To
Dr. S.Kerketta
Scientist "E"
Government of India
Ministry of Environment & Forests
Eastern Regional Office
A/3, Chandrashekharpur
Bhubaneswar – 751 023
Odisha

Dear Sir,

Sub: Six monthly Compliance Report for existing Pig Iron Plant at Gokulpur, Kharagpur

Please find enclosed the Six Monthly Compliance Report (Oct' 13 to March'14) for the condition stipulated in Environment Clearance to the Tata Metaliks Ltd at Gokulpur, Kharagpur.

- 1. Environmental clearance no:- J-11011/601/2008-IA II (I) dated June 24, 2009.
- 2. Pig Iron Production-'Fy-2010-11'- 306190T,'Fy-2011-12'-287501T,'Fy-2012-13'- 288511T. 'Fy-2013-14 (April13 to March 14\*)'- 302,998.90T
- 3. Water Consumption of 2013-14 (April 13 to March 14\*)'- 665607 KL
- 4. Power Consumption of April 13\* to March 14\*:- 54204000 Kwh

The copy of the compliance report is being sent to you as hard copy as well as soft copy and same also will be uploaded in the Tata Metaliks Ltd website.

Thanking you

Yours sincerely For Tata Metaliks Limited

Kalyan Chatterji VP ( Project & BO)

Enclosure - As above

A	SPECIFIC CONDITIONS for enhancement of (3,20,000TPA to 3,45,000TPA) Pig Iron :					
i.	On-line stack monitoring facilities for all the stacks and sufficient air pollution control equipments viz gas cleaning system, dust catcher, bag filters etc. shall be provided to control emissions from the blast furnace below 100 mg/Nm3.					
Com	On line stack m	nonitoring facili	ty has installed	in all three sta	acks.	
ii.	Dust extraction sy vibratory screens, emissions. Furthe	easures for checkir ystem with bag filt transfer points etc r, specific measure pads shall be done	ers shall be provi . All the conveyors es like water sprir	ided at material h s shall be covered nkling around the	andling areas, cl I with GI sheets t	rushers, hoppers, to prevent fugitive
Com	have been cove asphalting/con	conveyor, all vibered with GI sho creting of abou fog system cor	eets. Regular m t 75% of the ro	nobile water sp ad has been co	oraying in the prompleted, to c	plant area and ontrol fugitive
iii.	website of the com Pollution Control E	air quality, stack openy and submitte Board (WBPCB) and on SPM, SO <sub>2</sub> and ral public.	d on-line to the Mir d Central Pollution	nistry's Regional O Control Board (C	office at Bhubanes PCB) as well as I	war, West Bengal hard copy once in
Com	Please See ann	exure E				
	Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be					
iv.	, ,					•
	issued by the Mini					•
iv.	issued by the Mini followed.	Month	monitored. Guideli	nes / Code of Pra	SO <sub>2</sub> (mg/m <sup>3</sup> )	NO <sub>2</sub> (mg/m <sup>3</sup> )
iv.	issued by the Mini followed.	stry and regularly	monitored. Guideli  SPM (mg/m³)  Limit- 10	nes / Code of Pra	SO <sub>2</sub> (mg/m <sup>3</sup> ) Limit- 5	NO <sub>2</sub> (mg/m³) Limit- 6
iv.	issued by the Minifollowed.  Area  Cast House	Month	SPM (mg/m³) Limit- 10 0.953	RPM (mg/m³) Limit- 5 0.278	SO <sub>2</sub> (mg/m³) Limit- 5 0.028	NO <sub>2</sub> (mg/m³) Limit- 6
iv.	issued by the Minifollowed.  Area  Cast House Bunker House SPCM  Efforts shall be m	Month	SPM (mg/m³) Limit- 10 0.953 0.984 1.098 pact of the transp	RPM (mg/m³) Limit- 5  0.278  0.251  0.311  port of the raw m	SO <sub>2</sub> (mg/m³) Limit- 5  0.028  0.029  0.028  naterials and end	NO <sub>2</sub> (mg/m³) Limit- 6 0.043 0.042 0.048  products on the
iv.	cast House Bunker House SPCM Efforts shall be m surrounding envirounding environations.	Month  December 2013  nade to reduce im	SPM (mg/m³) Limit- 10 0.953 0.984 1.098 pact of the transpricultural land. Verted through ra	RPM (mg/m³) Limit- 5  0.278  0.251  0.311  port of the raw makicular emissions stilway wagon.	SO <sub>2</sub> (mg/m³) Limit- 5  0.028  0.029  0.028  naterials and end should be regularl	NO <sub>2</sub> (mg/m³) Limit- 6  0.043 0.042 0.048  products on the y monitored.
iv. Com v.	issued by the Minifollowed.  Area  Cast House Bunker House SPCM  Efforts shall be m surrounding envirounding	Month  December 2013  nade to reduce import including agmainly transpor	SPM (mg/m³) Limit- 10 0.953 0.984 1.098 pact of the transpricultural land. Verted through rare allowed to libe installed for the and reused either ties at the site. No	RPM (mg/m³) Limit- 5  0.278  0.251  0.311  port of the raw micular emissions shilway wagon. enter the plant the treatment of print the process of	SO <sub>2</sub> (mg/m³) Limit- 5 0.028 0.029 0.028 naterials and end should be regularl Only vehicles at premises.	NO <sub>2</sub> (mg/m³) Limit- 6 0.043 0.042 0.048 products on the y monitored. having proper
iv. Com  v. Com	issued by the Minifollowed.  Area  Cast House Bunker House SPCM  Efforts shall be m surrounding envirounding	Month  December 2013  made to reduce implement including agomainly transportation Certificate to Plant (ETP) shale treated, recycled various other activities.	SPM (mg/m³) Limit- 10 0.953 0.984 1.098 pact of the transpricultural land. Verted through rate allowed to libe installed for the and reused either ties at the site. Note adopted.  Tom different & pig quenchir	RPM (mg/m³) Limit- 5  0.278  0.251  0.311  port of the raw mandal managements and managements are in the plants are in the process of a wastewater shall processes. A	SO <sub>2</sub> (mg/m³) Limit- 5 0.028 0.029 0.028 naterials and end should be regularl Only vehicles at premises. Process water. A per for dust suppress to the discharged of collected in a collec	NO <sub>2</sub> (mg/m³) Limit- 6 0.043 0.042 0.048  products on the y monitored. having proper all the wastewater ession, green belt outside the factory
iv. Com v. Com	Cast House Bunker House SPCM  Efforts shall be m surrounding envirounding enviround	Month  December 2013  made to reduce important including agomainly transportation Certificate to Plant (ETP) shale treated, recycled various other activity discharge shall be the generated for ag granulation	SPM (mg/m³) Limit- 10 0.953 0.984 1.098 pact of the transpricultural land. Verted through rate allowed to be installed for the and reused either ties at the site. Note adopted.  Tom different & pig quenchir 3/ hr is 16 hrs	RPM (mg/m³) Limit- 5  0.278  0.251  0.311  port of the raw mandal managements and managements are in the plants are in the process of a wastewater shall are purposes. A day.	SO <sub>2</sub> (mg/m³) Limit- 5 0.028 0.029 0.028 naterials and end should be regularl Only vehicles at premises. Process water. A per for dust suppress be discharged of collected in a verage running	NO <sub>2</sub> (mg/m³) Limit- 6 0.043 0.042 0.048  products on the y monitored. having proper all the wastewater ession, green belt outside the factory

viii.	The solid materials collected from pollution control equipment shall be suitably stored and supplied to nearby pig iron/steel plant having sinter plant. The project authorities shall make the agreement with user of Coke, coal fines and iron ore fines and copy of the agreement shall be submitted to Ministry's Regional Office at Bhubaneshwar. Used oil shall be sold to recyclers and reprocessors only.
Com	Solid waste { Coke Breeze (1998.2 Ton)} are sold to outside agencies from April13*to March 14*. Used oils (3600 kg) also sold to certified re-processing agencies only from 1st April 2013 to 31st March 2014
ix	The blast furnace slag shall be granulated and sold to the cement manufacturing units for further utilization. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
Com	121379 MT granulated Slag sold to outside agency in Fy 13-14(April 13 to March 14*)*.
х	Green belt shall be developed in 33 % area in and around the plant as per the CPCB guidelines in consultation with DFO.
Com	4250 nos plants saplings of trees and shrubs planted on 2013-2014. Total plant area-197 acre & greenery developed area are approx 66 acre (33%).
xi.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the steel sector shall be strictly implemented.
Com	Tata Steel Group of Companies, as a whole are taking necessary initiatives to adhere to the CREP recommendations.
xii	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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
	Increase in production capacity is mainly on account of improved operations / process improvement resulting in 'Enhancement of Production' and hence it is not an Expansion Project. Thus these requirements are not applicable in the present instance.

	GENERAL CONDITIONS for enhancement of (3,20,000TPA to 3,45,000TPA) Pig Iron :
i	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB) and the State Government.
	Increase in production capacity is mainly on account of improved operations / process improvement resulting in 'Enhancement of Production' and hence it is not an Expansion Project. Thus these requirements are not applicable in the present instance.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
Com	Noted for future compliance.
iii	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board (SPCB) may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.

Noted for compliance.					
At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO2 and NOX are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office and the SPCB / CPCB once in six months.					
Please	See annexure E				
Further,	specific measures like water	sprinkling around the			
_		•	•		
under G	SR 422 (E) dated 19th May, 1	993 and 31st Decem			
recycle	ed for slag granulation 8	pig quenching p	urposes.		
providing noise ge	g noise control measures inc eneration. The ambient noise	luding acoustic hood levels shall conform	ls, silencers	, enclos	ures etc. on all sources of
Date of	sampling :-20th Decembar 20	)13			the standards (75 dBA).
1 2	ADM Building (Near Main Gate)  Material Gate	Ambient Limit (dBA)  75 dBA (day time)	60.1- 62.2 62.3- 64.5	)	
Occupat	tional health surveillance of the	e workers shall be don		ılar basis	and records maintained as
	OCC	UPATIONAL HEALTH CHE	ECK-UP 2013-1	14	
Sl no	Name of	Investigation			No Of Employees
1	Blood Test (TC, DC, Hb%)			261	
2	Audiometry			236	
3	P. F. T.			260	
4	Eye Test			181	
5	Physical Health Check-Up			560	
6	Blood	sugar test			104
The company shall develop rain water harvesting structures to harvest the rain water for utilization in th lean season besides recharging the ground water table.			n water for utilization in the		
Pond f	or accumulation of rain v	water is already in	n place.		
The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented.					
	At least where m SPCB. Exits Region Please In-plant Further, the road of about Industrial under Gatreated with the second pump,  The overproviding noise get 1989 viz.  The overproviding noise get 1989 viz.	At least four ambient air quality monitor where maximum ground level concent SPCB. Data on ambient air quality and its Regional Office and the SPCB / CP Please See annexure E  In-plant control measures for checking Further, specific measures like water the roads shall be done to control fugit Regular mobile water spraying of about 75% of the road has be Industrial wastewater shall be proper under GSR 422 (E) dated 19th May, 1 treated wastewater shall be utilized for All waste water generated from the cycled for slag granulation and pump, having capacity of 20 minor The overall noise levels in and aroun providing noise control measures inconsise generation. The ambient noise 1989 viz. 75 dBA (day time) and 70 dB The overall noise levels in and Date of sampling:-20th Decembar 20 Material Gate    ADM Building (Near Main Gate)	At least four ambient air quality monitoring stations shall be where maximum ground level concentration of SPM, SO2 a SPCB. Data on ambient air quality and stack emission shall its Regional Office and the SPCB / CPCB once in six month Please See annexure E  In-plant control measures for checking fugitive emissions frour Further, specific measures like water sprinkling around the the roads shall be done to control fugitive emissions.  Regular mobile water spraying (120001/day) in the function of about 75% of the road has been completed, to Industrial wastewater shall be properly collected, treated under GSR 422 (E) dated 19th May, 1993 and 31st December treated wastewater shall be utilized for plantation purpose.  All waste water generated from different province yold for slag granulation & pig quenching pump, having capacity of 20 m³ / hr is 16 hrs / day in the overall noise levels in and around the plant area shall providing noise control measures including acoustic hood noise generation. The ambient noise levels shall conform 1989 viz. 75 dBA (day time) and 70 dBA (night time).  The overall noise levels in and around the plant Date of sampling:-20th Decembar 2013  SI no Area / Location Area / Location Ambient Limit (dBA)  1 ADM Building (Near Main Gate)  2 Material Gate 3 Near Cycle Stand  Occupational health surveillance of the workers shall be dother the Factories Act.  OCCUPATIONAL HEALTH CHITCHER SI no Name of Investigation  1 Blood Test (TC, DC, Hb%)  2 Audiometry  3 P. F. T.  4 Eye Test  5 Physical Health Check-Up  6 Blood sugar test  The company shall develop rain water harvesting structure lean season besides recharging the ground water table.  Pond for accumulation of rain water is already in The project proponent shall also comply with all the environment of the solution of the project proponent shall also comply with all the environment of the project proponent shall also comply with all the environment of the project proponent shall also comply with all the environment of the project proponent sha	At least four ambient air quality monitoring stations shall be established where maximum ground level concentration of SPM, SO2 and NOX are SPCB. Data on ambient air quality and stack emission shall be regularlits Regional Office and the SPCB / CPCB once in six months.  Please See annexure E  In-plant control measures for checking fugitive emissions from all the verther, specific measures like water sprinkling around the coal stocks the roads shall be done to control fugitive emissions.  Regular mobile water spraying(12000l/day)in the plant are of about 75% of the road has been completed, to control fundistrial wastewater shall be properly collected, treated so as to counder GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or treated wastewater shall be utilized for plantation purpose.  All waste water generated from different processes are recycled for slag granulation & pig quenching purposes. Jump, having capacity of 20 m³/ hr is 16 hrs /day.  The overall noise levels in and around the plant area shall be kept we providing noise control measures including acoustic hoods, silencers noise generation. The ambient noise levels shall conform to the stan 1989 viz. 75 dBA (day time) and 70 dBA (night time).  The overall noise levels in and around the plant area is 1989 viz. 75 dBA (day time) and 70 dBA (night time).  The overall noise levels in and around the plant area is 1989 viz. 75 dBA (day time) and 70 dBA (night time).  Sl no Area / Location Ambient Limit (dBA)    Ambient Limit (dBA)   GC2,3-64.5   GC2,9-64.5   GC2,9	At least four ambient air quality monitoring stations shall be established in the de where maximum ground level concentration of SPM, SO2 and NOX are anticipt SPCB. Data on ambient air quality and stack emission shall be regularly submit its Regional Office and the SPCB / CPCB once in six months.  Please See annexure E  In-plant control measures for checking fugitive emissions from all the vulnerable Further, specific measures like water sprinkling around the coal stockpiles and the roads shall be done to control fugitive emissions.  Regular mobile water spraying(120001/day)in the plant area and of about 75% of the road has been completed, to control fugitive industrial wastewater shall be properly collected, treated so as to conform to under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as ame treated wastewater shall be utilized for plantation purpose.  All waste water generated from different processes are collect recycled for slag granulation & pig quenching purposes. Average pump, having capacity of 20 m³/ hr is 16 hrs /day.  The overall noise levels in and around the plant area shall be kept well within providing noise control measures including acoustic hoods, silencers, enclose noise generation. The ambient noise levels shall conform to the standards pring 1989 viz. 75 dBA (day time) and 70 dBA (night time).  The overall noise levels in and around the plant area is within to Date of sampling:-20th Decembar 2013  Sino Area / Location Ambient (dBA) (

Com	Community development activities are ingrained in the working of the Company.  Community development programme (2013-2014)					
	Sl No	Activity	No of cases			
	1	NUTRITIONAL SURVEY & HEALTH CHECK-UP CAMP FOR STUDENTS OF PRIMARY SCHOOLS	108 nos of Student were examined			
	2	Blood donation camp	131 Personnel			
	3	HIV / AIDS AWARENESS PROGRAMME	150 nos persons including employee, truck drivers and helpers were present.			
	4	Maternal & child health awareness programme	35 villagers (women)appx.			
	5	Awareness camp on Sex Education for students (girls) in Loreto school girls, Kolkata	300 Students			
	6	Awareness camp on Addiction for parents in Loreto school girls, Kolkata.	94 Parents			
	7	Self Employment Generation by making of Vermi Compose	1200 kgs of vermicompost have been produced by Self help group (Sidhu Kanu Birsha) at kunja chack village.			
	8	Gynaecological Camp at Kunjachawk Primary School	<b>62</b> villagers of our community Medicines for gynaecological as well as common health disorder were distributed accordingly			
xi	control Environ	ate fund shall be earmarked towards capital co measures and shall be judiciously utilized to in ment and Forests as well as the State Govern er purpose.	implement the conditions stipulate	d by the Ministry o		
Com	Compa	h the enhancement in production c any regularly allocates funds for poll ties. Company also ensures utilization	ution control measures / m	onitoring & CSF		
xii		egional Office of this Ministry / CPCB / SPCB sance report and the monitored data along withly.				
Com	Noted	for compliance.				
xiii	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.					
Com	Noted	for compliance.				
xiv	Project authorities 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 and the date of commencing the land development work.					
Com		cement in Production capacity has be ot by way of a Project.	en achieved by way of proce	ess modification		

## Annexure E

# Date Of Sampling:- 19th December to 20th December 2013

## Ambient PM 10 Level

S1	Area / Location	Limit (µg/m³)	Result - $(\mu g/m^3)$
1	Near ADM Building	100	73.88 (Avg)
2	Near Guest House	100	77.88 (Avg)

#### Ambient SO2 Level

S1	Area / Location	Limit (µg/m³)	Result - $(\mu g/m^3)$
1	Near ADM Building	80	16.98 (Avg)
2	Near Guest House	00	19.02 (Avg)

#### Ambient NO2 Level

S1	Area / Location	Limit (µg/m³)	Result - $(\mu g/m^3)$
1	Near ADM Building	80	41.64 (Avg)
2	Near Guest House	80	39.52 (Avg)

# Particulate Matter – <u>Date Of Sampling:- 19<sup>th</sup> December 2013</u>,

Sl	Process attached to stack	Limit - mg/Nm <sup>3</sup>	Result
1	MBF-1 Stove		28
2	MBF-2 Stove	100	25
3	Boiler		30