## F. No. J-11011/366/2010-IA.II (I)

#### Government of India

Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

Indira Paryavaran Bhawan Jor Bagh Road, Aliganj, New Delhi – 110003 E-mail: r.sundar@nic.in Tel: 011-24695304

Dated: 8th April, 2021

To

Shri Sanjay Agarwal, Director, M/s. Giridhan Metal Private Limited, Premlata, 39, Shakespeare Sarani, 3<sup>rd</sup> Floor, Kolkata 700017.

Email: giridhanmetal@gmail.com; Tel: 033 22892734

Subject:

Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal – Environment Clearance – regarding.

Sir,

- Stry
- 1. This refers to the online application of M/s. Giridhan Metal Private Limited made vide proposal no. IA/WB/IND/201973/2010 dated 05/03/2021 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 2. The aforesaid proposal was considered in the 32<sup>nd</sup> meeting of the EAC (Industry -1) held on 15<sup>th</sup> -17<sup>th</sup> March, 2021. The EAC proceedings of the said meetings are furnished as below.

## Details submitted by the project proponent

3. The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord
07/08/2019	10 <sup>th</sup> meeting of the REAC (Industry – 1) held on 22 <sup>nd</sup> - 23 <sup>rd</sup> August, 2019	Terms of Reference	01/10/2019
04/02/2020	Transfer of ToR	Transfer of ToR from Damodar Ispat	16/03/2020

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA to 3,00,000 TPA to 30,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Januria, District Paschim Bardhaman, West Bengal."



Date of Application	Consideration	Details	Date of Accord
		Limited to Giridhan Metal Private Limited	

- 4. The project of M/s. Giridhan Metal Private Limited located at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, State West Bengal is for expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB).
- 5. Environmental Site Settings

S. No.	Particulars	Details	Remarks
i.	Total land	Existing plant area is 40.44 acres (16.37 ha). Additional land required for expansion is 38 acres (15.37 ha). Hence after expansion, total plant area will be 78.44 acres (31.74 ha).	Proposed expansion will be done within existing plant premises and own additional area adjacent to plant site. Complete land is already under the possession of company.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total plant area after expansion will be 78.44 acres (31.74 ha) which is totally under the possession of the company.	Plot details with area of land under possession of GMPL duly certified by Block Land & Land Reforms Officer, Jamuria, Burdwan obtained.
iii.	Existence of habitation & involvement of R&R, if any.	Expansion project will be done within existing plant premises and company's own land adjacent to existing plant and there is no existence of habitation & involvement of R&R	
iv.	Latitude and Longitude of the project site.	Latitude: 23 <sup>0</sup> 41'4 <sup>0</sup> .83" N to 23 <sup>0</sup> 41'59.49" N Longitude: 87 <sup>0</sup> 5'35.35" E to 87 <sup>0</sup> 6'0.97" E	
v.	Elevation of the project site	Elevation of the plant site is from 111 m to 127 m	
vi.	Involvement of Forest land, if any.	No Forest land is involved.	



			distance from the plant site is as follow:  SingaranNala (~2.5 km in East direction)  Damodar Nala (~3.0 km in West direction)  Punta Khal (~6.5 km in WNW direction)  Nonia Khal (~8.0 km in SW direction)  Ajay River (~8.0 Km in NNE direction)	
6 fri	iii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	No ESZ/ ESA/ National Park, Wildlife Sanctuary, Biosphere Reserve, tiger reserve, elephant reserve exists within 10 km radius study area.	-

**Details** 

Project site: No natural water body

Study area: 5 water bodies present

within study area. Name and its

present within plant site.



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No.

vii.

**Particulars** 

Water body exists

within the project

area

site as well as study

- 6. The existing project was accorded environmental clearance vide letter number J-11011/366/2010-IA.II(I) dated 2<sup>nd</sup> April, 2012 for expansion of existing unit of 1x50 TPD (15.000TPA) DRI by 3 x 100 TPD DRI (1.05,000 TPA of sponge iron), 2x15T IF, 1x30T LF (1,05,000 TPA of MS Billets), 310 TPD Rolling mill (1,00,000 TPA of Rods/bars/light structurals), 1X9 MVA SAF (15,000TPA of Fe-Mn/Si-Mn), 16 MW Captive Power Plant (7 MW of WHRB and 9 MW of FBC) and validity extension issued on 24th May, 2019 and validity extended till 1st April, 2022. Transfer of EC from Damodar Ispat Limited to Giridhan Metal Private Limited was also obtained from MoEFCC vide letter no. J-11011/366/2010-IA. II(I) dated 29th Jan., 2020. The implementation of this EC is under process and is expected to be completed within validity period. Consent to Establish was obtained from WBPCB vide Memo no. 211-2N-51/2003 & NOC NO159358 dated 15/02/2019. and change in name of CTE from Damodar Ispat Limited to Giridhan Metal Private Limited vide Memo No. 196-2N-51/2003(E) and NoC no. 164509 dated 04/08/2020.
- 7. Implementation status of the existing EC:

S. No.	Facilities	Units	Capacity as per granted EC dated 2nd April, 2012 & validity extended till 1st April, 2022	Implementation Status as on date	Expected Completion Time
1.	Sponge Iron	TPA	120000 (1X 350 TPD DRI Plant)	Under Construction	Apr, 2021

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."

Remarks

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S. No.	Facilities Unit		Capacity as per granted EC dated 2nd April, 2012 & validity extended till 1st April, 2022		Expected Completion Time	
2.	MS Billets	TPA	105000 {2X15 Ton IF (Induction Furnace) * & 1X30 Ton LF (Ladle Furnace)}	Under Construction	Nov., 2021	
3.	Rolling Mill	TPA	100000 (310 TPD of rolled/bars/light structure)	Under Construction	Nov., 2021	
4.	SAF	TPA	15000 (1X9 MVA of Fe-Mn/ Si-Mn)	Under Construction	May, 2021	
5.	Captive Power Plant	MW	16 MW (35 TPH WHRB & 32 TPH FBC boiler)	Under Construction	Apr., 2021	

<sup>\*</sup>Note — As per the recommendation of EAC for the expansion proposal (also mentioned in the ToR letter issued on 1/10/2019), existing 15 Ton IF will be replaced by 20 Ton IF. Expected time of completion as submitted earlier is delayed by 5-6 months due to unprecedented time because of COVID19 and expected time of completed tabulated above is after considering the unprecedented delay.

## 8. The unit configuration and capacity of existing and proposed project is given as below:

S.		Existing Unit		Proposed Unit		Total (Existing + Proposed)	
N o.	Name	Configurat ion	Product ion (TPA)	Configurat ion	Product ion (TPA)	Configura tion	Product ion (TPA)
1.	Sponge Iron (DRI Plant)	1X 350 TPD	120000 TPA	1X 600 TPD	198000 TPA	1x 350 & 1X 600 TPD DRI Plant	318000 TPA
2.	MS Billets (Inducti on Furnace with LF & CCM)	2X15 Ton IF (Induction Furnace) * & 1X30 Ton LF (Ladle Furnace)	105000 TPA	6X15 Ton IF* (Induction Furnace)	267300 TPA	6X20 Ton IF* (Induction Furnace) & 1X30 Ton LF (Ladle Furnace)	372300 TPA
3.	Rolling Mill	310 TPD of rolled/bars/l ight structure	100000 TPA	625 TPD of rolled/bars/l ight structure	200000 TPA	310 TPD & 625TPD of rolled/bars/ light structure	300000 TPA
4.	Submer ged Arc Furnace (SAF)	1X9 MVA of Fe-Mn/ Si-Mn	15000 TPA	1X9 MVA of Fe-Mn/ Si-Mn	15000 TPA	2X9 MVA of Fe-Mn/ Si-Mn	30000 TPA

S. N o.		Existing Unit		Proposed	d Unit	Total (Existing + Proposed)	
	Name	Configurat ion	Product ion (TPA)	Configurat ion	Product ion (TPA)	Configura tion	Product ion (TPA)
5.	Waste Heat Recover y Boiler based CPP	35 TPH	7 MW	70 TPH	14 MW	35 TPH & 70 TPH	21 MW
6.	Captive Power Plant (FBC boiler)	1X 32 TPH FBC boiler	9 MW	50 TPH FBC boiler	12 MW	1X 32 TPH & 50 TPH FBC boiler	21 MW
7.	Billet Caster	1X 350 TPD DRI Plant	120000 TPA		2X2 Strand	2X2 Strand	
0	D '1 (	Viding with W/	T' 1	Marine Control of the	17.7		

8. Railway Siding with Wagon Tippler

Note: \*On the recommendation of honorable EAC, instead of 2X15 Ton IF and proposed 6X15 Ton IF (Induction Furnace), {6X20 Ton IF (Induction Furnace)} will be installed as a part of proposed expansion.

Note: - Presently only 15000 TPA Sponge Iron Plant (50 TPD DRI Plant) is installed which is currently non- operational and will be dismantled after commissioning of 1X350 TPD.

9. The details of the annual raw material requirement for the expansion cum proposed project along with its source and mode of transportation is given as below:

C	Raw material	Estimated quantity (in TPA)		Source of raw	Mode of	Distance	
S. No.		Existing	Additional	Total after expansion	material	transportation	from plant site
I				Sponge iro	n		
1.	Iron Ore / Iron Ore Pellets	1,74,000	3,03,000	4,77,000	Iron Ore – From Orissa & Jharkhand	Rail	250-280 Km
					Iron Ore Pellets – Nearby plants e.g. Super Smelters Ltd, Shyam Sel etc.	Road	Within 2 Km
2.	Coal (Imported)	75,600	1,24,740	2,00,340	To be procured through reputed importers like Adani global Pte limited, Saraogi Global Pte Limited, Swiss Singapore Overseas, Coal	Ship & Rail	Over Sea

8.43

-		Estir	nated quantity	(in TPA)	Sauras of warr	24.1.6	Distance
S. No.	Raw material	Existing	Additional	Total after expansion	Source of raw material	Mode of transportation	from plant site
					India ltd, Avani, JSW Intl, etc.		
	Indian Coal for DRI	32,400	53,460	85,860	ECL, Agarwal Coal etc.	Rail	60-80 km
3.	Dolomite	4,200	6,930	11,130	To be procured from Bhutan	Rail	900-920 Km
II				Steel Melting	Shop		
1	Pig Iron	15,750	37,861	53,611	To be procured mainly from Tata Steel, SAIL, etc as well as other reputed suppliers.	Rail	150-170 KM
2	Sponge Iron (DRI)	99,750	271060	370810 (Self -3,18,000 Purchased—	Own Production and other nearby steel mills, if	Own Nearby plants	Own 1-5 KM
3	Scrap	5,350	16,988	52,810) 22,338	required.  To be procured through Indicaa Group Limited, Ayaan Global FZE and other reputed suppliers.	Ship & Rail	Over Sea
4	Ferro Alloys	2,100	2,740	4,840	Silico Manganese from own production / Indsil energy & Electro Chemicals Limited and other suppliers	Own	Own
III				Rebar Mill			
1	Liquid steel	1,05,000	2,67,300	3,72,300	O	wn Production	
IV			Ferro	Alloys Plant: S	ilico Manganese		
1	Manganese Ore	37,500	37,500	75,000	Import from South Africa / domestic purchase from state of Madhya Pradesh, Karnataka, etc	Rail	900-950 KM
2	Coal / Coke	12,600	12,600	25,200	Import / Local Purchase	Road	Within 10- 15 KM
3	Electrode Paste	300	300	600	Purchase from Maharashtra, West Bengal, Karnataka, etc	Road	20-25 KM
4	Oxygen Lancing	70	70	140	Local sources	Road	Within 10- 15 KM

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S.	Daw	Estimated quantity (in TPA)		C	Madaaf	Distance	
No.	Raw material	Existing	Additional	Total after expansion	Source of raw material	Mode of transportation	from plant site
	Pipe, Casting Sheets, etc						
5	Dolomite	4000	4000	8000	To be procured from Bhutan	Rail	900-920 km
V				Captive Pow	er Plants		
1	Coal for CPP	75,000	85,000	1,60,000	Auction — Eastern Coal fields Limited (ECL) and suppliers like Adani Enterprises and Agarwal Coal Corporation	Rail	60-80 km

- 10. The total freshwater requirement for the project is estimated as 4178 m³/day which will be obtained from Surface Water (River Barakar d/s of Maithon Dam). River Barakar is the main tributary of the Damodar River in eastern India. The permission for drawl of Surface water (4.178 MLD) has already been obtained from Damodar Valley Reservoir Regulation Committee (DVRRC), Unit Maithon, Dhanbad (Jharkhand), Central water Commission, Department of Water Resources, Ministry of Jal Shakti, GoI vide their letter no. MD/DVRR/W-6(143)/2020/1756-61 dated 01st July, 2020.
- 11. The power requirement for the project is estimated as 84.3 MW, which will be obtained from Captive Power Plant (42 MW) and remaining will be sourced from West Bengal State Power Grid/ Damodar Valley Corporation (DVC). Damodar Valley Corporation, Kolkata vide their letter no. Coml/PS/GMPL/Jamuria/246 dated 04/09/2020 for supplying 25 MVA power and India Power vide Ref. no. 10033882 dated 16th March, 2020 granted permission for power supply.

#### 12. Baseline Environmental Studies:

Period	Post-Monsoon Season (Oct., to Dec., 2019)			
AAQ parameters	$PM_{2.5} - 29.6 \text{ to } 53.2  \mu\text{g/m}^3$			
at 12 locations	$PM_{10}$ - 63.1 to 94.4 $\mu g/m^3$			
	$SO_2 - 8.9 \text{ to } 28.2  \mu\text{g/m}^3$			
	$NO_2 - 14.1 \text{ to } 36.1  \mu\text{g/m}^3$			
	$CO - 0.54 \text{ to } 1.66 \text{ mg/m}^3$			
AAQ modelling	$PM_{10} - 3.12 \mu g/m^3$			
	$SO2 - 1.09 \mu g/m^3$			
	NOx - $1.19 \mu g/m^3$			
Ground water	pH: 6.77 to 7.46, Total Hardness: 195.2 to 307 mg/l, Chlorides: 57.85			
quality at 8	to 182.13 mg/l, Fluoride: 0.63 to 1.24 mg/l. Heavy metals are within			
locations	the limits.			

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Surface water	pH: 6.72 to 7.66; DO: 5 to 7.4 mg/l and BOD: 2.3 to 6.9 mg/l, COD
quality at 5	from 7.8 to 25.4 mg/l
locations	
Noise levels	53.8 Leq dB (A) to 62.9 Leq dB (A) for day time and 43.3 to 54.3 Leq
	dB (A) for Night time
Traffic assessment study findings	Transportation of raw material will be majorly done by rail. Traffic survey was conducted for 24 hours at NH-2 which is 4.5 km in SSW direction from the plant boundary. Its road network is very good to bear the increased traffic load. Proper parking facility will be provided.
Flora and fauna	No Schedule I species was found in the core as well as buffer zone.

# 13. The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of treatment / Disposal		
1.	CPP Fly ash	Captive Power	45,267	Use for making fly ash brick in nearby bricks manufacturing unit. It will also sale to nearby bricks plant. Supplied to cement plant to make Portland cement production.		
2.	CPP Bottom ash	plant	19,400	Use for making paver block/ replacement of sand.		
3.	Ferro Alloys Slag	Ferro Alloy Plant	28,500	Use as replacement of stone chips in road making. Dump in OCP of ECL		
4.	IF slag	Induction furnace	54,192	River sand substitute, land fill after iron separation.		
5.	Dolochar	C	47,700	Use in FBC for power generation		
6.	Kiln Accretion	Sponge Iron Plant	1,950	Road Making & Land fill		
7.	Mill scale & scrap	Rolling Mill	12,210	To be fully consumed in plant		
8.	Fly ash	DRI Kilns	51,675	Dumped in abandoned OCP of Eastern Coalfields Limited (ECL)		
9.	ETP Sludge	Effluent Treatment Plant	1.2	Disposed off at Secured landfill site througauthorized and approved vendor		
10.	Used oil and grease	•	10	Sold to Authorized vendor.		

## 14. Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspaper "The Telegraph "Millennium Post" Anandabazar Patrika", "Bartaman" ("Aajkaal" dated 12th September, 2020.					
Date of Public Consultation	15thOctober, 2020					

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."



Venue	Jamuria Town Hall, District Paschim Bardhaman, West Bengal.
Presiding Officer	<ul> <li>Dr. Abhijit Shevale, I.A.S. (Additional District Magistrate, Paschim Bardhaman, West Bengal)</li> <li>Mr. Swarup Kumar Mandal (Senior Environmental Engineer, WBPCB)</li> </ul>
Major issues raised	<ul> <li>I. Employment Generation</li> <li>II. Pollution free environment and measures for abatement of pollution</li> <li>III. No ground water abstraction</li> <li>IV. Continuation of CSR Activities related</li> <li>V. Management of plant waste water</li> <li>VI. Providing ambulance for local people</li> <li>VII. Maintenance of roads</li> </ul>
Budget for implementation of PH issues	Rs. 4.36 Crores

Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No	Particulars	Physical activity and action plan	UOM	Physical activity and action plan	UO M	Physical activity and action plan	UOM	Tentati ve Budget (In Lakhs)
		To b		To be implemented Year	in 2 <sup>nd</sup>	To be implemented Year	l in 3 <sup>rd</sup>	
		year	•					
1.						es & skill developmen		
	Village Damodarpur	Adoption of Adivasi football team for boys and girls & developme nt of their Football ground Training &	15 nos. boys & 15 nos. girls	Skill development/vocati onal training in trades	10no s.	Skill development/vocati onal training in trades	10	30.2
		Employme nt of local youth in own company	nos.					
	Village Simultala/Shekh pur	Training & Employme nt of local youth in own company	10 nos.	Skill development/vocati onal training in trades	10 nos.	Skill development/vocati onal training in trades	10 nos.	26.2
	Village Ikra/Balanpur	Training & Employme nt of local youth in own company	10 nos.	Skill development/vocati onal training in trades	10 nos.	Skill development/vocati onal training in trades	10 nos.	26.2
	Village Akhalpur	Training & Employme nt of local youth in	10 nos.	Skill development/vocati onal training in trades	10 nos.	Skill development/vocati onal training in trades	10 nos.	26.2

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S. No	Particulars	Physical activity and action plan	UOM	Physical activity and action plan	UO M	Physical activity and action plan	UOM	Tentati ve Budget (In Lakhs)
		To b implemente year	ed in 1st	To be implemented Year			To be implemented in 3 <sup>rd</sup> Year	
		own						
	Villaga Danali	company		Skill	10	Skill	10	25
	Village Benali			development/vocati onal training in trades	nos.	development/vocati onal training in trades	nos.	23
2.	Concern Raise	d in PH - Infr	astructu	re Development & pro , development of road	ovision o	f drinking water facil	ities in	
	Village Damodarpur	Constructio n of Adivasi community temple	1 nos.	RO drinking water for villagers through tanker	1 no.	Installation of solar lights	10 nos.	61
		Constructio n of community toilet for villagers	6 nos.	Repairing of internal roads	400 m	RO drinking water for villagers through tanker	l no.	
		Provision of RO drinking water for villagers through tanker	1 no.					
	Village Simultala/Shekh pur	Constructio n of Community toilet	2 with 6 toilets each	Construction of drainage system and connect with main drain	400 m	RO drinking water for villagers through tanker	l no.	67
		Constructio n of bath ghat	1 no.	RO drinking water for villagers through tanker	1 no.			
		Provision of RO drinking water for villagers through tanker	1 no.					
	Village Ikra/Balanpur	Constructio n of well for drinking water	1 no.	Construction of cycle stand shed in Govt. High school	1	Provision of computer	3 nos.	14.1
		Constructio n of lunch shed in Govt. primary school	1 no			Provision of printer	1 no.	
		Constructio n of cultural stage	1 nos.			Installation of LED lights in villages	10 nos.	
						Distribution of furniture (Tables & Chairs) in Govt Primary school	30 nos.	
	Village Akhalpur	Constructio n of toilet	2 closed	Construction of bore well for	l no.	Installation of solar light	3 nos.	19.0

Akhalpur n of toilet closed bore well for light

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S. No	Particulars	Physical activity and action plan	UOM	Physical activity and action plan	UO M	Physical activity and action plan	UOM	Tentati ve Budget (In Lakhs)
		To be implemented in 1st year		To be implemented Year	To be implemented in 2 <sup>nd</sup> Year		in 3 <sup>rd</sup>	
		in Govt. Primary School	toilets with 3 urinals	drinking water in Govt. Primary School				
		Constructio n of boundary wall of Muslim Cementry	1000 m	Construction of public toilet in Hermitage	5 close d toilet s			
	Village Benali	Renovatio n of Govt. School	1 no.	Distribution of furniture in school (Tables & Chairs)	20 nos.	Repairing of internal road	700 m	15.5
	Others					Development of roads opposite to plant site or connecting to one pucca road from Akhalpursub village to Damodarpur main road	1 km	80
3.	Concern Rais	ed in PH - Gi	reenbelt d	levelopment in nearby species	y areas d	& preserving local		
	Village Damodarpur	Communi ty plantation	500 saplin gs	Distribution of samplings and tree guard	300	Distribution of samplings and tree guard	300	0.85
	Village Simultala/Shekh pur	Communi ty plantation	600 saplin gs	Distribution of samplings and tree guard	300	Distribution of samplings and tree guard	300	0.95
	Village Ikra/Balanpur	Communi ty plantation along with plantation in Govt. Primary School	700 saplin gs					0.55
	Village Akhalpur	Communi ty plantation	700 saplin gs			Distribution of samplings and tree guard	300	0.8
	Village Benali	Communi ty plantation	400 saplin gs			Distribution of samplings and tree guard in schools and villages	500 saplin gs	0.7
4.	Village	Concern Rai	sed in PH	- Development of He	alth faci	lities		10
	Damodarpur	Condition ed Bolero Ambulanc e to Borough for	T no.					
		villagers duly equipped with oxygen						TP4 to 3 72 30

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MV to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."



15. The capital cost of the project is Rs. 996.69 Crores (Cost of project under implementation is Rs. 427.03 Crores and for proposed expansion is Rs. 569.66 Crores) and the capital cost for environmental protection measures is proposed as Rs. 55.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 5.8 Crores. The employment generation from the project is 2003 during operation phase. The details of cost for environmental protection measures is as follows:

BREAKUP OF EMP COST							
S. No.		Description	Capital Cost (Crores)	Recurring Cost/annum (Crores)			
1	Air Pollution management	ESPs & bag filters + stack	47.0	4.65			
2	Water pollution management	Installation of Effluent Treatment Plant and sewage treatment plant	2.0	0.1			
3 Environment Monitoring		Lab Instrument	0.15	0.05			
		Online monitoring of air water	1	0.2			
		Third party investment for monitoring	0.15	0.15			
		Others	0.2	0.2			
4	Solid waste management	Ash handling & management Sludge/slag handling	1.0	0.2			
5	Greenbelt & plantation development	Additional Greenbelt development & other miscellaneous requirements	2.0	0.15			
6	Rain water harvesting	Required infrastructure	2.0	0.1			
		Total	55.5	5.8			

F.

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."

- 16. Greenbelt will be developed in 12.7 ha (31.38 acres) which is about 40% of the total project area. A 10 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/ MoEFCC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total number of 31750 samplings will be planted and nurtured in 12.7 ha within 4 years.
- 17. The proponent has reported that there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration
- 18. Name of the EIA consultant: M/s J.M. EnviroNet Private Limited, [S.No. 41, List of ACOs with their Certificate / Extension Letter no. Rev. 08, Mar. 15, 2021].

## Certified compliance report from Regional Office

19. The Status of compliance of earlier EC was obtained from Integrated Regional Office, Kolkata *vide* letter no. 102-410/20/EPE/07 dated 05/02/2021 in the name of M/s. Giridhan Metal Private Limited. The Action taken report regarding the observations was submitted to Regional officer MoEF&CC, Kolkata vide letter no. GMPL/20-21/MoEFCC/03 dated 10/03/2021. The present status of observations made by RO as furnished by the PP is given as below:



S.	Non-	Observations of	Co	ondition N	0.	
No.	compliance Details	RO	EC date	Specific	General	Response by PP
1.	-	It is mentioned that dust suppression system and bag filters shall be installed to control the fugitive dust emissions at conveyor and transfer points, product handling, loading and unloading points, but it is observed the same is being partially complied by the PA.	2nd April, 2012 & validity extended till 1st April, 2022	(v)		The former company had only one 50 TPD DRI production unit. After transfer of EC (Environment Clearance) from M/s Damoda Ispat Limited to M/s Giridhan Metal Private Limited, the new management has stopped the 50 TPD DR production since 04.02.2020 and the same has been intimated to The Chairman CPCB and Eastern Regional Office, MoEFCC, Bhubaneswar. The project in now in interest to the company of the same has been intimated to the Chairman CPCB and Eastern Regional Office, MoEFCC, Bhubaneswar.

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA, Submerged Arc Furnace (SAF) from 15,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."

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S.	Non-	Observations of	C	ondition N	lo.	
No.	compliance Details	RO	EC date	Specific	General	Response by PP
						construction phase for the present EC and company ensures dust suppression system and bag filters will be installed to control fugitive dust emissions at conveyor and transfer points, product handling, loading and unloading points.
2.		As proposed, green belt shall be developed in 33% of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO. Though the project proponent has done some plantation along the boundary line of the plant, it is not 33% yet.		(xvi)		33% of the existing plant area i.e., 13.34 acres (5.4 ha) has been earmarked and is being developed under greenbelt & plantation.  Presently, 5533 trees i.e. ~1000 trees/ha have been planted.  The company has also proposed expansion in their existing EC and as a part of expansion approx. 40% of the total plant area i.e. 31.38 acres (12.7 ha) will be developed under greenbelt & plantation by planting trees to the tune of 2500 trees/ha.

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA to 3,00,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."

S. No.	Non- compliance Details	Observations of RO	Condition No.			
			EC date	Specific	General	Response by PP
3.		The copy of the			(xi)	After taking over
		letter with respect				the assets of the
		to environment				former company,
		clearance letter				GMPL could not
		marked to				locate the
		concerned		1		submission
		Panchayat, Zila				receipts of letter
		Parishad,				w.r.t. EC marked
		Municipal				to concerned
		Corporation/Urban				authority. The
		Local Body, local				company ensures
	1969 2-16	NGO may be				that on receipt of
		submitted to the				Environment
		Regional Office,		10.2		Clearance of
		Kolkata.				proposed
						expansion the
	3.05					letter will be
						positively
						marked to
	No. of London					concerned
						Panchayat, Zila
						Parishad,
						Municipal
						Corporation/
						Urban Local
						Body, local NGO
						may be
					14.1	submitted to the
						Regional Office,
						Kolkata.

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## **Observations of the Committee**

## 20. The EAC noted the following:

- i. The EAC found that the EIA/EMP report is in order reflecting the present environmental concerns and the projected scenario for all the environmental components arising out of the proposed project with respective mitigation measures. The EAC also noted that the baseline data reported and incremental GLC due to the proposed project were within NAAQ standards.
- ii. The EAC also deliberated on the public hearing issues as well as action plan to address the issues raised during public hearing and found it satisfactory.
- iii. The Committee also deliberated upon the certified compliance report of RO and found satisfied with the action taken report submitted by the proponent.

#### Recommendations of the Committee

21. In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 for the instant proposal subject to the 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:

#### Decision of MoEF&CC

22. The Ministry of Environment, Forest and Climate Change 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) hereby decided to grant Environment Clearance for instant proposal of M/s. Giridhar Metal Private Limited under the provisions of EIA Notification, 2006 subject to the 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:

## A. Specific conditions

- i. Green belt shall be developed in 31.38 acres of land (40%) including the gap filling in the existing green belt with a tree density of 2500 trees per hectare.
- ii. Closed type Submerged Arc Furnace with 4th hole extraction system shall be installed.
- iii. 1 x350 TPD and 1x600 TPD DRI kiln shall be installed. Remaining DRI kilns as per the existing EC accorded by MoEF&CC shall not be installed and 50 TPD DRI kiln existing at the site shall be dismantled.
- iv. Project proponent shall meet the particulate matter emission norms in all the stacks less than 30 mg/Nm<sup>3</sup>.
- v. The project proponent shall comply with emission norms of PM, SO<sub>X</sub>, NO<sub>X</sub> and mercury for captive power plant as stipulated in the gazette notification no. S.O. 3305 (E) dated 7/12/2015.
- vi. PP shall prepare and implement an action plan giving annual improvement targets for resource conservation and environment improvement. This plan shall be monitored by the concerned Regional Office of the MoEF&CC.
- vii. The heat rate of coal based power plant as specified by Central Electricity Authority shall be maintained and monitored.
- viii. Energy efficient drives, VFD for auxiliary motors and slip power recovery system for motors above 1000 kw shall be provided.
- ix. PTFE Membrane bags shall be used in filter bag house and designed for 150% of normal design air flow.
- x. PP shall use ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system. Shall use Post combustion control system (SCR/SCNR process) with NH3 monitoring when Ammonia is used.
- xi. Project proponent shall undertake rain water harvesting and recharge the ground water. Level monitoring indicators for online real time measurement of rain water harvesting shall be provided.
- xii. Treated effluent shall be recycled and reused.
- xiii. Air cooled Condensers shall be used in CPP.



- xiv. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
- xv. Jigging and briquetting Plant shall be installed.
- xvi. 85-90 % hot charging of billets shall be done. Balance heating can be done through RHF using LDO/FO as heating fuel.
- xvii. An affidavit shall be submitted to the Ministry as well as the Regional Office stating that observations made in the inspection report of Regional Office has been complied within three months from date of issue of the EC.

#### B. General conditions

#### 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. 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 Continuous Ambient Air Quality Station (CAAQS) 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories as per revised CPCB guidelines dated August, 2018 REV 01.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. 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.
- iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- v. 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.
- vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- viii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
  - ix. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

#### III. Water quality monitoring and preservation

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- The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. 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.

## IV. Noise monitoring and prevention

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

## V. Energy Conservation measures

i. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

## VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. 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.
- iii. Dolochar generated from DRI kiln shall be used for power generation.
- iv. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused in melting Furnaces.
- v. Kitchen waste shall be composted or converted to biogas for further use.

## 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.

## 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 of Factory Act.
- iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

Environmental Clearance for "Expansion of Steel Plant by expanding Sponge Iron from 1,20,000 TPA to 3,18,000 TPA, MS Billets from 1,05,000 TPA to 3,72,300 TPA, Rolling Mill from 1,00,000 TPA to 3,00,000 TPA to 3,00,000 TPA to 30,000 TPA & Captive Power Plant from 16 MW to 42 MW including Waste Heat Recovery Boiler (WHRB) by Giridhan Metal Private Limited at Jamuria Industrial Estate, Village Ikra & Damodarpur, Tehsil Jamuria, District Paschim Bardhaman, West Bengal."



#### IX. Corporate Environment Responsibility

- 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.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring 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.

## 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. 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.
- vi. 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.
- vii. 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.
- viii. 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.



- ix. 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).
- 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.
- The Ministry may revoke or suspend the clearance, if implementation of any of the xi. above conditions is not satisfactory.
- The Ministry reserves the right to stipulate additional conditions if found necessary. xii. The Company in a time bound manner shall implement these conditions.
- xiii. 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
- xiv. 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.
- 23. This issues with the approval of the Competent Authority.

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### Copy to:-

- 1. Secretary, Department of Environment, Government of West Bengal, Secretariat
- 2. Secretary, Department of Forests, Government of West Bengal, Kolkata.
- 3. Regional Officer, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, IB – 198, Sector-III, Salt Lake City, Kolkata - 700106.
- 4. Chairman, Central Pollution Control Board, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 5. Chairman, West Bengal State Pollution Control Board, Paribesh Bhawan, 10A- Block LA, Sector –III, Salt Lake City, Kolkata – 700 098.
- 6. Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 7. District Collector, Paschim Bardhaman District, West Bengal.
- 8. Guard File/Record File/Monitoring File.
- 9. MoEFCC website.

R. Kuysiyiy (Sundar Ramanathan)