ENVIRONMENTAL	CLEARANCE	To, The DIRECTOR SHAKAMBHARI ISPAT AND F M/s Shakambhari Ispat and Po	ower Limited,41A, A J C BOSE ROAD, OOR, ROOM No. 801, KOLKATA, WEST
Dro-Active and Deconcise Excititation by Interactive		 under the provision of EIA Not Sir/Madam, This is in reference to your a in respect of project submitted to IA/WB/IND1/411013/2022 dated 24 Maiclearance granted to the project are as 1. EC Identification No. 2. File No. 3. Project Type 4. Category 5. Project/Activity including Schedule No. 6. Name of Project 7. Name of Company/Organization 8. Location of Project 9. TOR Date 	application for Environmental Clearance (EC) o the Ministry vide proposal number r 2023. The particulars of the environmental
	Martin Martin	Date: 19/07/2023	(e-signed) Dr. R B Lal Scientist F IA - (Industrial Projects - 1 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

This is a computer generated cover page.

IA-J-11011/282/2021-IA-II (I) Government of India Ministry of Environment, Forest and Climate Change (I.A. Division – Industry I sector)

Indira Paryavaran Bhawan Vayu Wing, 3rd Floor, Jor Bagh Road, Aliganj, New Delhi – 110003

Dated: 19th July, 2023

To,

M/s Shakambhari Ispat and Power Ltd

41A, A J C Bose Road, Diamond Prestige, 8th Floor, Room No. 801, Kolkata, West Bengal-700017 Email: <u>siplmoef@shakambharigroup.in</u>

Project: Expansion of Shakambhari Ispat & Power Limited plant for production of 0.7875 million tons per annum Crude Steel/Stainless Steel, 0.214272 million tons per annum Ferro-Alloys (maximum) along with allied facilities by M/s Shakambhari Ispat and Power Ltd., located at Village: Parvatpur, Madandih, Radhamadabpur, P.O.: Bortoria, Tehsil: Raghunathpur, District: Purulia, West Bengal – Grant of Environmental Clearance.

Sir,

This refers to your proposal no. IA/WB/IND1/411013/2022 dated 24.03.2023 received through PARIVESH Portal for grant of Environmental Clearance (EC) for the project mentioned above. Further the project proponent has uploaded the information on portal on 07.06.2023.

2. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous), 2(a) Coal Washeries, 2(b) Mineral Beneficiation and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

3. The proposal was first considered in the 26th held on 12th, 13th and 17th April, 2023 wherein the Committee deferred the proposal due to certain deficiencies in the proposal and sought requisite information. The proposal was further considered based on the ADS submission in 32nd meeting of the EAC for Industry-I sector held on 26th & 29th May, 2023, wherein the Committee, after detailed deliberations, recommended the proposal. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at <u>https://parivesh.nic.in.</u>

4. The details of the proposal are as per the EIA/EMP report submitted by the proponent. The salient features of the proposal as presented during the above-mentioned meetings of EAC (Industry 1 Sector) are as under: -

S. No.	Particula	rs	Details submitted by PP
a.	Terms	of	
	Reference	for	10.01.2022
	undertaking	EIA	
	study		
b.	Period	of	December 2019 to February 2020
	baseline	data	
	collection		

S. No.	ParticularsDate of Public	22.07.202		submitted by PP	
с.	Consultation	22.07.202	L L		
d.	Action plan to	An amou	int of Rs. 498.5 Lak	ths has been earma	rked to address the
	address the PH		aised during public		
	issues	attached	as Annexure 1.	-	
e.	Location of the project	-	Parvatpur, Madanc aghunathpur, Distric	-	
f.	Latitude and				-
	Longitude of the	Point	Latitude	Longitude	
	project site	1	23°37'37.899''N	86°47'29.202"E	
		2	23°37'41.569"N	86°47'29.031"E	
		3	23°37'42.829"N	86°47'19.000"E	
		4	23°37'34.580"N	86°47'15.498"E	
		5	23°37'29.049''N	86°47'20.148"E	
		6	23°37'22.363''N	86°47'20.284"E	
		7	23°37'9.251"N	86°47'21.786"E	
		8	23°37'4.938"N	86°47'17.689"E	
		9	23°36'57.878"N	86°47'14.693"E	
		10	23°36'47.412"N	86°47'10.438"E	
		11	23°36'43.398"N	86°47'17.694"E	
		12	23°36'38.246''N	86°47'19.755"E	
		13	23°36'20.087"N	86°47'24.490"E	
		14	23°36'44.871''N	86°47'30.640"E	
		15	23°36'51.666''N	86°47'30.704"E	
		16	23°36'57.043"N	86°47'32.690"E	
	-	17	23°37'10.700''N	86°47'32.539"E	
		18	23°37'18.895''N	86°47'32.569"E	
	Strane.	19	23°37'24.314"N	86°47'29.900"E	
	5	20	23°37'29.717"N	86°47'31.515"E	
	e,	20	23°37'35.187''N	86°47'29.311"E	
		22	23°37'35.485"N	86°47'20.161"E	
		23	23°37'38.608"N	86°47'20.161"E	
		23	23°36'18.708"N	86°47'34.719"E	
		24	23°36'11.938''N	86°47'31.451"E	
		26	23°36'12.491"N	86°47'38.815"E	
		20	23°36'15.512"N	86°47'43.456"E	
		27	23°36'21.019"N	86°47'38.540"E	
			23°36'23.137"N		
~	Total land	29 81 102 H		86°47'32.735"E	
g. h.	Total landLand acquisition		a (200.41Acres) [Pri and area of 81.103Ha		under possession of
11.	details as per		ne Expansion Unit	. ,	-
	MoEF&CC O.M.	Proposed	=	will be setup in I	as well as
	dated 7/10/2014	-	ne total land, 46.95	Ha has been conv	erted for industrial
			Remaining land wil		
		purpose.	Kemanning lanu Wi	ii also de converte	a for mousural use

S. No.	Particulars		De	tails subm	itted by	y PP	
		prior to commen		of the proje	ect.		
i.	Existence of habitation &	R&R is not appl	licable				
	involvement of	Existence of Ha	bitation				
	R&R, if any	Project Site – N	il				
		Study Area					
			Distance	Direc	tion		
		Madandih 0).05Kms	East			
					-		premises are village
							hool at 0.70km and
			-		n in Eas	st dire	ection form the plant
		boundary (Ferro					
j.	Elevation of the project site	183 m above me	ean sea l	evel			
k.	Involvement of	No Forest Land	is involv	ved in the p	roject s	ite.	
	Forest land if any.	Sia.					
1.	Water body	Project site:		C			
	exists within the	No water body e	exists wi	thin the pro	piect site	e	
	project site as			ann an Pre		•	
	well as study	Study area :					
	area	Water Bo	dy	Distance	Direct	tion	
		Uttala Nadi		5.10km	We	st	
		Panchet Reserv	voir	5.8km	We	st	
		Ramchandrapu	ır	5.5km	SE	2	
		Reservoir					
		Damodar Rive	r	6.0km	Nor	th	
		Panchet Dam		7.15km	NW	V	
m.	Existence of ESZ				E C		
	/ ESA / national	No ESZ/ ESA/ 1	national	park/ wildl	ife sanc	tuary	// biosphere reserve/
	park / wildlife	tiger reserve/ ele					
	Sanctuary 4	List of Reserved	d and Pro	otected Fore	est in St	tudy a	area:
	biosphere	1. Panchet					
	Reserve / tiger	2. Senara R					
	reserve / elephant	3. Brindaba	-	i			
	reserve etc. if	1					
	any within the	5. Behti PF					
	study area	 Dubrajp Dandahi 					
		8. Ledium					
		9. Nimtiku					
		10. Indra Pa					
n.	Project cost	Existing capital	cost of t	he project	was Rs.	. 100	1 Crores. The capital
		cost of the prope					
0.	EMP cost	Туре	(D	Capital s. in Crore	c)		Recurring (Rs. in Crores)
		Proposed		6.5350 Cro			Rs. 0.7128 Crores
		TTOPOSEd	15.3	0.5550 Cr	762		NS. 0. / 120 CIUIES

//

S. No.	Particulars	Details submitted by PP
р.	Employment	The employment generation form the proposed expansion is 1250.
	opportunity	
q.	Water and Power	Water – The water requirement after the proposed expansion is
-	requirement	estimated as 15,139m3/day. The power requirement after the
		proposed expansion is estimated as 209.5MW.

Unit configuration and capacity:

		Existi	ng Facility	as per EC	dated 21.			ed on 29.04	4.2020	Propose	ed Unit		Rem arks
SI	Plant	То	tal	Impler	nented	Ur implem		As per	сто	_	3		
N 0.	Equip ment/ Facility	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Final	
1.	Pellet Plant	1x1870 TPD	582,00 0	A SE	IC1.	1x1870 TPD	582, 000		2	Capacity enhance ment	268,00 0	850,00 0	
2.	Produce r Gas Plant				J		1		-	6x4000 Nm ³ /hr	24,000 Nm ³ /hr	24,000 Nm ³ /hr	
3.	Sponge Iron Plant	DRI Kiln 4x100T PD + 2x350T PD + 1x600T PD	544,00	DRI Kiln 4x100T PD + 2x350T PD + 1x600T PD	544,00			DRI Kiln 4x100T PD + 2x350T PD + 1x600T PD	544,00 0	Capacity enhance ment of 4x100T PD+ 2x350T PD+ 1x600T PD 1x600T PD (additio nal DRI	30,400 (additi onal) 53,200 (additi onal) 45,600 (additi onal) 237,60 0	910,80 0	
4.	Blast Furnace	Mini Blast Furnace : 1x350m 3 Pig casting Machin e: 1x1500 TPD	249,90 0	- Pr	Ptect	Mini Blast Furnac e: 1x350 m3 Pig casting Machi ne: 1x1500 TPD	249, 900	10 15		Capacity enhance ment of Mini Blast Furnace: 1x350m 3	166,60 0 (additi onal)	416,50 0	
5.	Sinter Plant	1x20m ³	198,00 0			1x20m 3	198, 000			Sinter Plant of changed configur ation 1x90m ² will be installed	597,60 0 (additi onal)	795,60 0	



		Existi	ng Facility	as per EC	dated 21.	12.2016 &	amend	ed on 29.04	4.2020	Propose	ed Unit		Rem arks
SI	Plant	То	tal	Implen	nented	Ur implem		As per	сто		A		arks
N 0.	Equip ment/ Facility	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Final	
6.	SMS	9x25T Inducti on Furnace LRF: 1x30T & CCM: 3x6/11	523,95 0	7x25 Ton IF & CCM 3x6/11 m	400,72 0	2x25T and LRF 1x30T	123, 230	7x25 Ton IF & CCM 3x6/11 m	400,72 0	Capacity enhance ment/ Product Modific ation+ 1x25 Ton AOD	263,55 0 MS/SS Billets (additi onal)	787,50 0	
7.	Rolling Mill along with wire drawing facility	1000TP D	300,00 0	1000TP D	300,00 0	200		1000TP D	300,00 0	1000TP D	360,00 0 MS/SS Long Produc ts	660,00 0	
8.	Reheati ng Furnace			- 5	-			-		2x40TP H		2x40T PH	
9.	Oxygen Plant		225TP D			\	225 TPD		225TP D			225TP D	-
		AFBC - 36 TPH	8.5 MW	AFB <mark>C</mark> - 36 TPH	8.5 MW		-	AFBC - 36 TPH	8.5 MW			8.5MW	
		CFBC - 100 TPH	25 MW	CFBC - 100 TPH	25 MW			CFBC - 100 TPH	25 MW	22		25MW	
		CFBC - 120 TPH	28.5 MW	T.	1	CFBC - 120 TPH	28.5 MW					28.5M W	
	Captive	WHRB @4x10 0TPD DRI - 40 TPH	8 MW	WHRB @4x10 0TPD DRI - 40 TPH	8 MW	ts if	5	WHRB @4x10 0TPD DRI - 40 TPH	8 MW			8MW	
1 0.	Power Plant	WHRB @2x 350TP D DRI- 71 TPH	15 MW	WHRB @2x 350TP D DRI- 71 TPH	15 MW			WHRB @2x 350TP D DRI- 71 TPH	15 MW			15MW	
		WHRB @1x 600TP D DRI - 64TPH	14 MW	WHRB @1x 600TP D DRI - 64TPH	14 MW			WHRB @1x 600TP D DRI - 64TPH	14 MW		2MW	16MW	
										WHRB @1x 600TPD DRI - 64TPH	16 MW	16MW	

		Existi	ng Facility	as per EC	dated 21.	12.2016 &	amend	ed on 29.04	1.2020	Propose	ed Unit		Ren arks
SI	Plant	То	otal	Impler	nented	Ur implem		As per	сто	U	3		ai K
N).	Equip ment/ Facility	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Configuration	Capacity(TPA)	Final	
										BF Gas Based	9 MW	9MW	
												126M W	
1	Iron Ore Benefic iation		0.63 MTPA	-	Rt: T	रवै	0.63 MTP A	- P20		Change in Configu ration from 0.63MT PA to 1.0 MTPA	0.37 MTPA (additi onal)	1.0MT PA	
•	Coal Washer y		0.74 MTPA	7	(-		0.74 MTP A	-				0.74M TPA	
	Lime Plant	250TP D	80,000 TPA	-	7	250TP D	80,0 00 TPA					80,000 TPA	
1	Ferro Alloy Plant with Metal recover y Plant	4x9MV A SAF with metal recover y Plant	63,150 TPA Fe-Mn or Si. Mn or Fe Si or High Carbon Ferro Chrom e, or Pig Iron, or in combin ation of any	4x9MV A SAF with metal recover y Plant	63,150 TPA Fe-Mn or Si. Mn or Fe Si or High Carbon Ferro Chrom e, or Pig Iron, or in combin ation of any	ts if		4x9MV A SAF with metal recover y Plant	63,150 TPA Fe-Mn or Si. Mn or Fe Si or High Carbon Ferro Chrom e, or Pig Iron, or in combin ation of any	Capacity enhance ment of 4x9MV A SAF + Addition al installati on of 4x9MV A SAF	Fe-Mn- 194,05 8 or Si. Mn- 142,84 8 or Fe Si – 64,282 or High Carbon Ferro Chrom e – 135,33 0, or Ferro Silico Chrom e – 88,664, or Pig Iron- 214,27 2, or in combin ation of any	Fe-Mn- 194,05 8, or Si. Mn- 142,84 8 or Fe Si – 64,282 or High Carbon Ferro Chrom e – 135,33 0, or Ferro Silico Chrom e – 88,664, or Pig Iron- 214,27 2, or in combin ation of any	
l 5.	Briquett e Plant									1x 50 TPH	300,00 0	300,00 0	
l	Sinter									1x600	216,00	216,00	

		Existi	ng Facility	as per EC	dated 21.	12.2016 &	amende	ed on 29.04	.2020	Propose	ed Unit		Rem arks
SI	Plant	То	tal	Impler	nented	Ur implem		As per	• СТО	_			ai 115
N o.	Equip ment/ Facility	Configuration	Capacity(TPA)	Final									
6.	Plant									TPD	0	0	

5. The EAC, in its meeting held during $26^{th} \& 29^{th}$ May, 2023, inter-alia, deliberated the following:

- i. The EAC noted that existing greenbelt has been developed in 23.66 Ha which is about 29.17% of the total project area of 81.103 Ha with total plantation of 36,000 trees. The EAC observed that existing project dates back to 2016 and PP has still not completed the greenbelt in 33% of the project area. Also, the green belt density is very less and not as per 2500 trees/ha. PP has failed to comply with the ToR condition and therefore shall provide justification in this regard and prepare a plan for effective implementation of greenbelt development and gap filling in the existing plantation.
- ii. The Committee deliberated on the baseline data and incremental GLC due to the proposed project and suggested to re-verify the incremental GLC values. PP shall also submit the mitigation measures that will be undertaken to minimise the PM_{10} values.
- iii. The EAC deliberated on the project cost and EMP cost of the existing and proposed project. The EAC is of the view that EMP cost do not commensurate with the project cost and PP shall revise the EMP cost. PP shall provide the EMP expenditure made with respect to the existing project.
- iv. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020. Also, the EAC advised to quantify the written and oral representation received during the public hearing. EAC is of the view that the PP has made a vague plan.
- v. The PP shall prepare a Village Adoption program consisting of need based community development activities and submit an undertaking for adoption of villages including the name of villages.
- vi. The EAC deliberated on the PH issues raised during the earlier EC and is of the view that PP shall submit the status of implementation of the action plan of the commitment made by the PP during the existing ECs in tabular form.
- vii. PP reported that there is no Schedule-1 Species of Fauna in the Study area. The EAC is of the view that PP shall obtain certificate from the State Forest Department certifying the same.
- viii. The EAC noted that there is Madandih Village at a distance of 0.05 km from the project site. Also there are other ESA's like school and hospital within the study area. PP shall submit the

specific mitigation measures that will be undertaken to minimise the impact of project activities on these ESA's.

- ix. There is no proper Engineering drawing of a layout. It missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
- x. The proposed project area is observed to be in multiple patches. The EAC is of the opinion that PP/Consultant shall submit the coordinates of project area patch wise.
- xi. Total land area is 81.103 ha which is under the possession of the company. PP shall submit the status of conversion of land for industrial purpose along with the requisite documents.
- xii. The EAC noted that the existing project was accorded environmental clearance vide lr no. J-11011/201/2013-IA.II(I) on 21st December, 2016 and the complete project is still not implemented. PP shall submit the justification for the same.
- xiii. In view of above, the PP requested the Committee to allow to reappear with the revised information/ clarification to the points deliberated during appraisal.

6. The EAC, in its 32nd meeting of Expert Appraisal Committee (Industry-1 Sector) held on held on 26th &29th May, 2023, based on information & clarifications provided by the project proponent and after detailed deliberations **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements

7. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1 Sector) hereby decided to grant **Environment Clearance** for instant proposal of **M/s Shakambhari Ispat and Power Ltd** under the provisions of EIA Notification, 2006 subject to the following specific conditions and general conditions:

A. <u>Specific conditions:</u>

- i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as applicable to this project.
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. The total proposed project land shall be converted for industrial use prior to commencement of the project.
- v. Environment Sensitive Areas near the plant premises are village Madandih at 50meters, Gopalganj Primary school at 0.70 km and Harmadih Rural Hospital at 0.58 km in East direction form the plant boundary (Ferro Division) within study area. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include these locations in its environmental monitoring programme.
- vi. The total water requirement of 15,139 m³/day, shall be met from the DVC (13,735 m³/day) and recycled water (1,404 m³/day) after obtaining necessary permission from the Competent Authority. No ground water shall be abstrated. Efforts shall further be made to use maximum water from the rain water harvesting sources.
- vii. The project proponent shall strictly implement the mitigation measures proposed to minimise the PM_{10} values.
- viii. Three tier Green Belt shall be developed in at least 33% of the project area in the forthcoming monsoons of 2023 (as committed) with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Madandih, Radhamadhabpur and Parvatpur Villages, Gopalganj Primary School and Harmadih Rural Hospital. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
 - ix. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.
 - x. All the commitments made towards socio-economic development of the nearby villages including the commitments made during the previous EC shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 4.985 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
 - xi. As committed PP shall adopt three villages namely: Madandih, Radhamadhabpur and Parvatpur in East direction and prepare and implement a robust plan to develop them into model villages in next three years.
- xii. The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report

shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

- xiii. The ETP for Mini Blast Furnace effluent should be designed to meet Cyanide standard as notified by the MoEFCC.
- xiv. The Standards issued by the Ministry vide G.S.R. No. 277(E) dated 31st March, 2012 regarding integrated iron and steel plant shall be followed. The Standards issued by the Ministry vide G.S.R. No. 277(E) dated 31st March, 2012 regarding integrated iron and steel plant shall be followed.

B. <u>General Conditions</u>

I. Statutory compliance:

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.
- ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
 - ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
 - x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
 - xix. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
 - xx. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxi. The 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
- xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m3 for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
- xxiii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.

- xxiv. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- xxv. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- xxvi. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.
- xxvii. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxviii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
 - xxix. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
 - xxx. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (preand post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

- ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- x. The project proponent shall provide appropriate ETP for effluents discharged from coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to Coke oven plants) as amended from time to time.
- xi. Treated water from ETP of COBP shall not be used for coke quenching.
- xii. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- xiii. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- xiv. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.
- xv. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
- xvi. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- xvii. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- xviii. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m³/tonne of raw coal.
 - xix. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
 - xx. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government
- xxi. Air Cooled condensers shall be used in the captive power plant.
- xxii. Tailing management plan shall be implemented as included in EIA report.
- xxxi. Tailings from Iron Ore beneficiation plant shall be dewatered in filter press and no slime /tailing pond shall be permitted.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.
- vii. Ensure installation of regenerative type burners on all reheating furnaces.
- viii. Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
 - ix. Coke Dry Quenching (CDQ) shall be provided for coke quenching for both recovery and nonrecovery type coke ovens.
 - x. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- xi. The dolochar generated shall be used for power generation.
- xii. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xiii. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures

taken shall also be included in the six monthly compliance report being submitted by the project proponents.

- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- vi. Solid waste utilization
 - a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
 - c. Used refractories shall be recycled as far as possible.
- vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
 - ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
 - x. In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.
 - xi. Tar Sludge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens).
- xii. Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
- iii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP.

Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- The company shall have a well laid down environmental policy duly approve by the Board of ii. Directors. The environmental policy should prescribe for standard operating procedures to and balances bring have proper checks and to into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

8. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

9. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

11. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

12. This issues with approval of the competent authority.

(Dr. R. B. Lal) Scientist 'F'/ Director Tel: 011-20819346 Email- <u>rb.lal@nic.in</u>

Encl. as above at Annexure -I

Copy to: -

- 1. The Secretary, Department of Environment, Government of West Bengal, Secretariat Kolkata.
- 2. The Secretary, Department of Forests, Government of West Bengal, Kolkata.
- 3. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi.
- 4. The Principal Chief Conservator of Forests, Government of West Bengal, Block LA, 10A Sector-III, Salt Lake City, Kolkata-700098.
- 5. The Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, IB-198, Sector-II, Salt Lake City, Kolkata 700106
- 6. The Member Secretary, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 7. The Member Secretary, West Bengal State Pollution Control Board, Paribesh Bhawan, 10A-Block LA, Sector –III, Salt Lake City, Kolkata 700 098.
- 8. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi 110001.
- 9. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
- 10. District Collector, Purulia District, West Bengal.
- 11. Guard File/Monitoring File/Website/Record File/ Parivesh Portal

(Dr. R. B. Lal) Scientist 'F'/ Director Tel: 011-20819346 Email- <u>rb.lal@nic.in</u>

1/

Table: Action Plan as per Ministry's O.M. dated 30/09/2020

Sl. No	Activities	Physical Targets	Implen (in	Year of nentation Cost Rs Lakh	s)	Total Expenditure (Rs. In Lakhs)
			1 st Year	2 nd Year	3 rd Year	Laxiis)
1.0	Adoption of vil	lage Madandih for Socio-economic			I cai	
1.1	Road Development	Construction of Pucca road (Paver Blocks) for the approx. 1km along with need based pucca drain connecting village up to Shakambhari plant.	45.0			45.0
1.2	Public Bus Stand with Shelter	Construction of One (1) Public Bus Stand with shelter near Madandih village at SH-5. (<i>Platform</i> construction and Installation of Pre-Fabricated Shelter)	6.0			6.0
1.3	Installation of Solar Street Lights		12.0			12.0
1.4	Renovation of pond	First time shaping with excavation and slide slope stabilization, Construction of Bathing Ghat on one side with changing area, pair of toilets with septic tank and Beautification of pond by plantation of 100 tress along boundary of pond along with Yearly Cleaning/Desilting of Pond	13.0	0.50	0.50	14.0
1.5	Construction of Community Hall	Construction of one (1) Community Hall in the village along with installation of coolers, fans & lights and construction of 4 pair of toilets with septic tank		30.0		30.0
1.6	Construction of Model Anganwari Centre	Construction of One (1) Model Anganwari Centre in the village. (construction of Two rooms, installation of cooler, fans & lights, furniture and other necessary furniture)		30.0		30.0

//

Sl. No	Activities	Physical Targets	Implen	Year of nentation Cost Rs Lakh		Total Expenditure (Rs. In
			1 st Year	2 nd Year	3 rd Year	Lakhs)
1.8	Establishment of Skill Development Centre	Construction of One (1) Skill Development Centre near the village (Construction of Building and installation of appropriate devices & Machines)			85.0	85.0
1.9	Installation of Hand Pumps	Installation of Ten (10) nos. of Mark-2 Hand Pumps		5.5		5.5
1.10	Development of Primary School	Development of Primary School of Gopalganj near Madandih (construction of one (1) classroom & along with maintenance of other classrooms, providing furniture & white boards in all classrooms, construction of separate Two (2) pair of toilets for boys & girls, development of playground in the school and installation of drinking water system (submersible pump and Water Cooler) in school)		30.0		30.0
2.0	Adoption of vil	lla <mark>ge Radhamad</mark> habpur for Socio-ec	onomic de	evelopme	ent	
2.1	Road Development	Construction of Pucca road (Paver Blocks) for the approx. 1.5km along with Pucca drain/culvert required connecting village to SH- 5.	70.0			70.0
2.2	Installation of Solar Street Lights	Installation of Twenty (20) nos. of solar lights in the village. (Solar light with GI pipe and installation)	8.0			8.0
2.3	Renovation of pond	First time shaping with excavation and slide slope stabilization, Construction of Bathing Ghat on one side with changing area, pair of toilets with septic tank and Beautification of pond by plantation of 100 tress along boundary of pond along with Yearly Cleaning/Desilting of Pond	13.0	0.50	0.50	14.0
2.4	Installation of	Installation of Ten (10) nos. of		5.5		5.5

Sl. No	Activities	Physical Targets	Implen (in	Year of nentation Cost Rs Lakh	s)	Total Expenditure (Rs. In Lakhs)
			1 st Year	2 nd Year	3 rd Year	Lakiis)
	Hand Pumps	Mark-2 Hand Pumps	I Cui	I cui	I Cui	
3.0	Adoption of vil	lage Parvatpur for Socio-economic	developm	ent		
3.1	Road Development	Construction of need based pucca drainage in the village streets	10.0			10.0
3.2	Installation of Solar Street Lights	Installation of Ten (10) nos. of solar lights in the village. (Solar light with GI pipe and installation)	4.0			4.0
3.3	Renovation of pond	First time shaping with excavation and slide slope stablization, Construction of Bathing Ghat on one side with changing area, pair of toilets with septic tank and Beautification of pond by plantation of 100 tress along boundary of pond along with Yearly Cleaning/Desilting of Pond	13.0	0.50	0.50	14.0
3.4	Installation of Hand Pump	Installation of Ten (10) nos. of Mark-2 Hand Pumps	13 M	5.5		5.5
4.0	Installation of Hand Pumps	Installation of Ten (10) of Mark-2 Hand Pumps each in village Erakusum and Harmadih		11.0		11.0
5.0	Installation of Solar Street Lights	Installation of Five (5) nos. of solar lights each in the village Erakusum & Harmadih. (Solar light with GI pipe and installation)	4.0			4.0
6.0	Renovation of pond in village Erakusum	First time shaping with excavation and slide slope stabilization, Construction of Bathing Ghat on one side with changing area, pair of toilets with septic tank and Beautification of pond by plantation of 100 tress along boundary of pond along with Yearly Cleaning/Desilting of Pond	13.0	0.50	0.50	14.0
7.0	Sports Promotion	Organizing the sports tournament in the area once in every year (Cricket Tournament)	5.0	5.0	5.0	15.0

Sl. No	Activities	Physical Targets	Year of Implementation and Cost (in Rs Lakhs) 1 st 2 nd 3 rd Year Year Year			Total Expenditure (Rs. In Lakhs)
8.0	Skill Development and Empowerment of Women	Distributing knitting machines for making cotton hand gloves etc. in local village of Harmadih, Madandih, Radhamadhabpur, Parvatpur, Erakusum. This will be an earning source for women in village by their skill development	10.0			10.0
9.0	Providing Medical Facility	Providing Two (2) nos. of ICU Ambulances under Harmadih Hospital covering villages Harmadih, Madandih, Radhamadhabpur, Parvatpur, Erakusum and Goplaganj	Res .	16.0		16.0
10.0	Establishment of Cultural Centre	Construction of Sri Biranchidham Cultural Centre		40.0		40.0
Grand Total in Rs.			226	180.5	92	498.5

Note: M/s SIPL has proposed to adopt nearby three villages namely: Madandih at 50 meters, Radhamadhabpur at 350 meters and Parvatpur at 220 meters in East direction. A total budget of Rs. 3.885 Crores has been envisaged for carrying out various developmental activities under adoption of these villages, in three-year time duration.

reprotects if She is Pro

 \swarrow