. This program organized from 5rd to 6th November 2018 near Jai Maa Mankeshari Temple of Taroud. Tournament inaugurated by Mr. Saurabh Singh MLA Akaltara in auspicious presence of Shri Shiv Kumar Tiwari, Shri Santosh Bhedpal, Shri Suresh Singh and Premlal Yadav. Final Match played between Katghari and Parsada, winning team has been awarded by Shri Sandeep Yadav Zila Panchayat member, Smt. Sushila Patle Sarpanch Taroud and Shri Parmeshwar Patley.





Annexure V

	Particulate Matter Emission's Result (mg/Nm3)						
Month	Unit # 3	Unit # 4	Unit # 2				
Month	(600 MW)	(600 MW)	(600 MW)				
Oct-18	Shut down	34.1	17.4				
Nov-18	Shut down	30.8	18.2				
Dec-18	Shut down	34.4	18.7				
Jan-19	Shut down	31.8	17.5				
Feb-19	Shut down	35.2	17.5				
Mar-19	Shut down	33.1	17.9				
Average	0	33.23	17.86				



Images of rain water harvesting measures implemented during project stage:



Figure 1- Recharge Well No 1



Figure 2 Rechage Well No 2



Figure 3 Rechage Well No-3



Figure 4 Recharge Well No-4

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Storm water collection well for recharge the ground





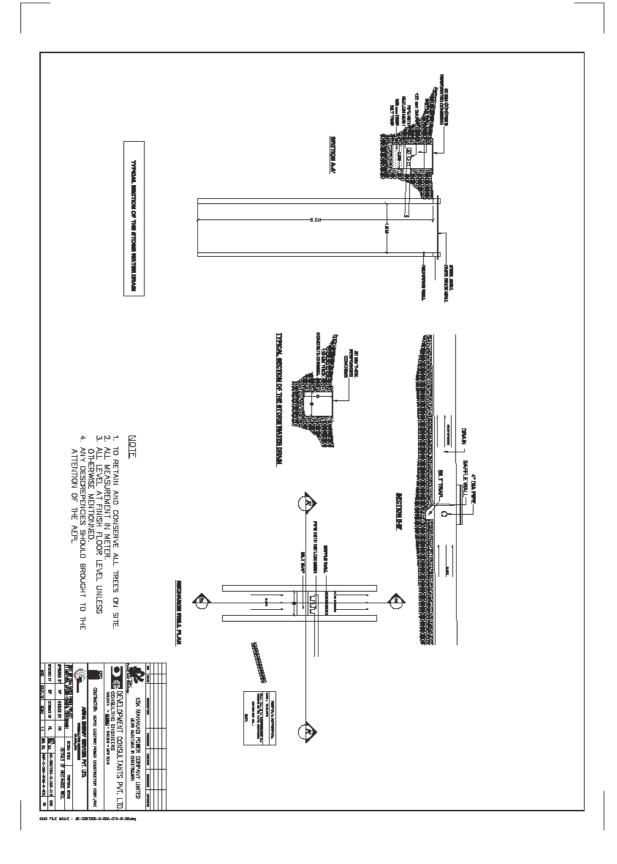


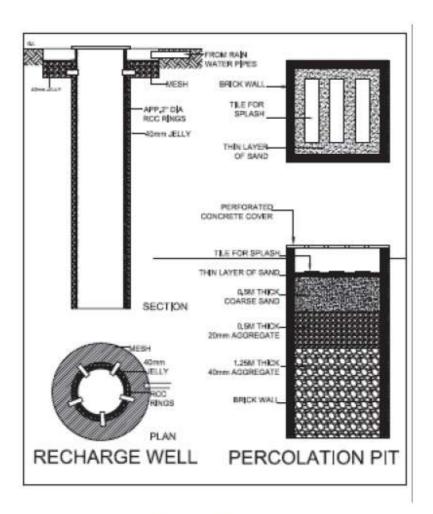


Image of Project Site- At Present (Source : Google Earth)



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)		
				137194.3989		
Total Road area	131753	0.9	1157			
				1352473.067		
Other Open area	1948247	0.6	1157			
				1489667.466		
Total Site area	2080000					

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



कार्तिक युक्त पद्ध-5, 2066

आम सूचना

सर्व संबंधितों को सृचित किया जाता है कि वर्धा पाटर कंपनी लिम्ब्टिड की प्रस्ताबित 5×600 मेगावाट कोयला आधारित ताप विद्युत परियोजना ग्राम- नरियरा, तहसील अकलतरा, जिल्हें जाजगीर-चाम्पा (छ.ग.) को स्थापना हेतु पर्याक्षरण स्वीकृति पत्र क्रमांक-J13012/44/08/-IA, II (Y) के भाष्ट्रम से पर्यावरण एवं वन मंत्रालय, भारत स्तकार (MOEF) द्वारा प्रदान की गई है। इस पत्र की प्रतिलिपि का अवलोकन छ.ग. प्रयावरण संरक्षण मंडले के कार्यालय तथः पर्यावरण एवं वन मंत्रात्तयः, भारत सरकार (MOEF) की वेबसाइट http://envfor.nic.in पर भी किया जा संकता है।

and had made former 8-2-293/A/43/A. Road No. 22, Jubilee Hills <u> उद्शबाद</u>

आम सूचना

सर्वसाधारण को सूचित किया जीता 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/8SP/72/09 dated 16.10.2009 के द्वारा मेससे अग्रवाल मिनरल्स बिलाबपुर की ग्राम खरकेना, तहसील तखतपुर, जिला-बिलासपुर (छ.न.) की डोलोमाइट खंदान (5.70 हेदटेसर) पर खनन हेतु पर्यावरणीय स्वीकृति प्रदान कर दी गयो है। उक्त पर्यावरणीय स्वीकृति आदेश की एक प्रति छ.म. प्रदूषण नियंत्रण जोई सम्पूर के समक्ष सुरक्षित है तथा उंदत आदेश को छ.ग. राज्य स्तरीय पर्यावरण प्रभाव निर्धारण प्राधिकरण की वेबसाइट www.envior.nic.in पर भी देखा जा सकता है।

अतः सर्वसाधारण को सचित हो। अधिकत हस्ताग्रसकर्गाः मेसर्स अग्रवाल मिनरत्स लाजपत्तरायनगर, बिलासपुर (छ.ग.)

<u>एकम् ठात्मा ज्ञास्य</u> ी राष्ट्रियायसर्व G-15 23.10.2009 : शा. बालक उ.मा शा Section and the section of the secti साजन्य । ठिकेदार स्यशः वि

GGRUCE faculty Commenced

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स्पिट- ना डा कर रूप स्ट्या न्य के तथे जा में नव्यं भी हम रेग में कि हो हिंद के भी स्थान के लोग कि हो हम बेबी होंगे प्रशान के ने तथा स्टार्टर के बाद प्रशान के हम स्थान कर अपने में कुमी स्टार्टन कि स्टार्टन कर अपने में कुमी स्टार्टन कि स्टार्टन कर अपने में कुमी स्टार्टन कि स्टार्टन के सहस्त्रीय अपने स्टार्टन कि स्टार्टन के सहस्त्रीय कुमी स्टार्टन के स्टार्टन के स्टार्टन के स्टार्टन हमें अस्टार्टन की सुना हिए वार्टन के भे कहा के स्टार्टन की स्टार्टन के स्टार्टन अस्टार्टन की स्टार्टन के स्टार्टन

वैशाली पाइड 'कोड ... लतेमी के अव्यक्ष केके मुह्ने को द्विपट पर ल्यू मुद्दारा चंद्रणे, अभिवाध तेमारी तम चंद्र

क्षाना क्षान क्षा

45 भी अधिका भारतीय शतरकार्याय प्रकारितमा को पहल कल प्रकार में अनोक ने दूसरा स्थार प्रपाण कियान स्वातिक्रम प्रतिविक्तिक के सुरत्ये हिन छन्तीस्वक दे आरोक दुसार ने वर्क अंतरस्त्रीय हिनाहित्यें को पेदल कत में प्रसार्ख किया। 20 कियी औ पैदल चान प्रतिविक्ता को उस्रोक पटेल ने शमक्त प्रदर्शन करते हुए 1 घंटे 30 मिनट 2**8 सेकंड** में पून किया।

इसरा स्थान मिल अशोक को

आम सचनाः

सर्व संबंधितों को सर्वित किया जाता है कि वर्षा पावर कंपनी लिनिटेड की प्रस्ताबित 6×600 मेगावाट कोयला आधारित लाप विद्युत परियोजना ग्राप-संशियरा, तहसील अकलतरा; जिल्ह जाजगीर-चारण छ ग को स्थापना हेतु पर्यावरण स्थीकृति पत्र क्रमांक -J:3012/44/08-IA II(T) के माध्यम से पर्यावरण एवं दन मंत्रालय, भारत सरकार (MOEF) द्वारा प्रदान की गई। है। इस पत्र की प्रतिनिधि का अवलोकन छ ग. पर्यावरण संरक्षण मंडल के कार्यालय तथा पर्यवरण एवं वन मंत्रालय, भारत सरकार(MOEF) की वेबसाइड http://envior.nic.in पर भी किया जा सकता है।

आम सूचना

सर्व सावारण को सूचित किया जाता है कि भारत संस्कार के वन एवं पर्यावरण के झरा गठित हैं हों. सज्य स्वसीय पर्यावरण प्रभाव निर्धारण प्राधिकरण के अबदेश क्रिमीक 275/8EIAA-CG / EC/Mining /BBP // 72/09 खंड 16.10.2009 के द्वारा मेसर्स अग्रकल मिनरलस बिलासपुर पी गान खरकेना, जहसील तथतपुर, जिता- वितासपुर (छ.ग.) की डोलोमाइट खदान (5.70 हेक्टेयर) पर खेनेन हेर्नु पर्यादरणीय स्वीकृति प्रदान कर दी गरी हैं। उदत क्येंदिरणीय रवीकृति आदेश की एक प्रति छ .य . प्रदृष्टम 🚉 जन बोर्ड खेक्पुर के संपक्ष सुरक्षित है दथा उक्त आदेश को छ ग . राज्य स्तरीय पूर्वावरण प्रभाव निर्धारण प्राविकरण की बेबसाइट www.er vior.nic.in पर भी देख: बा सकता है। अतः सर्व साधारण की श्रधिकृष हस्ताक्षरकर्त्र सूचित हो।

(विभाद कुमार अग्रयाल) मेससं अग्रवातः मिनाल्स

्रिनिवृद्धाः सुर्वा । सन्दर्भकोते वह राजवेशो अध्यानी निर्मेषु सुर्वे स्थितिकारी निर्मेषु १. हिन्दरः १८ के सूच-प्रश्चेष्ठ प्रसाद प्रवस्ति होती स्थानित निर्मेष्ट नहीं भोदानों होती। स्थानकोते स्थानकोते स्थानकोती स्थानकोती स्थानकोती स्थानकोती स्थानकोती स्थानकोती स्थानकोती स्थानक

्रिक्रिया अनुसरिक्ष क्षेत्र स्थापन 3,630 (18) 100 (18) 100 (18) 100 (18) केंग्स है 5 जाने सिर्म म

ंदिन ध्रुष्ट कर्य केंद्र प्रवीक्तफर्ता के अग्रितिक कर्य प्रदेश केंद्र पर में कि बरने की रेत्रि र िक श्रा करों के दोनिकारिक से शिक्त कर यह हाईकर स्वीतिक हाने कर होते. यह की कार्यों के सिंग के किस को बीच हो किस को मिल हो किस हो की हो किस को मिल हो किस हो की हो किस के में ने उन्होंने बात के साथ हो की अपने की सिंग के में ने उन्होंने बात के सिंग का अनुकार कर की में अपने की सिंग की मोल में पीर्ट की होते की को की सिंग की सिंग

1998 स्तर प्रसापन चौररी

लाजमतस्य नातं, विल्हमपुर (च.ग.)







KSK Mahanadi Power Company Limited

CIN No: U40300TG2009PLC064062

Works

Near Nariyara Village, Akaltara Tehsil, Janjgir - Champa District, Chhattisgarh Tel (Site): 07817-284001 Registered Office 8-2-293/82/A/431/A, Road No. 22, Jubilee Hills, Hyderabad - 500033. Tel: +91-40-23559922-25, Tel: +91-40-23558701

Fax: +91-40-23559930

Ref.: MOEF& CC, MPUR |PDKN/2500108/1592

30th Nov. 2018

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
Maharastra

Sub: - Six Monthly Status of Compliance for Environmental Clearance granted to 6 x 600 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 subject above, please find enclosed herewith our Status on Compliance to Environmental Clearance from April-2018 to September-2018.

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- Apr'18 to Sept.'18



KSK Mahanadi Power Company Limited

CIN No: U40300TG2009PLC064062

Works

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

Registered Office

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

GSTIN-22AADCK6843M1ZB

nservation

30th Nov. 2018

Ref .: MOEF &CC, NPUR / PDKN/25 50 108/1592

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 Maharastra

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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 subject above, please find enclosed herewith our Status on Compliance to Environmental Clearance from April-2017 to September-2018.

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- Apr'17 to Sept'18

ENV.KMPCL

From: ENV.KMPCL

Sent: 01 December 2018 11:41
To: apccfcentral-ngp-mef@gov.in

Cc: hocecb@gmail.com; cecb.robilaspur@gmail.com

Subject: Submission of Six Monthly Compliance Report for Environmental Clearance conditions-

Reg.

Attachments: Six Monthly Compliance Report-Apr.2018 to Sept.2018_compressed.pdf

Dear Sir,

As desired, please find herewith the attached Six Monthly Status of Compliance Report for Environmental Clearance granted to M/s KSK Mahanadi Power Company Ltd.(6x600MW TPP) for the period of Apr.-2018 to Sept.-2018.

This is for your kind information and record please.

Thanking you, Your's Sincerely

Environment Dept.

KSK Mahanadi Power Company Ltd. Village: Nariyara, Tehsil-Akaltara, Dist.-Janjgir-Champa, Chhattisgarh





KSK Mahanadi Power Company Limited

CIN No: U40300TG2009PLC064062 Registered Office

Near Nariyara Village, Akaltara Tehsil, Janjgir - Champa District, Chhattisgarh

Hyderabad - 500033. Tel: +91-40-23559922-25, Tel: +91-40-23558701

Road No. 22, Jubilee Hills,

8-2-293/82/A/431/A,

Tel (Site): 07817-284001

Fax: +91-40-23559930

GSTIN-22AADCK6843M1ZB

Ref.: CECB, BILAS [POKN/2500168/692

Date: 22.05.2018

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

Sub: - Submission of Environment Statement in Form-V for FY 2017-18-Reg.

Ref: - i) Consent for Operation No. - 763/TS/CECB/2015 Dt. 22.05.2015

- ii) 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
- iii) Rule 14 of Environmental (Protection) Rule, 1986

Sir,

Inviting your reference on the above mentioned subject, please find enclosed herewith the 'Environmental Statement in Form-V' duly filled under Rule-14 of the Environmental (Protection) Rules, 1986 for our Unit-1, 2 & 3 (3 x 600MW) in M/s KSK Mahanadi Power Company Limited for the Financial Year ending 31st March, 2018.

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, Raipur, Chhattisgarh.

ii) The Addl. PCCF(C), MoEF &CC, Regional Office (WCZ), Nagpur, Maharashtra

Encl: Environmental Statement in Form-V- FY 2017-18.

ANNEXURE-X



Photographs of Online Monitoring equipments installed in KMPCL

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







SO2, NOx & CO Analysers and Dust Monitor





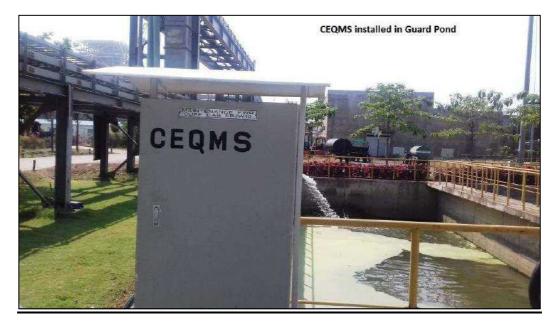






2. CEQMS installed in Guard Pond Water.









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



