

MAHARASHTRA STATE POWER GENERATION CO. LTD. KORADI THERMAL POWER STATION

Office of: Chief Engineer (O & M), T.P.S., Koradi, Dist. Nagpur, PIN - 441111 Phone: (07109) 262141 to 262146,262106, 262109 FAX: 262127(Off) Email -cegenkoradi@mahagenco.in

CIN: U40100MH2005SGC153648

CE (O&M)/KTPS/660MW/Env. Cell/FL-8

Mo 0 4 5 6 8

Date:

3 C JAN 2023

To,

Scientist 'D'

Ministry of Environment, Forest & Climate Change

Regional Office, East Wing

New Secretariat Building.

Civil Lines, Nagpur- 440001

E-mail: apccfcentral_ngp_mef@gov.in

Sub.: Compliance Status of Environmental Clearance conditions for 3X660 MW Coal based Thermal Power Plant at Koradi.

Ref.: 1) MoEF Letter Ref. No.J-13012/87/2007-IA.II (T) dtd. 04/01/2010.

- 2) MoEF Letter Ref. No.J-13012/87/2007-IA.II (T) dtd. 27/03/2015.
- 3) MoEF Letter Ref. No.J-130 12/87/2007-IA.II (T) dtd. 23/03/2017.
- 4) MoEF Letter Ref. No.J-13012/87/2007-IA.II (T) dtd. 29/05/2018.
- 5) Notification No. SO 5845(E) Dtd. 26.11.2018.

Dear Sir,

With reference to above subject matter, please find enclosed herewith the status of Environmental Clearance Conditions issued to 3x660 MW KTPS Koradi Project for a period of 01.07.2022 to 31.12.2022.

This is for your information, please.

Thanking you.

Encl.: As Above.

Yours faithfully

Chief Engineer Koradi TPS, 3X660 MW

Copy s.w.rs. to:

Executive Director (E&S), 4th floor, HDIL Tower, Bandra (E), Mumbai- 51.

Copy f.w.cs. to:

Regional Officer, MPCB, Udyog Bhavan, 5th floor, Civil Lines, Nagpur- 440001

MoEF, New Delhi: Environmental Clearance conditions for 3X660 MW, Expansion Project at Koradi, Dist.- Nagpur.

MoEF Condition No.	Condition	Status as on 31.12.2022
	MoEF Letter Ref. No. J- 13012/87/	2007-IA, II (T) dtd 04/01/2010
1	FGD with one unit of 660 MW will be installed initially to begin with and the requiremnt, if any, for the installation of FGD system with the other two units will depends upon the prevalent ambient levels of SO2. Provision for installation of FGD in all units shall be made.	Partially Complied. Open tender RFx. 3000013388 was initiated on 04.11.2020. Same is cancelled. MSPGCL Board approved for retendering accordingly. Tender will be refloat in the month of January-2023.
2	Hydro-geological study of the area shall be reviewed annually & results submitted to the Ministry & concerned agency in the State Govt. In case adverse impact on ground water quantity & quality is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	Complied. A detailed report of Hydro geological investigation for 3x660 MW Koradi project has been carried out. Analysis of Ground Water is carried out periodically. The parameters are within desirable range.
3	Minimum required environmental flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel/ rivers even in lean season. It shall be ensured that natural drainage in the region is not disturbed due to activities associated with operation of the plant.	Complied. The 3X660 MW Koradi Project was installed on the land available with MAHAGENCO. The natural drainage system available on this land was not disturbed and Koradi TPS, 3X660 MW has constructed and commissioned its own independent system for trade and sewage effluent.
4	Tri-Flue stacks of 275 m height each shall be provided with continuous online monitoring equipment's for SOx, NOx & PM. Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.	Complied. One stack with three flue cans of 275 meters height is provided. Continuous Online monitoring system for PM, SO ₂ , NOx for Unit-8, 9 & 10 is commissioned and connected to CPCB & MPCB servers on 10.05.2017. Exit velocity & mercury emission is monitored regularly for all three units. However, it is to inform that exit velocity factor is load dependent and hence during partial load the velocity remains below 22 m/s. Whereas, during full load operation or units operating at more than 70% PLF, the exit velocity will remain more than 22 m/s.
5	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm ³ .	Complied. High efficiency ESPs are installed at all three Units with design efficiency 99.9 % for particulate emission not more than 50 mg/Nm³.

6	Adequate dust extraction system such as cyclones/ bag	Complied.
	filters & water spray system in dusty areas such as in coal handling & ash handling points, transfer areas & other vulnerable dusty areas shall be provided.	·
7	Utilization of 100% fly ash generated shall be made from 4 th year of operation of the proposed expansion. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	In Process. Ash utilization for the year 2021-22 was about 81%. TPS is taking various efforts to achieve the 100% ash utilization. Action plan is presented.
8	Fly ash shall be collected in dry form & storage facility (silos) shall be provided. 100 % fly ash utilization shall be ensured from 4 th year onwards. Unutilized fly ash shall be disposed off in the slurry form. Mercury & other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	ash utilization. Action plan is prepared. Complied. A temporary arrangement is made for disbursement of dry fly ash utilization from intermediate/ HCSD silo no. 1. Provision of three Remote silo is also made for dust free loading of ash in bulkers. Unutilized ash is disposed off by HCSD system in Khasara ash bund. Heavy metals are monitored regularly in effluent of ash bund through MoEF&CC approved lab. PP is taking all efforts for 100% ash utilization.
9	Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety shall also be implemented to protect the ash dyke from getting breached.	Partially Complied. Koradi TPS is using Khasara Ash Bund for ash disposal, Khasara Ash bund is live hence the work of HDPE & LDPE lining cannot be taken up in hand. Koradi TPS has also requested to MoEF & CC to amend EC conditions for HDPE/LDPE lining to ash bund, as before obtaining EC, Koradi project has submitted EIA as a standard procedure wherein it was informed to the ministry about presence of active ash bund and TPS shall dispose off ash to live bund after commissioning of project. Hence it was understood that any lining to the peripheral area of bund is not possible being a live bund. However, following measures are taken to maintain the bund: a) Bund is in service since 3 decades during period sufficient compaction is already taken place, hence possibility of leaching is minimal. This has been established by Ground water analysis report. b) As the pH of ash pound water is alkaline (8.2-8.5) in nature and hence leaching of heavy metals from it is not envisaged. c) Stone pitching is done at inner slope of dyke wall.

		 d) Decanted water is being recycled and reutilized in plant. Bund water is recovered though available weir & drain wells. e) However, proper maintenance of ash bund is done to avoid any breaching of bund.
10	For disposal of bottom ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom & sides of the mined out areas are adequately lined with clay before bottom ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	Koradi TPS, 3X660 MW is trying to follow all the
11	Closed cycle cooling system with natural draft cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.	Complied
12	The treated effluents conforming to the prescribed standards only shall be recirculated and reused within the plant. There shall be no discharge outside the plant boundry except during monsoon. Arrangement shall be made that effluents and storm water do not get mixed.	Complied. In house ETP is installed and commissioned to treat trade effluents arising from power station premises. Work order for balanced work is placed. Currently treated effluent is reused within the plant for ash disposal purpose. Separate storm water drainages are constructed in plant premises.
13	A sewage treatment plant shall be provided & the treated sewage shall be used for raising green belt/plantation.	Complied. Two sewage treatment plants having capacity of 25 and 10 KLD are established and treated water is
14	Rainwater harvesting should be adopted. Central groundwater, Authority/ Board shall be consulted for finalization of appropriate rainwater technology within a period of three months from the date of clearance & details shall be furnished.	used for raising green belt / plantation. Complied. Rain water harvesting at 3 locations has been finalized and work is completed.
15	Adequate safety measure shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with leasting.	Complied. Fire quenching line erected in stack yard to control fire in Coal yard.
16	shall be submitted to the regional Officers of the Ministry. Storage facility for auxiliary liquid fuel such as LDO/HFO & LSHS shall be made in the plant area in consultation with Departmental of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Complied. Oil handling plant is commissioned as per plan sanctioned by Explosive Department. License for oil handling plant is issued by Explosive department. LDO/ HFO is received from Oil India companies and use as received basis. Disaster management all of the companies and the companies are companies and the companies and the companies are companies are companies and the companies are companies are companies and the companies are companies ar
17	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells & constructing new piezometers. Monitoring around the ash pound area shall be carried out particularly for heavy metal (Hg, Cr, As, Pb) & records maintained & submitted to the Regional office of the Ministry. The data so obtained should be compared with baseline data so as to ensure that the ground water quality is not adversely	onsite emergency preparedness plan is prepared. Complied. Three Nos. of Piezo wells has been installed at periphery of Khasara Ash Bund. However, analysis of Ground Water is carried out periodically through MoEF&CC approved laboratory. Recent ground water report is enclosed as Annexure.

	affected due to the project.	
18	Green Belt consisting of 3 tires of plantations of native species around plant & at least 100 m width shall be	Complied.
	raised. Wherever 100 m width is not feasible, a 50 m width shall be raised & adequate justification shall be submitted to the Ministry. Tree density shall not be less than 2500 per ha with survival rate less than 70%.	During construction of Units Koradi TPS has taken massive tree plantation as a social obligation. Available open land for plantation is 400.44 Hectare, Total area covered under plantation is 270.40 Hectare. Percentage of area covered under plantation is 67.52%. Total progressive no. of trees planted upto 31.03.2022 is 5,96,227. PP has engaged M/s National Environmental Engineering Research institute, Nagpur since February-2018 for development of Bamboo green belt for dust suppression at TPS premises using Eco-rejuvenation technology. 10,000 Nos. All three units of Koradi TPS, 3X660MW are constructed on the available land, additional land is not acquainted for units. Being a expansion project the green belt is actually developed on the land available with MAHAGENCO. Being already existing plant with infrastructure and residential colony, ample plantation/ green belt has already occupied nearby area. 100m / 50m width plantation is not available at periphery of KTPS as it is surrounded by existing National Highway, temple and villages. However, tree plantation at ash bund area is proposed for compliance of EC condition of 3 tier tree plantation. 40,000 trees to be planted in next 3 years around plant area including bund, same is to be proposed.
19	First aid & sanitation arrangements are to be made for the drivers & other contract workers during construction phase.	Complied. First aid & sanitation arrangements were made for the drivers & other contract workers during construction phase. Now, construction phase is over and all three units are commissioned.
20	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ earmuffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric records & for treatment for any hearing loss including shifting to non-noisy/ less noisy area.	Complied. Acoustic enclosures are provided to high noise generating auxiliaries. Sound proof cabins are provided for staff working in high noise area. Personal protective equipments are provided to staff and contractor labors. Regular medical checkup is arranged by Colony hospital for audiometric examination.
21	Regular monitoring of ground level concentration of SO ₂ , NOx, RSPM (PM10 & PM2.5) & Hg shall be carried out in the impact zone & 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 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.	Complied. KTPS Koradi, 3X660 MW, is carrying out ambient air quality monitoring twice in week at three different locations approved by SPCB. Three CAAQMS are installed around the premises of 3X660 MW Koradi at various locations as approved from SPCB. CAAQMS connectivity to SPCB server is established, Data is available through online connectivity with MPCB server. CAAQMS connectivity to CPCB server is under process. Koradi TPS is regularly carrying out GLC study, recently carried out in Oct- 2022 for PM, SO2 & NOx emission. The concentrations of pollutants predicted by Industrial source Complex (ISCST3) Dispersion model at various locations are well within limit.
22	A good action plan for R & R (if applicable) with package for the project affected persons be submitted & implemented as per prevalent R & R policy within three	Complied. As no land is required, R & R policy is not applicable

	months from the date of issue of this letter.	to this project. No land was required for Koradi Expansion Project, same is mentioned in initial TOR issued for 2X800 MW and same is applicable to TOR of 3X660 MW.
23	An amount of Rs. 20 Crores shall be earmarked as per time capital case for CSR program. Subsequently a recurring expenditure of Rs.4 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be along with road map for implantation.	Complied. Impact Assessment of implementation of CSR action plan adjoining villages of TPS had been carried out. The activities undertaken by Mahagenco with capital cost of Rs. 20.00 cr. are completed.
24	As part of CSR program the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such community development activities & income generating program. This will be in addition to vocational training for individuals imparted to take self-employment & jobs.	Complied. The work orders for Bamboo plantation at Mahagenco's land were issued to the agency which is helping in upliftment of poor section of society.
25	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure & facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	Complied. Already provided during construction phase. Provision were made for the housing of construction labour within the site along with all necessary infrastructure & facilities. As of now, construction phase is over and all three units are commissioned.
26	The project proponent shall advertise in at least two local newspaper widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance & copies of clearance letter are available with the State Pollution Control Board/ Committee & may also be seen at Website of the Ministry of Environment & Forest at http://envfor.nic.in .	PP had advertised its accordance of environmental clearance in newspaper.
27	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad /Municipal Corporation, Urban Local Body & the Local NGO, if any, from whom suggestions/ representation, if any, received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	PP had sent clearance letter to Panchayat, Zila Parishad /Municipal Corporation, Urban Local Body. The EC of the project proponent was available on
28	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Complied. PP has set up the Environment Management cell. The organogram of staff available at Environment Management Cell is prepared.
29	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website & shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB & the SPCB. The criteria pollutant levels namely RSPM (PM10 & PM 2.5), SOx, NOx, (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Yes, compliance to EC conditions are regularly submitted to respective authorities by PP. Also, as per new guidelines of MoEF&CC the project proponent shall upload the EC conditions on 'Parivesh' portal. Monitoring of ambient air quality parameters is carried out regularly. The reports are

EI,

		Electronic display board at entrance gate for display of CAAQMS & stack parameters is provided. Connectivity of three CAAQMS stations with SPCB server is established and registration for connectivity with CPCB server is also completed.
30	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored date (both in hard copies as well as by e-mail) to the respective regional office of MoEF, the respective Zonal Office of CPCB & SPCB.	Complied. Yes, compliance is same as per Sr No: xxix.
31	The environment statement for each financial year ending 31st March in Form-V as 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 & shall also be sent to the respective Regional Offices of the Ministry by e-mail.	Complied. Environment statement in Form-V of 3X660 MW Koradi for FY 2020-21 is submitted online.
32	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment & Forests, its regional Office and Central Pollution Control Board & State Pollution Control Board. The project proponent shall upload the status of compliance of the environmental clearance conditions on their website & update the same periodically & simultaneously send the same by e-mail to the Regional office, Ministry of Environment & Forests.	Complied. Yes, compliance is same as per Sr No: xxix.
33	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report & Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional office for their use during monitoring. Project proponent will up load the compliance status in their website & update the same from time to time at least sixmonthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.	Complied. As per point No. xxix. Criteria pollutant levels displayed at TPS main gate.
34	Separate funds shall be allocated for implementation of environment protection measures along with item wise break up. This cost shall be included as part of project cost. The funds earmarked for environment protection measures shall not be diverted for other purposes and year wise expenditure shall be reported to the ministry.	Yearly expenditure on Environmental protection measures is submitted to SPCB through yearly Environment statement.
35	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure & final approval of the project by the concerned authorities & the dates of start of land development work & commissioning of plant.	Complied. Date of approval of Project: 18/01/2008. The dates for Land development work were informed during the initiation phase of the project and subsequently the dates of COD for respective units are also intimated to MoEF&CC accordingly. Regarding date of financial closure, it will be intimated after compliance of EC conditions. Date of comm. /COD: U-8: 16/12/2015, U-9: 22/11/2016, U-10: 17/01/2017.
36	Full co-operation shall be extended to the Scientist/ Officers from the Ministry/ Regional office of the Ministry at Bangalore/CPCB/SPCB who would be monitoring the	PP has consented to condition.

GROUND WATER SAMPLE ANALYSIS AVERAGE REPORT

	√ ea) muibans√	301	30,	5	덣	30	<u>8</u>	ద	30	ĕ	Ę	Č	4	덩	301	200	(5	3DL	30	30,	BDL	
		-	-	8	8	g	Ъ	8	8		- G	7	8	8	700	ğ		8	30,	35	90.	BOL	
	N ec) osauegneM	0	- B	0	0	0	0	0	0	(i	0		0 2	0	O Z	C 2		Ci Z	C)	O Z	N. O.	N. D.	
()	Cadmium (as Co	2	2	2	2	0	Z Ci	0	0	Z O	Ω		Q	O N	O.	2		O Z	O	O	O X	N.D.	
	Chromium Total (Z O	2	Z O	Ζ Ω	2	Ζ Ω	Ω	Z D	9	- Z		Q O	ď	O	(O Z	ď	O.N.	Ö	N.D.	
(6	Selonium(as Se	Z	Z	Z	Z	Z	Z	D)	Z D	Z	Z	-	ri,	Ó	O.		Š	Ö	Ö.	O.	Q.	ď	
Jui	Chromium Trivale	O Z	z	Z Z	Z	Z,	Z	Z O	Z Ci	z ci	Z		Z O	ď	<u>S</u>	1	ń.	ď	ď	O.	N.D.	ď.	
_	Nickel (as Ni)	N CO	Z	Z	Z O	2	Z O	Z O	o'	Z O	Z	_	Z Č	<u>d</u>	Z Z		á	O Z	o z	Ö	Ö	N. O.	
st	Chromium Hexa (a	N N	Z Z	N O	Z	Z O	Z	2 0	Z O	Z O	Z		Z O	Δ.	Z Q	-	0	Ö	OZ	OZ	O.	Q.	
_	Mercury (as Hg)	Z C	D Z	Z O	Z O	Z	Z	Z	Z Q	z z	2		Z C	Z O	Z	_	Z	Z O	0	0	ď	Q Z	\dashv
_	(eA ea) sinoe1A	O Z	O Z	Z O	N D	Z E	Z D	39 N D	Z	105 N	2	2	5 Z	042 N	13 N		N 970	N 290	018 N	147 N	063 N		
_	(nS as) oniS	0.142	0.050	.80:0	0.102	0.063	0.137	0	0.02	0.10		2	D 0.1	0.0	0.0		0.0	D 0.0	170 0.0	0	- 0	6	_
	Lead (as pb)	N	Z	Z Z	D. Z.	S.	ž	Z O	Z Q	Z		Z	Z	Z	Z	_	Z	Z ()	0.0	_ Z	-	-	_
	Copper (asCu)	Ω Z	O Z	Ω Z	Z	Z	Z O	Z Z	Z	Z C	2	0 Z	z	Z	2		Z	232 N	5. S.	V 710	2		2
	Iton (as Fe)	0 203	0 38	0.334	0 465	0 275	0 236	0.334	0.261	0.290	_	Ö	0 188	0.246	0 22	-	0.305	0			, -	_	0.233
	Jest VressoiB	Free From Acute lethal	Free From Acute lethal toxicity	Free From Acute lethal toxicity	Free From Acute lethal toxicity	Free From Acute lethal toxicity	Free From Acute letnal toxicity	Free From Acute lethal toxicity	Free From Acute lethal	Free From Acute lethal	toxicity Free From	Acute lethal toxicity	Free From Acute lethal	Free From Acute lethal	Free From	toxicity	Acute lethal toxicity	Free From Acute lethal	Free From	Free From	toxicity Free From	Free From	Acute lethal toxicity
-	(яг сенгон)	O,	O Z	O Z	Ω Z	Ω Z	O.	0	D.	O Z		Ö.	Ω Z	O.		2	O.	Q Z	2		z	z	Z.O.
sp	Nitrate (as NO ₃)	43	40	93	22.00	29.80	38.10	32.80	28.70	40.00		34.00	22.60	37.00		29.50	4.52	44.30				47.00	26.7
-	(ac Sol) obadqlu2	610 4	217 17	146 7	65.2	58.4 2	57.4 3	40	47.4	110	_	56.4	0,	200	_	120	108	136		3	128	151	105.1
_	(S sa) abinquius			O.	O. N	O.	Q.	Q	O.	C 2	2	O.	O.	Ω Z		Ω Z	O Z	O Z		Z.	Ω Z	N.	N.D.
-		Z 0	Σ Δ	۵	۵	O.Z	9	Ω Z	Q	2	د	Ω Z	Ω Z			O Z	O Z	2		D Z	N	O.	N.D
-	Nitrogen Cyanide (as CN)	Z u	52 N	672 N	728 N	0.616	260	45	504		70.07	504	0.280	u c		0.618	0.5	6		0 560	0.560	0.616	0.551
-	Total Kjeldahl	0	0		0	BDL 0.6	BDL 0.	BDL 0.	BDL 0	-	72	BDL 0	BDL 0	-		907	BOL	Š	-	3DL	BDL	BDL	BDL
-	Solids Free Ammonia	0 BDL	8 80	11 BDI	505 BDI	-	340 B	381 B	430 B	-	809	491 E	897		8	501	749	-	0/8	609	603	791	538.2
-	Fixed Dissolved	190	D 688	D 48	0	D 381	0	- C	Q. 4.	-	0	0			2	۵	0	-	o	0	Q	N.D.	N.D.
-	Oll & Grease	2	Z	Z	z	z	2	2	Z		7	0 Z	2		Z	71 N	0	-	2	0	Z	0	12.67
	COD	16	_	4	12	6		- 4	- 00 (7		ın -				-		,-		ro a	,-	2	·-	o.
	800	4	4	6 7	3.2	4.	7 7	4 3			4	ന	"		m N	4	7	_	7 3	υ 0	ω 	 6.	4,
	00	9		φ φ	8 62	9	φ φ	9 9			80	1 67	0		ω	7 6.5	φ		ω	Ø	648 6.6	94 6.5	9.9
	Fluoride(as F)	588	0	0 602	0 528	0 542	0 616	0.505	C	2	0 528	0 99		9	0.55	2 0.727	8 0 736		0.588	0.694	0	3 0.694	70.601
	(AO9 as)	0 205	0.239	0 184	0 162	0.14	0.25	0 107		2	0 17	0.2		5	0.12	0.132	0 098		0.12	0.16	0.09	0.18	0.154
-	SSI	I DI	5.0	5.0	BDL	BDL	BDL	C	,	2	BDL	BDL		ZZ	BDL	BDL	Ë	5	BDL	BDL	BDL	B	6.25
	SOT	284	800	588	614	468	470	823	5	3	747	570		579	388	760	000	3	987	705	735	919	640.83
ε	onholds froe chloring	ъя <u>c</u>	BDL	BDL	BDL	BDL	BDL	Ğ	3	i i	BDL	뎡		BOL	BDL	BDL	č	2	BDL	BDL	ap.	BD.	Ĝ
	Hq	c	0 0	6,	67	0,	00		- (0 0	8.0	7.9		0 0	7.3	4.9		7.0	8.0	00	7.6	7.8	1 03
-	.qmoT	ac	8 8	28	8	27	28	3	17	28	28	59		28	58	29		8	28	56	28	83	9
	SANPLES		Dugwell	Borewell	Dugwell	Borewell	Dugwell	Borewell	Dugwell	Borewell	Dugwell		Borewell	Dugwell	Borewell		Dugwell	Borewell	leword	:	Borewell	Dugwell	Borewell
VILLAGE			Panjara		Mahadulla Dugwell		Koradi		Nanda			Suradevi		Whasala			Khasara			Kawatha		Khain	

1