

Ref: -SIPL/SMC/MoEFCC/OCT-2022 TO MAR-2023

Date: 30.05.2023

To,

The Inspector General of Forest (IGF)

GOI, MoEF&CC,

Integrated Regional Office, Kolkata

IB-198, Salt Lake City, Sector-III, Kolkata – 700106

SUB: Six Monthly Compliance (Oct-2022 to March-2023) to Environmental Clearance conditions vide MoEF&CC F. No. J-11011/201/2013-IA- II (I) Dated 21st December, 2016 and EC amendment dated 29th April, 2020 by M/s Shakambhari Ispat & Power Limited, Vill-Madandih, PO-Bartoria, Dist- Purulia (WB)

Dear Sir/Madam,

With reference to above, we are submitting herewith the six-monthly compliance report (Period Oct-2022 to March-2023) of M/s Shakambhari Ispat & Power Limited, Vill-Madandih, PO-Bartoria, Dist- Purulia (WB) as per the directives of Ministry of Environment Forest and Climate Change, Government of India. Point wise compliance status report along with latest environment monitoring data is enclosed for your kind consideration.

Hard copy of the report has not been sent following MoEFCC Eastern Regional Office direction vide File No. 106-12/EPE Dated 11.05.2020. Hope you will find the same in order.

Kindly acknowledge our submission.

Thanking You.

Yours faithfully,

For **Shakambhari Ispat & Power Limited**

Authorized Signatory

Encl: as above

Copy to:

The Environmental Engineer, West Bengal Pollution Control Board, Asansol Regional Office, Kalyanpur Satellite Township Project, Dr. B.C. Roy Road, PO- Dakshin Dhadka, Asansol-713302 Dist.-Paschim Bardhaman (WB)



SHAKAMBHARI ISPAT & POWER LIMITED

COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE

MoEFCC F. No.: J-11011/201/2013-IA II (I) Dated: 21.12.2016 and EC amendment dated 29.04.2020

**COMPLIANCE PERIOD:
OCTOBER-2022 TO MARCH-2023**



PROJECT LOCATION:

Village-Madandih, P.O.-Bartoria, Dist.-Purulia, West Bengal-723121

Name of the Project	:	SHAKAMBHARI ISPAT & POWER LIMITED Village-Madandih, PO-Bartoria Dist.–Purulia (WB)
Environmental Clearance F.No.	:	J-11011/201/2013-IA II (I) Date: 21.12.2016 and EC amendment dated 29.04.2020
Period of Compliance Report	:	October, 2022–March, 2023

Sl. No.	CONDITIONS	COMPLIANCE STATUS
SPECIFIC CONDITION:		
i.	The project proponent shall install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office	We have installed 24x7 Online Continuous Emission Monitoring System (OCEMS) with all major stacks of DRI, CPP & Ferro Division and connected to CPCB portal to monitor the air emissions. Latest stack monitoring report is attached as Annexure-1
ii.	No dumping is permitted in the abandoned coal mines 2B and 2C in nearby Parbelia Village. The iron ore trailing and excess ash should be stored within the plant premises for the period of 2 years for which land is available. The status of storage of above material shall be periodically reviewed by the regional office for land adequacy and environmental management. For future storage of iron ore tailing and excess ash, beyond the period of 2 years, the proponent will submit the land acquisition details to the Ministry.	It is being complied. No dumping being done in the abandoned coal mines 2B and 2C nearby Parbelia village. Iron ore beneficiation plant has not been installed so far. Therefore, Iron ore tailings storage facility is not applicable at this stage.
iii.	In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant etc. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control the dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.	SIPL has already installed de-dusting systems like bag filters and ESPs for an effective control of dust emissions. Dust extraction system has been provided at the strategic points attached with bag filter units for cooler discharge, intermediate bin, product house etc. Dust conveying system from cooler discharge to ABC have been provided with each DRI Kiln., Fixed type water sprinklers for dust suppression in raw material & product handling areas along the conveyor, finished product house area, cooler discharge, Coal Handling Plant (CHP), along with Kiln axis etc. SIPL have deployed movable water tankers and road sweeping machine for dust cleaning on the road and minimizing fugitive emissions. Latest fugitive emissions monitoring report is attached as Annexure-2



Sl. No.	CONDITIONS	COMPLIANCE STATUS
iv.	The ETP for Mini Blast Furnace effluent should be designed to meet Cyanide standard as notified by the MoEF&CC.	It shall be complied. No Mini Blast Furnace has been installed so far.
v.	No effluent shall be discharged outside the plant premises and 'zero' discharge shall be adopted.	Recycle and reuse practice has been adapted and no effluent being discharged outside the factory premises.
vi.	Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm ³ and installing energy efficient technology.	Online Continuous Emission Monitoring System (OCEMS) have been installed at Stacks of DRI and CPP. Air pollution control devices viz. ESPs and bag filters along with dust extraction system water sprinkling system for suppression system have been installed and efficiently operated to control emission level well within the norms. Third party monitoring by NABL accredited laboratory being conducted periodically to evaluate the emission levels. Latest stack monitoring report in enclosed as Annexure-1
vii.	Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely. The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.	Hot gases from DRI Kiln being passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) for complete burning of CO. The dust content from gas being separated by ESP and cleaned gas discharged through stack.
viii.	Efforts shall further be made to use maximum water from the rain water harvesting sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. ETP sludge should be disposed off scientifically.	All possible attempts are made to ensure optimal use of water. We have rain water harvesting pond to harvest the rain water and reduce the water consumption. Air cooled condensers and closed-circuit cooling system have been provided with CFBC boiler to reduce water consumption. Cooling water in DRI, SMS and Rolling Mill are recycled back to the system. Rolling mill effluent being treated in ETP and recycled back to the process. Sludge generated from ETP being utilized in SAF. Cooling tower blowdown and softener/DM plant rejects being taken into neutralization/ humanization tanks and utilized for dust suppression, ash handling and for sprinkling on road to control fugitive dust emissions.
ix.	All the coal fines, char from DRI plant shall be utilized and no char shall be used for briquette making or disposed off anywhere else. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.	It is being complied. All the coal fines and the char generated from DRI plant being strictly utilized in Captive Power Plant (CPP). Other solid waste like broken refractory etc. being sold to it recyclers.



Sl. No.	CONDITIONS	COMPLIANCE STATUS
x.	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.	SIPL has completed concreting of All internal roads where heavy vehicle movements are exercised. The company has completed the paver blocking of around 96% of area where heavy vehicle movements are not envisaged. Along with paver blocking company has also done the concreting of many workplace areas of the plant. Some photographs are attached as Annexure-3 We have already purchased road sweeping machine and the same is operational. Parking area for the trucks within the unit has been provided. Annexure-4 Progressive measures have being taken to develop avenue plantation and green cover using indigenous species i. e. Radhachura, Neem, Arjun, Spathodia, Banyan, Peepal, Bakul, Conocarpus, Kadam, Rain tree, shishu, Sonajhuri, Siris, Pitanjiba, Ficus, Krishnachura Kanchan, Gamhar etc. along the plant road and periphery as well as inside the plant. Some pictures are attached as Annexure-5
xi.	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.	It is being followed.
xii.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 th November, 2009 shall be followed.	It is being followed. Latest Ambient Air Quality Monitoring report is attached as Annexure-6
xiii.	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.	Utmost priority is given to reduce the air pollution within the plant. Suitable control measures have been undertaken to keep Gaseous emission levels including secondary fugitive emissions within the latest permissible limits. Last work zone (Fugitive Emission) monitoring report is enclosed as Annexure-2
xiv.	Regular monitoring of influent and effluent surface, sub- surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more Stringent.	Regular monitoring being done. Recycle and reuse practice has been adapted and no effluent being discharged outside the factory premises. Latest monitoring report of Effluent water, Surface water and Ground water is enclosed as Annexure-7A, 7B & 7C.
xv.	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic	Proper handling, storage, utilization and disposal of solid waste being done. Analysis of toxic metal content in the solid waste being




Sl. No.	CONDITIONS	COMPLIANCE STATUS
	metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.	periodically carried out by approved agency. The monitoring report by NABL accredited laboratory is enclosed as Annexure- 8
xvi.	A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.	It is complied Solid waste generated from project activities are properly utilized at plant site. Excavated good soil being used for greenbelt development and remaining soil for backfilling. Old structural if any, are utilized in SMS and re-melted in induction furnace. Civil debris are used for road making/concretization of shop floors.
xvii.	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendments. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding shall be submitted to the Ministry's Regional Office.	All the fly ash generated within the plant is provided to brick manufacturers for further utilization. Accordingly, company has made agreement for the same. Company has also got permission from Eastern Coalfields Limited (ECL) for filling the illegally mined place at Bicched Bandh area near Narsamunda Colliery of Sodepur area. Copy of the agreement is enclosed as Annexure-9A & 9B
xviii.	A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.	Complied. It is already been submitted.
xix.	Green belt shall be developed in at least 33% of the project area by planting native and broad-leaved species in consultation with local DFO and local communities as per the CPCB guidelines.	SIPL has achieved the target of green belt plantations in 33% area of the plant i.e. 23.66ha out of 71.71ha land of project area having 36,000 trees till 31.10.2022 (maintaining the approx. 1500trees/ha. trees density. Company has taken extensive plantation drive by using indigenous species i. e. Radhachura, Neem, Arjun, Spathodia, Banyan, Peepal, Bakul, Conocarpus, Kadam, Rain tree, Shishu, Sonajhuri, Siris, Pitanjiba, Ficus, Krishnachura Chaatim, Kanchan, Gamhar etc. along the plant roadside, periphery as well as inside the plant according to recommendation from DFO and species of local growing species. SIPL has further initiated for more plantation by gap filling and scoping the additional area for plantation and 46165 plants have been planted so far maintaining the tree density 1951/ha. Further we are committed to develop more greenery by identifying more scope of plantation and green cover development by gap filling during ensuing monsoon season. Some photographs of green belt development /green cover plantation are attached as Annexure-5
xx.	All the commitments made to the public	It is compiled/being complied.



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	<p>during Public Hearing/public consultation meeting shall be satisfactorily implemented and adequate budget provision shall be made accordingly.</p>	<p>In accordance to the compliance of commitments made during public hearing and additional requirements made by the local people time to time, various CSR activities have been undertaken by SIPL for the benefit of local community of nearby villages i.e. Distribution of blanket, winter dresses for local needy villagers. Drinking water to the nearby villagers, free medical camps for needy people, providing study material to the school students and also arrange the sitting facilities to the school students, repairing & coloring of school building. food grains distribution to acute malnourished community, distribution of food materials during COVID situations to the weaker section of nearby villages communities, monetary support to the surrounding villagers for varies cultural program etc. Some photographs recently dove activities attached as Annexure-10</p> <p>We have dedicated CSR team to look after the welfare activities and redressing of issues if any.</p>
xxi.	<p>At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item- wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.</p> <p>Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken reporting this regard shall be submitted to the Ministry's Regional Office.</p>	<p>It has been complied.</p> <p>Details of the public hearing issues and various activities undertaken along with other need-based CSR activities is attached as Annexure-10</p>
	<p>The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum- expansion project, which includes village-wise, sector- wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135</p>	<p>SIPL have undertaken various social activities in nearby villages in consultation with local communities for their benefit of health, education, cultural activities, skill development and employment to local people etc.</p> <p>Our expenditures are incurred primarily towards supporting education, health, for the benefit of local community, such as repairing and renovating of old schools in local villages, developing of furnishing classrooms, facilitating study materials and utilities, and providing support to the Harmadih hospital by, drinking water arrangements, oxygen cylinders, illumination of hospital premises, etc., blanket and winter wear</p>



Sl. No.	CONDITIONS	COMPLIANCE STATUS
	<p>of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.</p>	<p>distribution to the nearby villagers, construction of public toilets, construction of Temples and Prayer Halls on demand of the local communities in nearby village etc. In addition to the above, further our primary objective is the Skill development of the local youth and strengthening employability, also making self-help groups of women for their economic improvements. Our HR-IR and CSR team personnel to look after the welfare activities and redressing of issues if any. The SIPL has varieties of CSR activities with its Elegant Care Foundation. As a part of CSR, we have distributed nutrition kits containing rice, dal and edible oils to less privileged people. Some photographs of latest CSR activity are attached as Annexure-10</p>
xxiii.	<p>The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of noncompliance/ violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.</p>	<p>Complied. SIPL have implemented standard operating procedure to look into any infringement/ deviation/violation of environmental or forest norms/conditions. SIPL have also the Hierarchical system/ Administrative order to deal with environmental issues and compliance of EC conditions. SIPL have in placed reporting system for non – compliance / violation of environmental norms.</p> <div style="text-align: center;"> <p>Board of Directors</p>  <pre> graph TD Board[Board of Directors] --> CMD[CMD] CMD --> ED[ED-Corporate] ED --> HEMC[Head – Environment Management Cell] ED --> UH[Unit Head] HEMC --> Env[Environment] HEMC --> Health[Health] HEMC --> Safety[Safety] UH --> OH[Operation Head] Env --> EO[Env. Officer/Engg.] Health --> MO[Medical Officer] Safety --> SO[Safety Officer] </pre> </div> <p>Corporate Environment Policy of the company is attached as Annexure-11</p>
xxiv.	<p>The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.</p>	<p>It is complied, Solar lighting system have been installed in the village Radhamadhabpur & Erakusum on roads side near Kali Mandir and it is being maintained regularly.</p>
xxv.	<p>The project proponent shall provide for LED lights in their offices and residential areas.</p>	<p>Complied. Energy conservation measure has already been adapted by providing LED lights in the offices to minimization of energy consumption.</p>
xxvi.	<p>Provision shall be made for the housing of construction labour within the site with all</p>	<p>It shall be complied. At present no any major project activities are going on,</p>



Sl. No.	CONDITIONS	COMPLIANCE STATUS
	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.	and workers whoever involved in construction activities are from nearby area and do not require to stay at project site.
GENERAL CONDITIOS:		
i.	The project authorities must strictly adhere to the stipulations made by the West Bengal Pollution Control Board and State Government.	It is being adhered as per the stipulation made by WBPCB and State Government. Consent to Operate obtained from WBPCB is attached as Annexure –12
ii.	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	It shall be followed. No further modification or expansion will be undertaken without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
iii.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM ₁₀ , PM _{2.5} , SO ₂ and NO _x 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 at Bhubaneswar and the SPCB/ CPCB once in six months.	Ambient Air Quality Monitoring being carried on as per direction in four locations in consideration of maximum ground level concentration of PM ₁₀ , PM _{2.5} , SO ₂ , and NO _x . Latest Ambient Air Quality monitoring report and stack monitoring report is enclosed as Annexure-6 & Annexure-1
iv.	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19th May, 1993 and 31st December 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Being complied. Effluent generated from roiling mill being treated in ETP and recycled back to the process. Sludge generated from ETP being utilized in SAF. Cooling tower blowdown and softener/DM plant rejects being taken into neutralization/ homogenization tank and utilized for dust suppression and, ash handling and for sprinkling on road to control fugitive dust emissions. No industrial effluent being discharged outside the factory premises.
v.	The overall noise levels in and around the plant area shall be kept well within the standards (85 dB(A)) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB(A) during	Noise control measure has already been implemented to keep the noise level well within the 85 dB(A) and ambient noise level below 75 dB(A) (during day time) and 70 dB(A) (during night time). Work Zone and Ambient Noise Monitoring report is enclosed as Annexure- 13A & 13B



Sl. No.	CONDITIONS	COMPLIANCE STATUS
	day time and 70 dB(A) during nighttime.	
vi.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers is being carried out on regular interval and records are maintained. Last Health checkup reports of some employees are enclosed as Annexure-14
vii.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	Rain water harvesting pond has been developed within the plant premises to harvest the rain water. This water is being utilized in the lean season as per requirement.
viii.	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.	Environmental protection measures have been implemented for effective compliance of safe guards and recommended in the EIA/EMP reports. Socio-economic development of local community has already undertaken through providing job to local people. SIPL have undertaken various social activities in nearby villages in consultation with local communities for their benefit of health, education, cultural activities, and employment to local people etc. The SIPL has varieties of CSR activities with its Elegant Care Foundation. Drinking water is supplied to needy communities of local villages on regular basis. The company has dedicated CSR team to look after the welfare activities for local community and redressing of issues if any. Some photographs of CSR activity are attached as Annexure-10 .
ix.	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEF&CC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	Requisite funds being released towards capital cost and recurring cost/annum for environmental pollution control measures to implement the conditions stipulated by MoEF&CC. Accordingly necessary facilities like ESPs followed by silos for de-dusting during boiler operation, bag filters along with dust extraction system, water sprinkling system for fugitive dust suppression, water tankers and road sweeping machine for dust suppression on roads, green belt development and water recycling system etc. have been installed for abatement of the pollution. Concretization/ paving of roads are almost on the stage of completion. Suitable man powers have been engaged for an efficient operation, monitoring and maintenance of the devices installed.



Sl. No.	CONDITIONS	COMPLIANCE STATUS
x.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	Complied. Clearance letter has been sent to concerned local body. EC letter is also uploaded to company website. http://shakambhariispat.com/environmental-orders
xi.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM ₁₀ , SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Being complied. Compliance status being periodically uploaded on the company website http://shakambhariispat.com/environmental-compliance Environmental parameter monitored has been displayed at the entrance of the company main gate in the public domain. Attached as Annexure -15
xii.	The project proponent shall also submit six monthly report status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar/ CPCB/SPCB shall monitor the stipulated conditions.	Six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data had earlier been submitted to MoEF&CC and Pollution Control Board in both soft & hard copies. Now it is being submitted in soft copy only as per direction of Hon'ble MoEF&CC F. NO. 106-12/EPE dated. 11.05.2020
xiii.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MoEF&CC	Being complied. The environment statement (Form-V) for Financial Year 2021-22 has already been submitted and for FY: 2022-23 will be submitted to WBPCB with copy to Integrated Regional Office of the MOEF&CC, Kolkata. The report being/will be uploaded on the company's website as per direction.



Sl. No.	CONDITIONS	COMPLIANCE STATUS
	at Bhubaneswar by e-mail.	
xiv.	The project proponent shall inform the public that the project has been accorded environment 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, Forest and Climate Change (MoEF&CC) 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 newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and copy of the same should be forwarded to the Regional Office at Bhubaneswar	It is Complied.
xv.	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.	Complied. Land development for the project was started w.e.f. 22.03.2017 and the date of financial closure is 14.01.2017
Additional condition as per EC Amended F. No. J-11011/201/2013-IA.II (I) dated 29 th April, 2020		
i.	An affidavit ensuring compliance to the non-compliances/partial compliances reported in the monitoring report of the Regional Office dated 18/02/2019 shall be submitted to the Ministry and to the Regional Office of the Ministry at Bhubaneswar within three months from date of issue of this letter.	Complied. We have already submitted the affidavit following the direction of Hon'ble MoEF&CC.



ANNEXURE-1



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/1	Report No.	: ENV/63/Feb./TR(A)/1/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: Rotary Kiln (No. 1 & 2) (100 TPD each) (attached to common Stack)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G. L.)	: 35.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 2.0
Capacity	: 100 TPD (each)	Height of sampling port (mtr.) (from G.L.)	: 15.0
Emission Due to	: Combustion of Coal & Reduction of Fe-Ore		
Fuel Used	: Coal	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: 5.12 MT/hr./Kiln		
Pollution Control Device	: W.H.R.B with E.S.P		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS : 11255 (Part 1)	: 152.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	: 9.78
4.	Quantity of Gas flow	Nm ³ /hr.	IS : 11255 (Part III)	: 75607.58
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) : 2019	: 425.22
6.	Concentration of CO ₂	% (v/v)	IS 13270 : 2019	: 10.6
7.	Concentration of CO	%(v/v)	IS 13270 : 2019	: <1.0
8.	a) Concentration of Particulate Matter (at 10.6% CO ₂)	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11	: 32.19
	b) Concentration of Particulate Matter (at 12% CO ₂)		(Vol.11.07) : 2017	: 36.44

Remarks : Result relates only to the sample tested.

Reviewed By :

INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

Authorised Signatory :

Dr. AJOY PAUL
Quality Manager

H.O. : 63/B, Rastraguru Avenue, Kolkata -700028 ■ Ph. 033 25792891/ 25497490 ■ Fax : 033 25299141
 Laboratory : 189, 190 & 192, Rastraguru Avenue, Kolkata -700028 ■ Ph. 033 25792889
 E-mail : info@envirocheck.in / envirocheck50@gmail.com ■ Website : www.envirocheck.in
 Branch Office : Siliguri ■ Haldia ■ Durgapur ■ Dhanbad ■ Gangtok ■ Port Blair ■ Dehradun ■ New Delhi
 Overseas : UAE ■ Qatar ■ Netherlands



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/II	Report No.	: ENV/63/Feb./TR(A)/II/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: Rotary Kiln (No. 3 & 4) (100 TPD each) (attached to common Stack)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G. L.)	: 35.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 2.0
Capacity	: 100 TPD	Height of sampling port (mtr.) (from G.L.)	: 15.0
Emission Due to	: Combustion of Coal & Reduction of Fe-Ore		
Fuel Used	: Coal	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: 5.12 MT/hr./Kiln		
Pollution Control Device	: E.S.P with W.H.R.B		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS : 11255 (Part 1)	: 149.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	: 10.36
4.	Quantity of Gas flow	Nm ³ /hr.	IS : 11255 (Part III)	: 80766.42
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) : 2019	: 456.14
6.	Concentration of CO ₂	% (v/v)	IS 13270 : 2019	: 11.2
7.	Concentration of CO	% (v/v)	IS 13270 : 2019	: <1.0
8.	a) Concentration of Particulate Matter (at 11.2% CO ₂)	mg/Nm ³	IS 11255 (Part – 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11	: 25.32
	b) Concentration of Particulate Matter (at 12% CO ₂)		(Vol.11.07) : 2017	: 27.12

Remarks : Result relates only to the sample tested.

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ENVIROCHECK

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/IV	Report No.	: ENV/63/Feb./TR(A)/IV/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: Hoods Over Induction Furnace (6 nos.) attached to common stack		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G. L.)	: 30.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 1.0
Capacity	: 25 MT/Heat (each furnace)	Height of sampling port (mtr.) (from G.L.)	: 19.0
Emission Due to	: Melting of Pig Iron, Sponge Iron and Scrap		
Fuel Used	: Electrically Operated	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Yes		
Pollution Control Device	: Bag Filter		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS 11255 (Part 1)	: 64.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS 11255 (Part 3)	: 9.43
4.	Quantity of Gas flow	Nm ³ /hr.	IS 11255 (Part III)	: 23489.18
5.	Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol.11.07) : 2017	: 26.17

Remarks : Result relates only to the sample tested.
: During monitoring all furnaces were in operation.

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/VI	Report No.	: ENV/63/Feb./TR(A)/VI/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: Rotary Kiln No. 7 (1 x 600 TPD)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G.L.)	: 72.0
Materials of Construction	: Concrete	Stack I.D. at sampling point (mtr.)	: 2.17
Capacity	: 600 TPD	Height of sampling port (mtr.) (from G.L.)	: 35.0
Emission Due to	: Combustion of Coal & Reduction of Fe-Ore		
Fuel Used	: Coal	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: 13.5 TPH/hr.		
Pollution Control Device	: E.S.P		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS : 11255 (Part 1)	: 198.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	: 10.94
4.	Quantity of Gas flow	Nm ³ /hr.	IS : 11255 (Part III)	: 89602.58
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) : 2019	: 385.35
6.	Concentration of CO ₂	% (v/v)	IS 13270 : 2019	: 11.8
7.	Concentration of CO	%(v/v)	IS 13270 : 2019	: <1.0
8.	a) Concentration of Particulate Matter (at 11.8% CO ₂)	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11	: 19.44
	b) Concentration of Particulate Matter (at 12% CO ₂)	mg/Nm ³	(Vol.11.07) : 2017	: 19.77

Remarks : Result relates only to the sample tested.

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/V	Report No.	: ENV/63/Feb./TR(A)/V/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: Rotary Kiln No. 5 & 6 (2 x 350 TPD) (attached to common Stack)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G.L.)	: 72.0
Materials of Construction	: Concrete	Stack I.D. at sampling point (mtr.)	: 2.60
Capacity	: 350 TPD (each)	Height of sampling port (mtr.) (from G.L.)	: 51.2
Emission Due to	: Oxidation of Coal & Reduction of Fe-Ore		
Fuel Used	: Coal	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: 13.5 TPH/Kiln		
Pollution Control Device	: W.H.R.B with E.S.P		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS : 11255 (Part 1)	: 188.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	: 11.68
4.	Quantity of Gas flow	Nm ³ /hr.	IS : 11255 (Part III)	: 140655.03
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) : 2019	: 435.55
6.	Concentration of CO ₂	% (v/v)	IS 13270 : 2019	: 11.8
7.	Concentration of CO	%(v/v)	IS 13270 : 2019	: <1.0
8.	a) Concentration of Particulate Matter (at 11.8% CO ₂)	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11	: 19.80
	b) Concentration of Particulate Matter (at 12% CO ₂)		(Vol.11.07) : 2017	: 20.13

Remarks : Result relates only to the sample tested.
: During monitoring both kilns were in operation

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/III	Report No.	: ENV/63/Feb./TR(A)/III/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: AFBC Boiler		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G.L.)	: 60.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 2.10
Capacity	: 36 TPH	Height of sampling port (mtr.) (from G.L.)	: 20.0
Emission Due to	: Combustion of Coal & Dolochar		
Fuel Used	: Coal & Dolochar	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Coal - 150 TPD & Dolochar - 132TPD		
Pollution Control Device	: E.S.P		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS : 11255 (Part 1)	: 147.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	: 10.36
4.	Quantity of Gas flow	Nm ³ /hr.	IS : 11255 (Part III)	: 89575.03
5.	Concentration of SO ₂ (at 6% O ₂)	mg/Nm ³	IS 11255 (Part 2) : 2019	: 373.30
6.	Concentration of NO _x (at 6% O ₂)	mg/Nm ³	IS 11255 (Part 7) : 2017 / ASTM D 1608-98, Sec. 11 (Vol. 11.07) : 2017	: 142.20
7.	Concentration of CO ₂	% (v/v)	IS 13270 : 2019	: 10.0
8.	Concentration of O ₂	% (v/v)	EPA Method 3 : 2017	: 8.4
9.	Concentration of CO	%(v/v)	IS 13270 : 2019	: <1.0
10.	a) Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11	: 23.94
	b) Concentration of Particulate Matter (at 6% O ₂)	mg/Nm ³	(Vol.11.07) : 2017	: 28.50

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd. (Ferro Division)	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/VII	Report No.	: ENV/63/Feb./TR(A)/VII/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: SEAF (No.1)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G.L.)	: 32.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 1.80
Capacity	: 9.0 MVA	Height of sampling port (mtr.) (from G.L.)	: 22.0
Emission Due to	: Reduction of Si-Mn Ore		
Fuel Used	: N.A. (Electrically Operated)	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Nil		
Pollution Control Device	: F. D. Cooler and Pulse Jet Bag Filter		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS 11255 (Part 1)	: 68.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS 11255 (Part 3)	: 7.72
4.	Quantity of Gas flow	Nm ³ /hr.	IS 11255 (Part III)	: 61573.53
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) 1985 RA 2003	: 392.0
6.	Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol.11.07) : 2017	: 23.81

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd. (Ferro Division)	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/VIII	Report No.	: ENV/63/Feb./TR(A)/VIII/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: SEAF (No.2)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G. L.)	: 32.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 1.80
Capacity	: 9.0 MVA	Height of sampling port (mtr.) (from G.L.)	: 22.0
Emission Due to	: Reduction of Si-Mn Ore		
Fuel Used	: N.A. (Electrically Operated)	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Nil		
Pollution Control Device	: F. D. Cooler and Pulse Jet Bag Filter		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS 11255 (Part 1)	: 72.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS 11255 (Part 3)	: 7.77
4.	Quantity of Gas flow	Nm ³ /hr.	IS 11255 (Part III)	: 61242.48
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) 1985 RA 2003	: 359.86
6.	Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part – 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol.11.07) : 2017	: 21.76

Remarks : Result relates only to the sample tested.

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/IX	Report No.	: ENV/63/Feb./TR(A)/IX/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: SEAF (No.3)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G. L.)	: 32.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 1.80
Capacity	: 9.0 MVA	Height of sampling port (mtr.) (from G.L.)	: 22.0
Emission Due to	: Reduction of Si-Mn Ore		
Fuel Used	: N.A. (Electrically Operated)	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Nil		
Pollution Control Device	: F. D. Cooler and Pulse Jet Bag Filter		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS 11255 (Part 1)	: 70.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS 11255 (Part 3)	: 7.74
4.	Quantity of Gas flow	Nm ³ /hr.	IS 11255 (Part III)	: 61373.08
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) 1985 RA 2003	: 411.27
6.	Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part – 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol.11.07) : 2017	: 16.09

Remarks : Result relates only to the sample tested.

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd. (Ferro Division)	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/X	Report No.	: ENV/63/Feb./TR(A)/X/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: SEAF (No.4)		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G.L.)	: 32.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 1.80
Capacity	: 9.0 MVA	Height of sampling port (mtr.) (from G.L.)	: 22.0
Emission Due to	: Reduction of Si-Mn Ore		
Fuel Used	: N.A. (Electrically Operated)	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Nil		
Pollution Control Device	: F. D. Cooler and Pulse Jet Bag Filter		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS 11255 (Part 1)	: 69.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS 11255 (Part 3)	: 7.74
4.	Quantity of Gas flow	Nm ³ /hr.	IS 11255 (Part III)	: 61564.72
5.	Concentration of SO ₂	mg/Nm ³	IS 11255 (Part 2) 1985 RA 2003	: 339.73
6.	Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11 (Vol.11.07) : 2017	: 28.12

Remarks : Result relates only to the sample tested.

Reviewed By :

Indrani Bhattacharya

INDRANI BHATTACHARYA
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Dr. Ajoy Paul

Dr. AJOY PAUL
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ENVIROCHECK

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TEST REPORT

FORMAT NO : ENV/FM/38

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Stack Emission
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XV	Report No.	: ENV/63/Feb./TR(A)/XV/22-23

A. GENERAL INFORMATION ABOUT STACK PROVIDED BY THE INDUSTRY

Stack Attached to	: CFBC Boiler		
Shape of Stack	: Circular	Height of Stack (mtr.) (from G. L.)	: 92.0
Materials of Construction	: M.S.	Stack I.D. at sampling point (mtr.)	: 2.60
Capacity	: 100 TPH	Height of sampling port (mtr.) (from G.L.)	: 51.2
Emission Due to	: Combustion of Coal & Dolochar		
Fuel Used	: Coal & Dolochar	Permanent Platform & Ladder	: Yes
Working Fuel Consumption	: Coal - 12.5MT/hr. & Dolochar - 8.33 MT/hr.		
Pollution Control Device	: E.S.P		

B. RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Flue Gas Temperature	°C	IS : 11255 (Part 1)	: 190.0
2.	Barometric Pressure	mm of Hg.	--	: 758.0
3.	Velocity of Gas flow	m/s	IS : 11255 (Part 3)	: 12.20
4.	Quantity of Gas flow	Nm ³ /hr.	IS : 11255 (Part III)	: 148932.11
5.	Concentration of SO ₂ (at 6% O ₂)	mg/Nm ³	IS 11255 (Part 2) : 2019	: 148.50
6.	Concentration of NO _x (at 6% O ₂)	mg/Nm ³	IS 11255 (Part 7) : 2017 / ASTM D 1608-98, Sec. 11 (Vol. 11.07) : 2017	: 60.20
7.	Concentration of CO ₂	% (v/v)	IS 13270 : 2019	: 11.4
8.	Concentration of O ₂	% (v/v)	EPA Method 3 : 2017	: 6.4
9.	Concentration of CO	%(v/v)	IS 13270 : 2019	: <1.0
10.	a) Concentration of Particulate Matter	mg/Nm ³	IS 11255 (Part - 1) : 2019 & ASTM D 3685/D 3685M-98 (reapproved 2005) : Sec. 11	: 21.22
	b) Concentration of Particulate Matter (at 6% O ₂)	mg/Nm ³	(Vol.11.07) : 2017	: 21.80

Remarks : Result relates only to the sample tested.

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ANNEXURE-2



ENVIROCHECK

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XIV	Report No.	: ENV/63/Feb./TR(A)/XIV/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Inside the Rolling Mill Division
2. Duration of Sampling : 08 hrs. (09:50 a.m. - 05:50 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 30.0
2. Average Relative Humidity (%) : 72.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	361.56

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XIV	Report No.	: ENV/63/Feb./TR(A)/XIV/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Inside the Rolling Mill Division
2. Duration of Sampling : 08 hrs. (09:50 a.m. – 05:50 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 30.0
2. Average Relative Humidity (%) : 72.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	11.80
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	26.52

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XV	Report No.	: ENV/63/Feb./TR(A)/XV/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near Control Room (SMS Division)
2. Duration of Sampling : 08 hrs. (10:00 a.m. – 06:00 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 28.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	210.80

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XV	Report No.	: ENV/63/Feb./TR(A)/XV/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near Control Room (SMS Division)
2. Duration of Sampling : 08 hrs. (10:00 a.m. – 06:00 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 28.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	9.52
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	28.50

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XVI	Report No.	: ENV/63/Feb./TR(A)/XVI/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Infront of MCC Control Room (DRI - 2 x 350 TPD)
2. Duration of Sampling : 08 hrs. (10:10 a.m. - 06:10 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 26.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	260.10

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XVI	Report No.	: ENV/63/Feb./TR(A)/XVI/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Infront of MCC Control Room (DRI - 2 x 350 TPD)
2. Duration of Sampling : 08 hrs. (10:10 a.m. - 06:10 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 26.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	8.20
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	26.56

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XVII	Report No.	: ENV/63/Feb./TR(A)/XVII/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Inbetween CPP – 12 MW & DRI – 100 TPD
2. Duration of Sampling : 08 hrs. (10:25 a.m. – 06:25 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 25.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	380.12

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XVII	Report No.	: ENV/63/Feb./TR(A)/XVII/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Inbetween CPP – 12 MW & DRI – 100 TPD
2. Duration of Sampling : 08 hrs. (10:25 a.m. – 06:25 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 25.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	16.50
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	36.10

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XVIII	Report No.	: ENV/63/Feb./TR(A)/XVIII/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near SEAF Control Room (Ferro Alloy Division)
2. Duration of Sampling : 08 hrs. (10:30 a.m. - 06:30 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 26.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	281.58

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XVIII	Report No.	: ENV/63/Feb./TR(A)/XVIII/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near SEAF Control Room (Ferro Alloy Division)
2. Duration of Sampling : 08 hrs. (10:30 a.m. - 06:30 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 26.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	12.57
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	31.80

Remarks : Result relates only to the sample tested.

Reviewed By :

INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

Authorised Signatory :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XIX	Report No.	: ENV/63/Feb./TR(A)/XIX/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Coal Shed Area (Raw Materials Handling Shed)
2. Duration of Sampling : 08 hrs. (10:30 a.m. – 06:30 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 24.0
2. Average Relative Humidity (%) : 64.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	461.56

Remarks : Result relates only to the sample tested.

Reviewed By :

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Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XIX	Report No.	: ENV/63/Feb./TR(A)/XIX/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Coal Shed Area (Raw Materials Handling Shed)
2. Duration of Sampling : 08 hrs. (10:30 a.m. - 06:30 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 24.0
2. Average Relative Humidity (%) : 64.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	12.80
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	28.52

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XX	Report No.	: ENV/63/Feb./TR(A)/XX/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near Cooler Discharge (DRI - 350 TPD)
2. Duration of Sampling : 08 hrs. (10:40 a.m. - 06:40 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 27.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULT

SL. NO.	PARAMETER	UNIT	METHOD NO.	RESULT
1.	Concentration of SPM	µg/m ³	IS 5182 (Part 4) : 2019	210.80

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/57

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 22.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Work Zone Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XX	Report No.	: ENV/63/Feb./TR(A)/XX/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near Cooler Discharge (DRI – 350 TPD)
2. Duration of Sampling : 08 hrs. (10:40 a.m. – 06:40 p.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 27.0
2. Average Relative Humidity (%) : 70.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	8.20
2.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	32.50

Remarks : Result relates only to the sample tested.

Reviewed By :

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 Overseas : UAE ■ Qatar ■ Netherlands

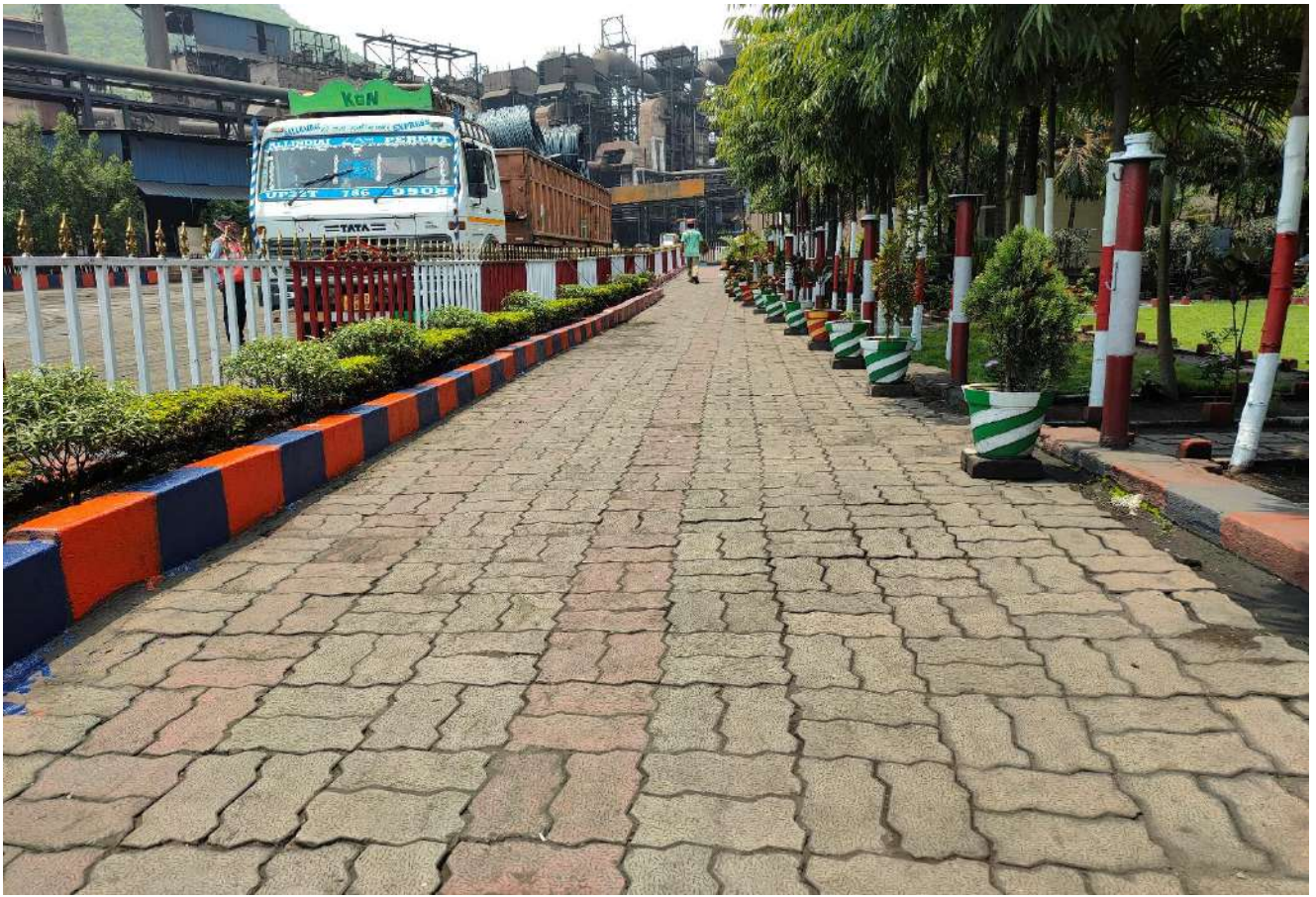
ANNEXURE-3

RCC ROAD & PAVER BLOCK AREA INSIDE PLANT



















ANNEXURE-4

TRUCK PARKING AREA



ANNEXURE-5

GREENBELT PHOTOGRAPHS









ANNEXURE-6



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TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 22.02.2023 – 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Ambient Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XI	Report No.	: ENV/63/Feb./TR(A)/XI/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near Security Gate (Southern Side)
2. Duration of Sampling : 24 hrs. (09:00 a.m. – 09:00 a.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 23.0
2. Average Relative Humidity (%) : 64.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell
5. Weather Condition : Clear

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of PM _{2.5}	µg/m ³	IS 5182 (Part 24) : 2019	36.20
2.	Concentration of PM ₁₀	µg/m ³	IS 5182 (PART 23) : 2019	74.10
3.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	16.23
4.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	32.56
5.	Concentration of CO	mg/m ³	IS 5182 (Part 10) : 2019	0.42
6.	Concentration of Pb	µg/m ³	IS 5182 (Part 22) : 2019	<0.01
7.	Benzo (a) Pyrene (BaP)	ng/m ³	IS 5182 (Part 12) : 2019 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021/ASTM D 6209-98, Sec. 11 (Vo. 11.07) : 2021	<0.36
8.	Benzene (C ₆ H ₆)	µg/m ³	IS 5182 (Part 11) 2017 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021	<0.74
9.	Ozone (O ₃)	µg/m ³	IS 5182 (Part-9) : 2019	<10.0
10.	Ammonia (NH ₃)	µg/m ³	IS 5182 (Part 25) : 2018	<4.18
11.	Nickel (Ni)	ng/m ³	EPA IO 3.2, 1999	<0.02
12.	Arsenic (As)	ng/m ³	EPA IO 3.2, 1999 & APHA 23 rd Ed 3114C : 2017	<0.01

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 22.02.2023 – 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Ambient Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XII	Report No.	: ENV/63/Feb./TR(A)/XII/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Near Laboratory Buildings (SMS Division) (Northern Side)
2. Duration of Sampling : 24 hrs. (09:30 a.m. – 09:30 a.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 22.0
2. Average Relative Humidity (%) : 62.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell
5. Weather Condition : Clear

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of PM _{2.5}	µg/m ³	IS 5182 (Part 24) : 2019	33.50
2.	Concentration of PM ₁₀	µg/m ³	IS 5182 (PART 23) : 2019	72.50
3.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	8.33
4.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	26.44
5.	Concentration of CO	mg/m ³	IS 5182 (Part 10) : 2019	0.26
6.	Concentration of Pb	µg/m ³	IS 5182 (Part 22) : 2019	<0.01
7.	Benzo (a) Pyrene (BaP)	ng/m ³	IS 5182 (Part 12) : 2019 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021/ASTM D 6209-98, Sec. 11 (Vo. 11.07) : 2021	<0.36
8.	Benzene (C ₆ H ₆)	µg/m ³	IS 5182 (Part 11) 2017 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021	<0.74
9.	Ozone (O ₃)	µg/m ³	IS 5182 (Part-9) : 2019	<10.0
10.	Ammonia (NH ₃)	µg/m ³	IS 5182 (Part 25) : 2018	<4.18
11.	Nickel (Ni)	ng/m ³	EPA IO 3.2, 1999	<0.02
12.	Arsenic (As)	ng/m ³	EPA IO 3.2, 1999 & APHA 23 rd Ed 3114C : 2017	<0.01

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 22.02.2023 - 23.02.2023		
		Period of Analysis	: 25.02.2023 - 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Ambient Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XIII	Report No.	: ENV/63/Feb./TR(A)/XIII/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Madandih Village (05 km. from Plant)
2. Duration of Sampling : 24 hrs. (10:00 a.m. - 10:00 a.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 22.0
2. Average Relative Humidity (%) : 64.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell
5. Weather Condition : Clear

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of PM _{2.5}	µg/m ³	IS 5182 (Part 24) : 2019	31.80
2.	Concentration of PM ₁₀	µg/m ³	IS 5182 (PART 23) : 2019	68.50
3.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	7.05
4.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	25.0
5.	Concentration of CO	mg/m ³	IS 5182 (Part 10) : 2019	0.20
6.	Concentration of Pb	µg/m ³	IS 5182 (Part 22) : 2019	<0.01
7.	Benzo (a) Pyrene (BaP)	ng/m ³	IS 5182 (Part 12) : 2019 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021/ASTM D 6209-98, Sec. 11 (Vo. 11.07) : 2021	<0.36
8.	Benzene (C ₆ H ₆)	µg/m ³	IS 5182 (Part 11) 2017 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021	<0.74
9.	Ozone (O ₃)	µg/m ³	IS 5182 (Part-9) : 2019	<10.0
10.	Ammonia (NH ₃)	µg/m ³	IS 5182 (Part 25) : 2018	<4.18
11.	Nickel (Ni)	ng/m ³	EPA IO 3.2, 1999	<0.02
12.	Arsenic (As)	ng/m ³	EPA IO 3.2, 1999 & APHA 23 rd Ed 3114C : 2017	<0.01

Remarks : Result relates only to the sample tested.

Reviewed By :

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TEST REPORT

FORMAT NO : ENV/FM/37

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 22.02.2023 – 23.02.2023		
		Period of Analysis	: 25.02.2023 – 25.02.2023		
		Date of Issue	: 27.02.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Ambient Air
Sample Condition	: Sealed	Sample ID No.	: ENV/63/Feb./A/XIV	Report No.	: ENV/63/Feb./TR(A)/XIV/22-23

A] GENERAL INFORMATION

1. Location of Sampling : Back Side of the Captive Power Plant (Western Side)
2. Duration of Sampling : 24 hrs. (10:30 a.m. – 10:30 a.m.)

B] METEOROLOGICAL INFORMATION

1. Average Temperature (°C) : 23.0
2. Average Relative Humidity (%) : 67.0
3. Barometric Pressure (mm of Hg) : 758.0
4. Smell or Odour : No Remarkable Smell
5. Weather Condition : Clear

C] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS
1.	Concentration of PM _{2.5}	µg/m ³	IS 5182 (Part 24) : 2019	46.20
2.	Concentration of PM ₁₀	µg/m ³	IS 5182 (PART 23) : 2019	73.50
3.	Concentration of SO ₂	µg/m ³	IS 5182 (Part 2) 2017 & ASTM D 2914-01, Sec. 11 (Vol. 11.07) : 2017	11.75
4.	Concentration of NO ₂	µg/m ³	IS 5182 (Part 6) 2017 & ASTM D 1607-91 : Sec. 11 (Vol. 11.07) : 2018	30.57
5.	Concentration of CO	mg/m ³	IS 5182 (Part 10) : 2019	0.40
6.	Concentration of Pb	µg/m ³	IS 5182 (Part 22) : 2019	<0.01
7.	Benzo (a) Pyrene (BaP)	ng/m ³	IS 5182 (Part 12) : 2019 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021/ASTM D 6209-98, Sec. 11 (Vo. 11.07) : 2021	<0.36
8.	Benzene (C ₆ H ₆)	µg/m ³	IS 5182 (Part 11) 2017 & ASTM D 6209-98, Sec. 11 (Vol. 11.07) : 2021	<0.74
9.	Ozone (O ₃)	µg/m ³	IS 5182 (Part-9) : 2019	<10.0
10.	Ammonia (NH ₃)	µg/m ³	IS 5182 (Part 25) : 2018	<4.18
11.	Nickel (Ni)	ng/m ³	EPA IO 3.2, 1999	<0.02
12.	Arsenic (As)	ng/m ³	EPA IO 3.2, 1999 & APHA 23 rd Ed 3114C : 2017	<0.01

Remarks : Result relates only to the sample tested.

Reviewed By :

INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

Authorised Signatory :

Dr. AJOY PAUL
Quality Manager

H.O. : 63/B, Rastraguru Avenue, Kolkata -700028 ■ Ph. 033 25792891/ 25497490 ■ Fax : 033 25299141
 Laboratory : 189, 190 & 192, Rastraguru Avenue, Kolkata -700028 ■ Ph. 033 25792889
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 Branch Office : Siliguri ■ Haldia ■ Durgapur ■ Dhanbad ■ Gangtok ■ Port Blair ■ Dehradun ■ New Delhi
 Overseas : UAE ■ Qatar ■ Netherlands

ANNEXURE-7A, 7B, 7C



ENVIROCHECK

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FORMAT NO. ENV/FM/40

TEST REPORT

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia (WB) - 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 24.02.2023 - 02.03.2023		
		Date of Issue	: 03.03.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Industrial Effluent Water (Grab)
Location	: E.T.P Inlet	Sample Condition	: Sealed	Sample ID No.	: ENV/1001C/Feb./W/I
Report No.	: ENV/1001C/Feb./TR(W)/I/22-23				

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	pH	4500H+B APHA 23 rd Edition, 2017	-	5.20
2.	Total Suspended Solids	2540 D APHA 23 rd Edition, 2017	mg/l	110.0
3.	Oil & Grease	5520 B/D APHA 23 rd Edition, 2017	mg/l	15.0
4.	Chemical Oxygen Demand	5200 B/C/D APHA 23 rd Edition, 2017	mg/l	510.0
5.	Biochemical Oxygen Demand for 5 days at 20°C	5210 B APHA 23 rd Edition, 2017	mg/l	<2.0

Remarks : a) Sample collected by Envirocheck and sent to lab for testing in sealed condition.
b) Result relates only to the sample tested.

Reviewed By :

DURBADAL CHAKRABORTY
Dy. Quality Manager

Authorised Signatory :

Dr. AJAY PAUL
Quality Manager

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Overseas : UAE ■ Qatar ■ Netherlands



ENVIROCHECK

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Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



FORMAT NO. ENV/FM/40

TEST REPORT

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia(WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 24.02.2023 - 02.03.2023		
		Date of Issue	: 03.03.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Industrial Effluent Water (Grab)
Location	: E.T.P Outlet	Sample Condition	: Sealed	Sample ID No.	: ENV/1001C/Feb./W/II
Report No.	: ENV/1001C/Feb./TR(W)/II/22-23				

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	pH	4500H+B APHA 23 rd Edition, 2017	-	6.80
2.	Total Suspended Solids	2540 D APHA 23 rd Edition, 2017	mg/l	36.0
3.	Oil & Grease	5520 B/D APHA 23 rd Edition, 2017	mg/l	3.0
4.	Chemical Oxygen Demand	5200 B/C/D APHA 23 rd Edition, 2017	mg/l	110.0
5.	Biochemical Oxygen Demand for 5 days at 20°C	5210 B APHA 23 rd Edition, 2017	mg/l	<2.0

Remarks : a) Sample collected by Envirocheck and sent to lab for testing in sealed condition.
b) Result relates only to the sample tested.

Reviewed By :

DURBADAL CHAKRABORTY
Dy. Quality Manager

Authorised Signatory :

Dr. AJAY PAUL
Quality Manager

<End of Report>

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Overseas : UAE ■ Qatar ■ Netherlands



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



FORMAT NO. ENV/FM/40

TEST REPORT

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia (WB) - 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 24.02.2023 - 03.03.2023		
		Date of Issue	: 04.03.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Surface Water
Location	: Pond at Madandih Village	Sample Condition	: Sealed	Sample ID No.	: ENV/1001B/Feb./W/M(i)
Report No.	: ENV/1001B/Feb./TR(W)/M(i)/22-23				

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	pH	APHA 23 rd Ed., 4500 H*B : 2017	-	7.10
2.	Total Suspended Solids	APHA 23 rd Ed., 2540 D : 2017	mg/l	28.0
3.	Total Dissolved Solids	IS 3025 (Part 16) : 1984 : 2014	mg/l	280.0
4.	Dissolved Oxygen	APHA 23 rd Ed., 4500 - OC : 2017	mg/l	7.2
5.	COD	APHA 23 rd Ed., 5220 B/C/D : 2017	mg/l	60.0
6.	BOD [5 Day's at 20°C]	APHA 23 rd Ed., 5210 B : 2017	mg/l	<2.0
7.	Oil & Grease	APHA 23 rd Ed., 5520 B/D/ : 2017	mg/l	<1.0
8.	Residual Chlorine	APHA 23 rd Ed., Cl-B : 2017	mg/l	<0.04
9.	Chloride	APHA 23 rd Ed., 4500 Cl-B/D : 2017	mg/l	42.65
10.	Iron	APHA 23 rd Ed., 3111 B : 2017	mg/l	0.23
11.	Arsenic	APHA 23 rd Ed., 3114 B : 2017	mg/l	<0.01
12.	Lead	APHA 23 rd Ed., 3111 B : 2017	mg/l	<0.005
13.	Mercury	APHA 23 rd Ed., 3112 B : 2017	mg/l	<0.001
14.	Copper	APHA 23 rd Ed., 3111 B : 2017	mg/l	<0.001
15.	Zinc	APHA 23 rd Ed., 3111 B : 2017	mg/l	0.50
16.	Total Chromium	APHA 23 rd Ed., 3111 B : 2017	mg/l	<0.02

Remarks : a) Sample collected by Envirocheck and sent to lab for testing in sealed condition.
b) Result relates only to the sample tested.

Reviewed By :

DURBADAL CHAKRABORTY
Dy. Quality Manager

Approved By :

INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

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Overseas : UAE ■ Qatar ■ Netherlands



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Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



FORMAT NO. ENV/FM/40

TEST REPORT

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 24.02.2023 - 03.03.2023		
		Date of Issue	: 04.03.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Surface Water
Location	: Composite Sample of Equalization Pond	Sample Condition	: Sealed	Sample ID No.	: ENV/1001B/Feb./W/M(ii)
Report No.	: ENV/1001B/Feb./TR(W)/M(ii)/22-23				

SL. NO.	PARAMETERS	TEST METHOD	UNIT	RESULTS
1.	pH	APHA 23 rd Ed., 4500 H+B : 2017	-	6.80
2.	Total Suspended Solids	APHA 23 rd Ed., 2540 D : 2017	mg/l	26.0
3.	Total Dissolved Solids	IS 3025 (Part 16) : 1984 : 2014	mg/l	1180.0
4.	Dissolved Oxygen	APHA 23 rd Ed., 4500 - OC : 2017	mg/l	6.2
5.	COD	APHA 23 rd Ed., 5220 B/C/D : 2017	mg/l	40.0
6.	BOD [5 Day's at 20°C]	APHA 23 rd Ed., 5210 B : 2017	mg/l	7.0
7.	Oil & Grease	APHA 23 rd Ed., 5520 B/D/ : 2017	mg/l	<1.0
8.	Residual Chlorine	APHA 23 rd Ed., Cl-B : 2017	mg/l	<0.04
9.	Chloride	APHA 23 rd Ed., 4500 Cl-B/D : 2017	mg/l	275.89
10.	Iron	APHA 23 rd Ed., 3111 B : 2017	mg/l	0.80
11.	Arsenic	APHA 23 rd Ed., 3114 B : 2017	mg/l	<0.01
12.	Lead	APHA 23 rd Ed., 3111 B : 2017	mg/l	<0.005
13.	Mercury	APHA 23 rd Ed., 3112 B : 2017	mg/l	<0.001
14.	Copper	APHA 23 rd Ed., 3111 B : 2017	mg/l	<0.001
15.	Zinc	APHA 23 rd Ed., 3111 B : 2017	mg/l	0.86
16.	Total Chromium	APHA 23 rd Ed., 3111 B : 2017	mg/l	<0.02

Remarks : a) Sample collected by Envirocheck and sent to lab for testing in sealed condition.
b) Result relates only to the sample tested.

Reviewed By :


DURBADAL CHAKRABORTY
Dy. Quality Manager

Approved By :


INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

<End of Report>

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Overseas : UAE ■ Qatar ■ Netherlands



ENVIROCHECK

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Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



FORMAT NO. ENV/FM/55

TEST REPORT

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia, Dist – Purulia, (WB)– 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 24.02.2023 – 04.03.2023		
		Date of Issue	: 06.03.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Ground Water
Location	: Madandih Village Tubewell	Sample Condition	: Sealed	Sample ID No.	: ENV/1001A/Feb./W/M
Report No.	: ENV/1001A/Feb./TR(W)/M/22-23				

PARAMETERS		METHOD	UNIT	RESULTS
1.	Colour	APHA 23 rd Ed., 3111 B : 2017	Hazen	1.0
2.	Odour	APHA 23 rd Ed., 2150 B : 2017	--	Odourless
3.	pH	APHA 23 rd Ed., 4500 – H+B : 2017	--	6.80
4.	Taste	APHA 23 rd Ed., 2160 B : 2017	--	Acceptable
5.	Turbidity	APHA 23 rd Ed., 2130 B : 2047	NTU	1.20
6.	Total Dissolved Solids	APHA 23 rd Ed., 2540 B : 2017	mg./l	490.0
7.	Calcium	APHA 23 rd Ed., 3500 Ca-B : 2017	mg./l	39.68
8.	Chloride	APHA 23 rd Ed., 4500 Cl-B/D : 2017	mg./l	52.64
9.	Iron	APHA 23 rd Ed., 3111 B : 2017	mg./l	0.62
10.	Magnesium	APHA 23 rd Ed., 3500 Mg-B : 2017	mg./l	12.24
11.	Nitrate	APHA 23 rd Ed., NO ₃ -E : 2017	mg./l	3.50
12.	Sulphate	APHA 23 rd Ed., 4500 SO ₄ -E : 2017	mg./l	31.50
13.	Total Alkalinity	APHA 23 rd Ed., 2320 B : 2017	mg./l	165.0
14.	Total Hardness	APHA 23 rd Ed., 2340 C : 2017	mg./l	150.0
15.	Arsenic	IS 3025 (Part 37) : 1988 : 2014	mg./l	<0.01
16.	Chromium	APHA 23 rd Ed., 3111 Cr-B : 2017	mg./l	<0.02
17.	Boron	APHA 23 rd Ed., 4500 B-C : 2017	mg./l	<0.1

Remarks : a) Sample collected by Envirocheck and sent to lab for testing in sealed condition.

b) Result relates only to the sample tested.

Reviewed By :


DURRADAL CHAKRABORTY
Dy. Quality Manager

Approved By :


INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

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Overseas : UAE ■ Qatar ■ Netherlands



ENVIROCHECK

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Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



FORMAT NO. ENV/FM/55

TEST REPORT

Name of the Industry	: Shakambhari Ispat & Power Ltd.	Type of Industry	: Steel & Power Unit		
Address	: Vill. - Madandih, P.O. - Bartoria, P.S. - Neturia, Dist - Purulia, (WB)- 723121	Sampling Date	: 23.02.2023		
		Period of Analysis	: 24.02.2023 - 25.02.2023		
		Date of Issue	: 06.03.2023		
Sampling Plan & Procedure	: ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	: Ground Water
Location	: Madandih Village Tubewell	Sample Condition	: Sealed	Sample ID No.	: ENV/1001A/Feb./W/M
Report No.	: ENV/1001A/Feb./TR(W)/M/22-23				

	PARAMETERS	METHOD	UNIT	RESULTS
1.	Total Coliform	9222 B, APHA 23 rd , 2017	CFU/100 ml.	<1.0
2.	E. Coli	9222 I, APHA 23 rd Ed., 2017	CFU/100 ml.	<1.0

Remarks : a) CFU indicates Colony Forming Unit.

b) <1.0 indicates "Absent" No Colony Developed i.e. No Coliform Found.

c) Sample collected by Envirocheck and sent to lab for testing in sealed condition.

d) Result relates only to the sample tested.

Reviewed By :

DURBADAL CHAKRABORTY
Dy. Quality Manager

Approved By :

PRIYANKA MUKHERJEE
Technical Manager, Microbiology

<End of Report>

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ANNEXURE-8



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



TCLP REPORT

1. Name of the Industry : Shakambhari Ispat & Power Ltd.
2. Address : Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia,
Purulia – 723121
3. Report No. : ENV/1001/TR(S)/M(i)/22-23
4. Date of sampling : 23.02.2023
5. Reporting Date : 30.02.2023
6. Type of sample : Slag
7. Location : SAF Slag

Sl. No.	PARAMETERS	METHOD	UNIT	RESULTS
1.	Zinc (Zn)	EPA 1311 : 1992 APHA 23 rd Ed., 3111 B : 2017	mg./l	5.80
2.	Copper (Cu)	EPA 1311 : 1992 EPA 3050 B, 1996/EPA 200.6 : 1998	mg./l	4.20
3.	Nickel (Ni)	EPA 1311 : 1992 APHA 23 rd Ed., 3111 B : 2017	mg./l	1.80
4.	Lead (Pb)	EPA 1311 : 1992 EPA 3050 B, 1996/EPA 200.9 : 1998	mg./l	1.60
5.	Cadmium (Cd)	EPA 1311 : 1992 EPA 3050 B, 1996/IS 3050 (Part 46)	mg./l	<0.002

Remarks: Result relates only to the sample tested.

Reviewed By :

INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

Authorised Signatory :

Dr. AJOY PAUL
Quality Manager

H.O. : 63/B, Rastraguru Avenue, Kolkata -700028 ■ Ph. 033 25792891/ 25497490 ■ Fax : 033 25299141
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Overseas : UAE ■ Qatar ■ Netherlands



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018



TCLP REPORT

1. Name of the Industry : Shakambhari Ispat & Power Ltd.
2. Address : Vill. – Madandih, P.O. – Bartoria, P.S. – Neturia,
Purulia – 723121
3. Report No. : ENV/1001/TR(S)/M(ii)/22-23
4. Date of sampling : 23.02.2023
5. Reporting Date : 30.02.2023
6. Type of sample : Slag
7. Location : SMS Furnace Slag

Sl. No.	PARAMETERS	METHOD	UNIT	RESULTS
1.	Iron (Fe)	EPA 1311 : 1992 EPA 3050 B, 1996/EPA 200.9 : 1998	mg./l	6.50
2.	Zinc (Zn)	EPA 1311 : 1992 APHA 23 rd Ed., 3111 B : 2017	mg./l	5.20
3.	Copper (Cu)	EPA 1311 : 1992 EPA 3050 B, 1996/EPA 200.6 : 1998	mg./l	4.40
4.	Nickel (Ni)	EPA 1311 : 1992 APHA 23 rd Ed., 3111 B : 2017	mg./l	2.20
5.	Lead (Pb)	EPA 1311 : 1992 EPA 3050 B, 1996/EPA 200.9 : 1998	mg./l	1.12
6.	Cadmium (Cd)	EPA 1311 : 1992 EPA 3050 B, 1996/IS 3050 (Part 46)	mg./l	<0.002

Remarks: Result relates only to the sample tested.

Reviewed By :

INDRANI BHATTACHARYA
Dy. Technical Manager, Chemical

Authorised Signatory :

Dr. AJOY PAUL
Quality Manager

<End of Report>

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Overseas : UAE ■ Qatar ■ Netherlands

ANNEXURE-9A, 9B

ECL



EASTERN COALFIELDS LIMITED

(A Subsidiary of Coal India Ltd.)

Office of the General Manager, Sodepur Area

P.O. – Sunderchak, P.S - Kulti,

Dt. Paschim Bardhaman (W.B), Pin-713 360

Website – www.easterncoal.gov.in

Dated: - 24.02.2022

To

The Authority of Sakhambhari Ispat & Power Limited

Vill: Madandih

P.O: Bartoria

Dist: Purulia

Pin: 723121

Dear Sir,

In response to your letter dated: 18.02.2022, as per discussion with you, you are hereby requested to fill up an illegally Mined place at Bicched Bandh area near Narsamuda Colliery of Sodepur Area, ECL with fly ash, with active help of State Administration.

Yours faithfully


Area Personnel Manager

Sodepur Area

B.S.C REFRACTORIES AND CERAMICS

Mob.: 9434071611
8145812111

Jamuria Industrial Estate P.O. - Mondalpur, Ward No.- 13, Burdwan (W.B.) Pin - 713336

AGREEMENT

Ref. No.

Date : 12.05.2015.....

This agreement hereinafter referred to as ("the Agreement) made on this the first day of May, Two Thousand Fifteen by and M/s. Shakambhari Ispat & Power Ltd., a company incorporated under the companies Act,1956 and having its registered office at Diamond Prestige Building, 41A, A.J.C.Bose Road, 8th Floor, Room No. 801, Kolkata 700017 hereinafter referred to as SIPL (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its successor or successors and permitted assigns) of the ONE Part and M/s B.S.C. Refractories & Ceramics, a partnership firm and having its Office at Jamuria Industrial Estate, P.O. Mandalpur, Ward No. 13, Burdwan - 713336 (which expression shall unless excluded by or repugnant to the subject or context be deemed to mean and include its successor or successors and permitted assigns) of the OTHER Part

Whereas, the First Party had offered "Fly Ash" to M/s B.S.C. Refractories & Ceramics generated from the Proposed AFBC Boiler at the Captive Power Plant of SIPL. The rate of the Fly Ash will be decided fortnightly.

Whereas M/s B.S.C. Refractories & Ceramics shall arrange to place vehicle for lifting of the Fly Ash on daily basis and will pay the freight to the transporter/truck driver as per lorry receipt and at actual being the charges from Unit of SIPL, Neturia to the unit of M/s B.S.C. Refractories & Ceramics, Jamuria Industrial Estate, Burdwan. Vehicles carrying Fly Ash shall be emptied and release at earliest.

M/s B.S.C. Refractories & Ceramics will utilize the Fly Ash towards manufacturing of Fly Ash Bricks at its factory at Jamuria Industrial Estate.

Period of Agreement: This agreement shall remain in force for a period of 10 years from the date of Commissioning of the Proposed Captive Power Plant of SIPL.

Dispute Resolution: That in the event of any dispute of difference between the parties in respect to this Agreement shall be settled by amicable negotiation between the parties failing which the same shall be decided by Arbitration in accordance with the provision of Arbitration and Conciliation Act,1966.

In witness thereof the parties here to have executed this above written Agreement on the first day of May Two Thousand and Fifteen.

Signed and delivered by the above
B.S.C. Refractories & Ceramics
Kailash Kumar Agarwal
Name: Kailash Agarwal
Degn : Partner Partner
M/s B.S.C. Refractories & Ceramics

Signed and delivered by the above
Shakambhari Ispat & Power Ltd.
Name: Vinay Kumar Agarwal
Degn: Director Director
Shakambhari Ispat & Power Ltd.

In presence of:

Witness No. 1: Ayush Agarwala
Ayush Agarwala

Witness No. 2: Sunil Das

ANNEXURE-10

SHAKAMBHARI ISPAT & POWER LIMITED

Vill: Pavatpur, Radhamadhabpur, Madandih, PO: Bartoria, Dist.: Purulia (WB)

M/s. Shakambhari Ispat & Power Limited has obtained Environmental Clearance from the Ministry of Environment, Forest & Climate Change (MoEF&CC) vide F. No. J-11011/201/2013-IA.II(I) on 21st December 2016 for expansion of the existing steel plant. The Subsequent amendment was granted by MoEF&CC on 29th April 2020.

COMPLIANCE OF COMMITMENTS MADE DURING THE PUBLIC HEARING HELD ON 14.10.2015

Sl. No.	COMMITMENTS	COMPLIANCE STATUS
1.	Shri. Swapan Bauri of village Madnadih and Shri. Nirmal Bauri of village Sarbari expressed their hope that the proposed expansion will lead to the generation of direct and indirect employment for the local people. They requested the PP to implement the project at the earliest and ensure the overall socio-economic development of the local villages	Shakambhari Ispat & Power Limited is providing employment to local people by giving opportunities for direct and indirect employment. about 1000 people and their families are getting benefitted along with many other small-scale traders of the local community. It is approx. 60 % of the total employment of the company.
2.	Shri. BalaramKarmakar of village Madandih and Shri. Chandi Chakraborty of village Sarbari welcomed the proposed expansion with the hope that the same will generate further employment opportunities for local people. They requested the PP to ensure proper safety measures for the workers and fulfillment of their CSR commitments.	The project has positively increased the opportunities for employment for the people of nearby areas. We are providing appropriate safety measures to the workers i. e. safety helmets, safety shoes, hand gloves nose masks, etc at the workplace. And also providing on-site safety training through our safety officers. Some photos are attached as under.



SHOP FLOOR SAFETY TRAINING PROGRAM

3.

Janab Sk. Maznum of Nimdanga requested the PP to fulfill their CSR commitments and expressed his dissatisfaction regarding the nonfulfillment of such commitments by other industries which have come up in the locality. He also enquired about the appropriate authority that the local residents should approach for redressal in case of such failure to fulfill CSR commitments by the local industries.

Various CSR activities have been undertaken by SIPL for the benefit of the local community of nearby villages i. e. free health checkup camp and medicines distributions program, distribution of study material to the school students, renovation of school buildings, providing sitting arrangements to the school students, promotion of sports, Monetary support for cultural programs in local communities etc. We have dedicated HR/ IR & CSR team to look after the welfare activities and redressing of issues if any.



FREE MEDICAL HEALTH CHECKUP & MEDICINE CAMP AT GOPAL GANJ PRIMARY SCHOOL



DISTRIBUTION OF STUDY MATERIALS TO SCHOOL STUDENTS AT RADHAMADHABPUR PRIMARY SCHOOL



DISTRIBUTION OF STUDY MATERIALS TO SCHOOL STUDENT AT AREA KUSUM PRIMARY SCHOOL



FREE MEDICAL HEALTH CHECKUP & MEDICINE CAMP AT AREA KUSUM PRIMARY SCHOOL



PROMOTION OF SPORTS AMONG VILLAGE GIRLS



PLANTATION AND PLANTS DISTRIBUTION PROGRAM AT LAXMANPUR



SPORTS EVENTS ORGANISED BY SIPL

4. Shri. Rabindranath Barman of village Saltore requested the PP to arrange for vocational training for skill development of the local youth to generate employment opportunities for them in both skilled as well as unskilled sectors.

SIPL is already providing training for skill development and employing them in the company.



TRAINING FOR SKILL DEVELOPMENT

5. Shri. Subodh Mahato of village Radhamadhabpur and Shri. Sudeb Murmu of village Lakshmanpur expressed their concern regarding the depletion of water level in the area due to the abstraction of groundwater by the local industries. They requested the PP to arrange for a surface water source for their project and provide a drinking water facility for the local villages through their CSR activity. Shri. Murmu further requested PP to give priority to the land losers for employment in their proposed expansion project.

SIPL is taking water from Damodar River and not extracting groundwater to run the process of the plant. Accordingly, company has made an agreement with DVC.

People are benefitted from getting direct and indirect employment in the company. Details of CSR activities are already mentioned in the previous as well as in consecutive pages. The company also arranged a water facility in the village for the needy population. Some photographs are attached as follows.





FACILITATING DRINKING WATER FOR LOCAL VILLAGERS BATHING GHAT FOR WOMEN

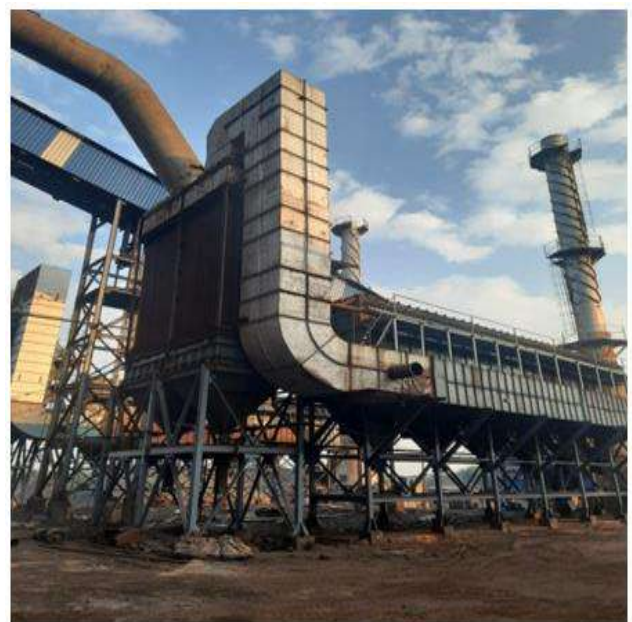


POND RENOVATION FOR NATURAL GROUND WATER RECHARGE

<p>6.</p>	<p>Shri Krishna Mohan Yadav, Savapati, and Neturia Panchayat Samiti expressed their hope regarding the generation of new employment opportunities in the locality resulting from the proposed expansion project. He requested the PP to ensure proper pollution control measures and ensure fulfillment of CSR commitments giving priority to local needs including the development of road conditions, providing medical facilities and arranging for drinking water facilities, helping the local schools, etc. Shri Yadav assured the PP that the local people will extend all possible help towards the implementation of the proposed expansion project.</p>	<p>We have already discussed regarding the generation of employment for local people at Sl. No.1 and emphasizing the suggestions made.</p> <p>We have already installed necessary pollution control devices like ESPs, Bag Filters, Dust Conveying System, and Water Sprinklers for fugitive dust suppression, etc. for abatement of pollution. RCC roads and paver blocking has been done in view of heavy and light motor vehicles' movement are envisaged.</p> <p>Road sweeping by automated sweeping machine and water sprinkling being done through mobile water tankers on roads to suppress the dust emission due to vehicular movement.</p>
<p>7.</p>	<p>Shri. Purna Ch. Bauri, Hon'ble MLA of Raghunathpur welcomed the proposed expansion project with the hope that this will generate local employment and lead to the overall development of the neighboring area. He requested the PP to run all pollution control devices continuously and efficiently to protect the serene and sensitive environment of the surrounding area from any sort of degradation due to pollution resulting from process activities.</p>	<p>We have already discussed regarding the generation of employment for local people at Sl. No.1 and emphasizing the suggestions made.</p> <p>We have installed necessary pollution control devices like ESPs, Bag Filters, Dust Conveying System, and Water Sprinklers for fugitive dust suppression, etc. for abatement of pollution. The units are running effectively.</p> <p>To monitor the stack emission level, SIPL has installed Online Emission Monitoring System (OCEMS) with all major stacks with connectivity to CPCB/SPCB portal and open to the public domain.</p> <p>We are conducting third-party monitoring on regular basis by NABL accredited laboratory for Stack, AAQM, and Work Zone, etc. to evaluate the environmental status in and around the factory premises.</p>

8.	Shri S. Ganguly, Environment Engineer, WBPCB then requested the project proponent to address the issues raised in public hearings.	The issues were addressed by Mr. Deepak Kumar Agarwal, CMD of the M/s Shakambhari Ispat & Power Ltd.
9.	Shri Deepak Kumar Agarwal, Chairman & Managing Director of M/s Shakambhari Ispat & Power Ltd. assured the gathering that they will continue with their CSR activities for further development of the neighboring area. Shri Agarwal assured that for the proposed expansion project local youth will be given priority for employment; he further assured that they will take up all local development programs in consultation with local administration and public representatives.	SIPL is complying with commitments made by Shri Deepak Kumar Agarwal, Chairman & Managing Director of M/s Shakambhari Ispat & Power Ltd. by promoting employment of local youth as well as CSR activities for the development of the neighboring area.
10.	Shri. S. Bhattacharya, Environmental Engineer, West Bengal Pollution Control Board, suggested that the project proponent should include all the issues discussed in the public hearing, in the final EIA/EMP report and address the issues properly during the implementation of the project.	It is included in EIA/EMP report for addressing the public hearing issues to improve the socio-economic condition of the locality.
11.	Shri P. K. Maity, Additional District Magistrate (Development), Dist: Purulia emphasized that all possible measures should be ensured by the project proponent towards the mitigation of environmental problems as the neighboring area and its serene environment and ecosystem with Panchkot Mountain in the backdrop has immense potential from tourism point of view. He also requested the PP to fulfill all their CSR commitments.	M/s Shakambhari Ispat & Power Limited (SIPL) is cautious towards its responsibilities of environmental protection and made proper arrangements for the abatement of pollution due to industrial operations to mitigate environmental issues and to maintain the eco-friendly environment around our establishment. Some photographs showing on-site protection measures taken by SIPL for abatement of pollution and implementation of CSR activities are attached here for your kind perusal

INSTALLATION OF POLLUTION CONTROL EQUIPMENTS



ROADSIDE WATER SPRINKLING ARRANGEMENT FOR DUST SUPPRESSION



RCC ROAD MAKING AND ITS SWIPING & WATER SPRINKLING FOR DUST SUPPRESSION



INSTALLATION OF EFFLUENT TREATMENT PLANT FOR WATER CONSERVATION





RCC ROAD MAKING WITH CLOSED CONVEYOR GALLERIES



RCC ROAD AND PAVER BLOCKING IN THE PLANT AREA



GREEN BELT DEVELOPMENT







GARDENING WITH AVENUE PLANTATION FOR GREENCOVER DEVELOPMENT



OTHER CSR INITIATIVES BY SIPL

Free Medical Camps & Health Check-ups



Renovation of Drinking Water System at Harmadih Govt. Hospital



Food distribution / Bhojan Ayojan during the village cultural program



Food item distribution to needy people during COVID-19 Pandemic



Food material distribution to malnourished children



Study material distribution to School Children



Renovation of School Building & Premises



Solar Lighting arrangement in villages



Renovation of Village Temples



s To



Road Safety Awareness



Promoting Sports Activities among village Youths



Blanket & Clothing distribution to underprivileged people



Drinking water arrangement



Av

Pilgrim Care Program during festivals at Biranchinath Dham



Bicycle stand at the Block Development Office



ANNEXURE-11

CORPORATE ENVIRONMENTAL POLICY

M/S Shakambhari Ispat & Power Limited (SIPL) is engaged in production of steel products is committed towards clean and sustainable environment. The mission of Shakambhari Ispat & Power Limited is to produce steel in an environment friendly manner and strive to:

- ❖ Integrate sound environmental management practices in all the activities.
- ❖ Conduct the operations in environmentally responsible manner to minimize pollution and its' impact on environment.
- ❖ Comply with applicable legal and other requirements related to environmental aspects of the operations and strive to go beyond. The environmental management cell will be headed by EHS-Head.
- ❖ The company shall ensure that deviations from this policy and cases of violations/non-compliances of Environment or Forest Laws, if any, shall be reported to the Board of Directors through ED-Corporate and shall identify and designate responsible person for ensuring compliance with the Environmental Laws and Regulations.
- ❖ Conserve energy, and other natural resources, minimize waste generation and promote recovery, recycle and reuse practices.
- ❖ Increase greenery in and around the plant.
- ❖ Ensure continual improvement in environmental performance by setting & reviewing objectives & targets.
- ❖ Encourage environmental awareness amongst employees and the general populace around the plant.
- ❖ Maintain transparency in matters of Environmental Compliance.

The hierarchical system/administrative order to deal with issues related to environmental compliance shall be as follows:

For **M/S Shakambhari Ispat & Power Limited**


Director



ANNEXURE-12

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098



Consent Letter Number : **CO110135**

apply for renewal of
consent 60 (Sixty) days
before expiry

Memo Number : **1767 -WPBA/Red(Pr1)/Cont(81)/2002**

Date : **09-08-18**

Consent to Operate

under

Section 25 & 26 of the **Water (Prevention and Control of Pollution) Act, 1974** and
Section 21 of the **Air (Prevention and Control of Pollution) Act, 1981**

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/S. Shakambhari Ispat & Power Ltd.

.....(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at **Vill- Madandih, P.O. Barteria,**

P.S. Neturia, Dist- Purulia, Pin-723121

.....(Detailed address of the manufacturing unit)

for a period from **upto 31-07-2023**

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

[Handwritten signature]
09/08/18

ANNEXURE

Consent to **M/S. Shakambhari Ispat & Power Ltd.**
 for its unit at **Vill- Madandih, P.O. Barteria, P.S. Neturia, Dist-Purulia**
Pin-723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Billets	16600 MT
02	Electricity	29 MW
03	Sponge Iron	9000 MT
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. **Daily** discharge of industrial liquid effluent shall not exceed **NIL** KL.
04. **Daily** discharge of domestic liquid effluent shall not exceed **5.0** KL.
05. **Daily** discharge of mixed (industrial & domestic) liquid effluent shall not exceed **NIL** KL.
06. The *Applicant* shall discharge liquid effluent to **Soak Pit** (place of discharge) through **One (01)** nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Continued.....

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at Vill- Madandih, P.O..Barteria, P.S..Neturia, Dist- Purulia
Pim-723121

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below :

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1									
S-2			SEE Annexure 'A' attached						
S-3									
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Continued.....

(5)

Consent to M/s. Shakambhari Ispat & Power Ltd.

for its unit at Vill- Madandih, P.O. Barteria, P.S. Neturia, Dist- Purulia

Pin-723121

14. The *Applicant* shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Coal	390 MT	Rotary Kilns (03 nos.)
02	Coal & Delechar	180 MT	AFBC Boiler
03	M S D	-	D.G.Sets (03 nos.)
04			
05			

16. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :-

Type of waste	Quantity	Treatment	Disposal
Delechar	1440 MT	-	used in CPP
Mix Dust	600 MT	-	Land Filling

17. The *Applicant* shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 09 p.m.)	65
Night Time (09 p.m. to 06 a.m.)	55

18. The *Applicant* shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.

19. The *Applicant* shall bring about at least 33% of the available open land under the green coverage / plantation.

20. The *Applicant* shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the *Applicant* to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the *Applicant* shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The *Applicant* shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23. The *Applicant* shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Continued.....

Consent to **M/S. Shakambhari Ispat & Power Ltd.**

for its unit at **Vill- Madandih, P.O. Barteria, P.S. Neturia, Dist-Purulia**
Pin-723121

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Application* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions Please See Annexure 'B' attached.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

ANNEXURE - 'A'

Consent Letter Sl. No.: col10135.....

WEST BENGAL POLLUTION CONTROL BOARD
Paribesh Bhawan; Bldg. No.-10A, Block - L.A., Sector - III
Salt Lake City, Kolkata - 700 106

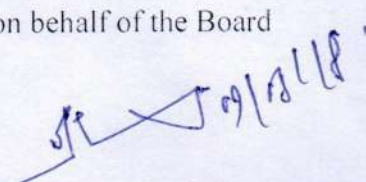
Name of the Unit: **M/s Shakambhari Ispat & Power Ltd.**

Located at Vill - Madandih, P. O. - Bartoria, P. S. - Neturia, Dist. - Purulia, Pin - 723121

The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the Standard as given in Table - II below:

Sl. No.	Stack height from GL (Meters)	Stack attached to (sources and control system, if any)	Volume (Nm ³ /hr)	Velocity of gas emission (m / sec)	Concentrations of parameters not to exceed		Frequency of emission sampling
					SPM (mg/ Nm ³)	CO (% v/ v)	
1.	35.0	Rotary Kilns - 1	-----	-----	100	1	Quarterly
2.	35.0	Rotary Kilns - 2	-----	-----	100	1	Quarterly
3.	42.0	Rotary Kilns - 3	-----	-----	100	1	Quarterly
4.	30.0	Induction Furnace - 1	-----	-----	50	---	Quarterly
5.	30.0	Induction Furnace - 2	-----	-----	50	-----	Quarterly
6.	30.0	Induction Furnace - 3	-----	-----	50	---	Quarterly
7.	30.0	Induction Furnace - 4	-----	-----	50	-----	Quarterly
8.	60.0	AFBC Boiler	-----	-----	50	1	Quarterly
9.	30.0	CHP	-----	-----	50	-----	Quarterly
10.	30.0	Coal Ground Hopper	-----	-----	50	-----	Quarterly
11.	00.0	DD Fan	-----	-----	50	-----	Quarterly
12.	30.0	Cooler Discharge - 1	-----	-----	50	-----	Quarterly
13.	30.0	Cooler Discharge - 2	-----	-----	50	-----	Quarterly
14.	30.0	Cooler Discharge - 3	-----	-----	50	-----	Quarterly
15.	30.0	Product House - 1	-----	-----	50	-----	Quarterly
16.	30.0	Product House - 2	-----	-----	50	-----	Quarterly
17.	30.0	I. Bin	-----	-----	50	-----	Quarterly
18.	8.0	DG Set (500 KVA)	-----	-----	150	1	Quarterly
19.	8.0	DG Set (750 KVA)	-----	-----	150	1	Quarterly
20.	8.0	DG Set (500 KVA)	-----	-----	150	1	Quarterly

For and on behalf of the Board


Environmental Engineer
Asansol Regional Office, WBPCB

ANNEXURE – 'B'

Consent Letter Sl. No.: ...0110135.....

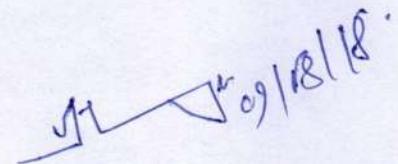
WEST BENGAL POLLUTION CONTROL BOARD
Paribesh Bhawan; Bldg. No.-10A, Block – L.A., Sector – III
Salt Lake City, Kolkata – 700 106

Name of the Unit: **M/s Shakambhari Ispat & Power Ltd**
Located at Vill – Madandih, P. O. – Bartoria, P. S. – Neturia, Dist. – Purulia, Pin – 723121

ADDITIONAL CONDITIONS

1. Proper & effective steps should be taken so as to ensure that manufacturing activities do not affect the residents of the neighbourhood in any way.
2. The unit will have to take pollution control measures regarding air, water and noise to keep the parameters within the permissible limit as laid down by WBPCB.
3. This consent shall be revoked at any time on the valid ground of any public complaint (for violation of Environmental Acts) against the unit regarding air, water pollution and any other environmental hazards caused by the unit.
4. Solid waste should be disposed off in an environment friendly manner.
5. No additional machinery / equipment can be installed without permission from the State Board.
6. No nuisance should be caused to the neighbourhood residence due to activity of the unit.
7. The unit should obtain permission for the three (03) DG sets of 750 KVA and 500 KVA (02 nos.) from the Directorate of Electricity as per 47A rule of Indian Electricity Rules 1956 & submit a copy of the same to the State Board accordingly.
8. The unit should comply with the provision of GSR 371 (E) dated 17.05.2002 issued by Ministry of Environment and Forest, Govt. of India.
9. The unit should comply with the sixteen-point direction issued by the State Board vide memo no. 1044 – 4 / WPB / CE – II / GEN / 2008 dated 01.06.2012.
10. The unit should obtain Hazardous Waste Authorisation under the provision of Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 and submit the copy of same to the State Board accordingly.
11. The unit should take immediate action to repair Cap leakage in the DRI Kiln-I.
12. The unit should improve internal road condition at an earliest.

For and on behalf of the Board



Environmental Engineer
Asansol Regional Office, WBPCB

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan',
Bldg. No. - 10A, Block-LA, Sector-III,
Salt Lake City, Kolkata-700 098



Consent Letter Number : **CO107584**

Memo Number : **582-2S-CO-S/11/0064**

Expansion

Date : **06.12.2018**

Consent to Operate

under **Application no. CO0000000207553**

Section 25 & 26 of the **Water (Prevention and Control of Pollution) Act, 1974** and
Section 21 of the **Air (Prevention and Control of Pollution) Act, 1981.**

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended, and Rules and Orders made thereunder, hereby grants its consent to :

Shakambhari Ispat & Power Ltd.,

WEST BENGAL

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at **Vill: Madandih, P.O: Bacteria,**

P.S: Neturia, Dist. Purulia, W.B., India, Pin - 723121.

(Detailed address of the manufacturing unit)

for a period from **the date of issue** to **31/07/2023**

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



Application for renewal shall be filed at least 120 (one hundred twenty) days before the date of expiry of this certificate.

For and on behalf of the State Board

[Signature] / 06.12.2018

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst.Env.Engr.)

ANNEXURE

Consent to **Shakambhari Ispat & Power Ltd.,**
 for its unit at **Vill: Madandih, P.O: Barteria, P.S: Neturia, Dist. Purulia,**
Pin - 723121, W.B. India.

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Billet	56320 TPA
02	Sponge Iron	224000 TPA
03	Captive Power	40 MW
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. **Daily** discharge of industrial liquid effluent shall not exceed **-** KL.
04. **Daily** discharge of domestic liquid effluent shall not exceed **5.0** KL.
05. **Daily** discharge of mixed (industrial & domestic) liquid effluent shall not exceed **-** KL.
06. The *Applicant* shall discharge liquid effluent to **Soak Pit** (place of discharge) through **01 (one)** nos. outlets/outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the *Applicant* shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.

Amans / 06.12.2018

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst.Env.Engr.)

Consent to **Shakambhari Ispat & Power Ltd.,**
 Vill: **Madandih, P.O: Barteria, P.S: Neturia, Dist. Purulia,**
 for its unit at
Pin - 723121, W.B., India.

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below :

Table - II (See Annexure)

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any) :	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed			Frequency of emission sampling
					SPM (mg/Nm ³)	CO (% v/v)		
S-I								
S-2								
S-3								
S-4								
S-5								
S-6								
S-7								
S-8								
S-9								
S-10								

(Signature) / 06.12.2018
 (Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Consent to Shakambhari Ispat & Power Ltd.,
 for its unit at Vill: Madandih, P.O: Barteria, P.S: Neturia, Dist, Purulia,
Pin - 723121, W.B., India.

11. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :=

Sl. No.	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Coal	14784 TPM	DRI Kiln(2x350 TPD) + AFBC
02			Boiler (1x100 TPH).
03			
04			
05			

16. The Applicant shall maintain the generation and treatment / disposal of non-hazardous solid waste as specified below :

Type of waste	Quantity	Treatment	Disposal
Delechar	2480 TPM	-	To be used in AFBC Boiler
MS Slag	925 TPM	-	Land filling.
Dust/Ash	600.0 TPM	-	Land filling.

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 09 p.m.)	75
Night Time (09 p.m. to 06 a.m.)	70

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage/plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

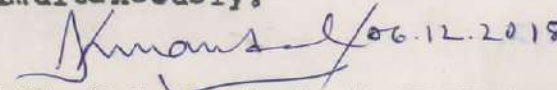
(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Consent to **Shakambhari Ispat & Power Ltd.,**
 for its unit at **Vill: Madandih, P.O: Barteria, P.S: Neturia, Dist. Purulia,**
Pin - 723121, W.B., India.

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, wastewater and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form-V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] Rules. 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Applicant* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and/or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater, if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quantity as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident / event including natural disaster. The *Applicant* shall (i) take all steps adequate to prevent such accidental discharge / release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment. (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous, noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions 1) See Annexure.

2) DRI Kiln & AFBC Boiler must be started simultaneously.


 (Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)



WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Government of West Bengal)

Office of the Senior Environmental Engineer

Kankinara Circle Office

Panpur More, P.O. – Narayanpur, Kankinara, 24-Parganas (N), Pin – 743 126

Special Condition

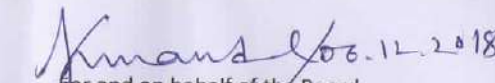
Annexure to Consent to Operate Letter Number: CO107584 of M/s. Shakambari Ispat & Power Ltd located at the existing unit at Vill.-Madandih, P.O.-Bartoria, P.S.-Neturia, Dist.-Purulia, PIN-723121

1. Conditions mentioned in the Environmental Clearance issued by MOEF Vide No. J-11011 /201/2013 – IA-II (I) dated 21/12/2016 must be complied with.
2. Conditions mentioned in the Consent to Establish (NOC) issued by the State Board vide Memo No. 101-2N-21/2012(E) dated 16/03/2017 and its amendment vide Memo. No. 330-2N-21/2012(E) dated 15/06/2018 must be complied with.
3. FORM-V for Environmental Statement and six monthly compliance report as per condition of Environmental Clearance must be submitted before due date.
4. Emission Standards as mentioned below must be complied with.

Table-II

Sl No.	Stack height from GL (in mts.)	Stack attached to (Sources & control system , if any)	Volume Nm ³ /hr	Velocity of gaseous emission (m/sec)	Concentration of parameters not to exceed					Frequency of sampling
					SPM (mg./ Nm ³)	CO (%v/v)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	Mercury(Hg) (mg/Nm ³)	
S-1	92.0	AFBC Boiler(1x100TPH)	-	-	30 .0	--	100.0	100.0	0.03	Quarterly
S-2	72.0	DRI Kiln(2x350TPD)	-	-	50 .0	--	-----	-----		
S-3	30.0	Cooler Discharge	-	-	50.0	-	-	-		
S-4	30.0	CHP Crusher House)	-	-	50.0	-	-	-		
S-5	30.0	CHP Bunker Top	-	-	50.0	-	-	-		
S-6	30.0	I-Bin and Product separation Building	-	-	50.0	-	-	-		
S-7	30.0	Coal feeding circuit	-	-	50.0	-	-	-		
S-8	30.0	Iron feeding circuit	-	-	50.0	-	-	-		
S-9	30.0	Day Bin Stock House	-	-	50.0	-	-	-		
S-10	30.0	Product House	-	-	50.0	-	-	-		
S-11	30.0	Induction Furnace(1x25T/Heat)	-	-	50.0	-	-	-		

5. Zero Liquid Discharge Principle should be strictly maintained.
6. This Consent to Operate for operation may be revoked at any time for non-compliance of the Environmental Statutes.


 For and on behalf of the Board

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098



Consent Letter Number : CO113782

Expansion

Memo Number : 50-23-co-8/11/0064

Date : 06/09/2019

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. Shakambhari Dpat & Power Limited

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at existing unit premises in villi

Madandih, P.O. - Baronia, P.S. - Neturia, Dist. - Purulia,
Pin - 723121

(Detailed address of the manufacturing unit)

for a period from date of issue to 31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Abhoshi
06/09/19
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

ANNEXURE

Consent to M/s. Shakambhari Ispat & Power Limited.
 for its unit at Vill: Madandih, P.O. - Bastoria, P.S. - Neturia,
Dist :- Purulia, Pin - 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	M. S. Billets	1,06,800 TPA
02	TMT bars/wire	1,80,000 TPA
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed KL.
04. Daily discharge of domestic liquid effluent shall not exceed KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed 5.0 KL.
06. The Applicant shall discharge liquid effluent to settling tank to municipal drain (place of discharge) through 01 (one) nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

(Member Secretary/Chief Engr./Sr. Env. Engr./ Env. Engr./ Asst. Env. Engr.)

Harsh
06/09/19
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

(4)

Consent to M/s. Shakambhari Ispat & Power Limited.
for its unit at Vill: Madandih, P.O. - Bartonia, P.S. - Neturia,
Dist:- Purulia, Pin-723121

- 11. The Applicant shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.
- 12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
- 13. The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the Standard as given in Table-II below :

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1	30	1X25 MT/heat induction furnace + 1X8 MT/heat			50	1	-	-	Yearly
S-2		Induction furnace with Air Pollution Control							
S-3		Systems- sparkarrestor cum cyclone separator							
S-4		and Bag filter.							
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

Handwritten signature
06/09/19

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Environmental Engineer
W. B. Pollution Control Board.....
Operation & Execution Cell

113782

(5)

Consent to M/s. Shakambhari Ispat & Power Limited
 for its unit at Vill: Madandih, P.O. - Bastoria, P.S. - Neturia,
Dist: - Purulia, Pin - 723121

14. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :-

SL No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Electricity	—	1X8 MT/heat and 1X25 MT/heat
02			Induction.
03			
04			
05			

16. The Applicant shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :-

Type of waste	Quantity	Treatment	Disposal
Slag	975 MT/m.	—	land filling.

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 10 p.m.)	75
Night Time (10 p.m. to 06 a.m.)	70

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage / plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Atxadi
06/09/19
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Consent to M/s. Shakambhari Ispat & Power Limited
 for its unit at Vill: Madandih, P.O. - Bantonia, P.S. - Neturia,
Dist: - Purulia, Pin - 723121.

24. The Applicant shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The Applicant shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The Applicant shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the State Board's staff as well as State Board's authorised agencies.
27. The Applicant shall submit to the State Board by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The Applicant shall allow the Officers of the State Board to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The Applicant shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the State Board for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The Application shall furnish to the State Board all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The Applicant shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The Applicant shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The Applicant shall intimate to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The Applicant Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The Applicant shall make an application to the State Board in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The Applicant shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The Applicant shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See annexure .

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Atarshi
06/09/19
Environmental Engineer
W. B. Pollution Control Board
Operation & Executive Cell

Annexure to Consent Letter Number – **CO113782**

Additional Conditions issued to **M/s. Shakambhari Ispat & Power Limited** at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

1. The unit should comply all the conditions issued in earlier Environmental Clearance, Consent to Establish and Consent to Operate.
2. The unit shall comply the directives issued by the Board vide memo no.630-WPBA/Red(Pri/Cont(81)/2002 Part-III dated 30/07/2019.
3. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
4. This consent may be revoked at any time on violation of environmental norms.
5. The unit shall submit a status of compliance of the conditions stipulated in EC.
6. This consent to Operate is valid for operation of Induction Furnace- 1x25 Ton in place of 2x15Ton and existing Induction Furnace -1x8 Ton and enhancement of capacity of Rolling Mill from 400 TPD to 600 TPD without oil fired reheating furnace by directly charging the hot billets.

Atardi
06/09/19

Environmental Engineer
West Bengal Pollution Control Board
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

16/02/20

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098



Consent Letter Number : CO128922

Memo Number : 185-as-co-8/11/0064

Date : 13/02/2020

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. Shakambhari Ispat & Power Limited

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at existing unit premises in Vill:

Madandih, P.O. - Bantonia, P.S. - Naluria, Dist - Purulia,

Pin - 723121.

(Detailed address of the manufacturing unit)

for a period from date of issue to 31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary/Chief-Engr./St. Env. Engr. / Env. Engr. / Asst.-Env-Engr.)
13/02/20
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

(2)

ANNEXURE

Consent to M/s. Shakambhari Ispat & Power Limited.
for its unit at Villi Modandih, P.O. - Bastoria, P.S. - Neturia,
Dist - Purulia, Pin - 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	<u>M.S. Billet</u>	<u>4700.00 MT</u>
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed KL.
04. Daily discharge of domestic liquid effluent shall not exceed 5.0 KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.
06. The Applicant shall discharge liquid effluent to settling tank to municipal drain (place of discharge) through 01 (one) nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

(Member Secretary/Chief-Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

H. H. H. H.
13/02/20
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

(4)

Consent to M/s. Shakambhari Spat & Power Limited
for its unit at Villi Madandih, P.O. - Bantoria, P.S. - Neturia,
Dist - Purulia, Pin - 723121.

11. The Applicant shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the Standard as given in Table-II below :

Table-II

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any);	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1	30m existing	01 no. Induction Furnace (25 Ton/batch) with existing APED (bag filter)			50	1	-	-	
S-2									
S-3									
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Atanadi
13/02/20
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

C0128922

(5)

Consent to M/s. Shakambhari Tspal & Power Limited.
for its unit at Vill: MadanSih, P.O - Bantonica, P.S. - Neturia,
Dist :- Purulia, Pin - 723121.

14. The *Applicant* shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall observe the following fuel consumption pattern :-

Sl. No.	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Electricity	—	1X25 MT/heat Induction.
02			
03			
04			
05			

16. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :-

Type of waste	Quantity	Treatment	Disposal
Slag	825 MT/Month	—	land filling.

17. The *Applicant* shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 09 p.m.)	75
Night Time (09 p.m. to 06 a.m.)	70

18. The *Applicant* shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.

19. The *Applicant* shall bring about at least 33% of the available open land under the green coverage / plantation.

20. The *Applicant* shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the *Applicant* to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the *Applicant* shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The *Applicant* shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23. The *Applicant* shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

(Member Secretary/Chief. Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

13/02/20
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Continued.....

Consent to M/s. Shakambhari Ispat & Power Limited.
 for its unit at Villi Madandih, P.O. - Bantoria, P.S. - Neturia,
Dist - Purulia, Pin - 723121.

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Applicant* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alteration/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See Annexure.

(Member Secretary/Chief Engr./Sr. Inv. Engr./ Inv. Engr./ Asst. Env. Engr.)

M. S. Mondal
12/02/20
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Annexure to Consent Letter Number – **CO128922**

Additional Conditions issued to **M/s. Shakambhari Ispat & Power Limited** at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

1. The unit should comply all the conditions issued in earlier Environmental Clearance, Consent to Establish and Consent to Operate.
2. The unit shall comply the directives issued by the Board vide memo no.630-WPBA/Red(Prl/Cont(81)/2002Part-III dated 30/07/2019 & 805-WPBA/Red(Prl/Cont(81)/2002 Part-III dated 07/02/2020.
3. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
4. This consent may be revoked at any time on violation of environmental norms.
5. The unit shall submit a status of compliance of the conditions stipulated in EC.
6. This consent to Operate is valid for operation of 8th Induction Furnace- 1x25 Ton/batch for manufacturing of M.S.Billets-4700 MT/Month.

Mandi
13/02/20
Environmental Engineer
West Bengal Pollution Control Board
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

"Expansion"

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098



Consent Letter Number : CO128973

Memo Number : 281-WPBA/Reg(P-1)/Cont(82)/02-PT-VI

Date : 14/08/2020

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. Shakambhari Dept. & Power Ltd.

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at Vill: Madandih, P.O. - Barteria,
P.S. - Heluria, Dist. Purulia, Pin - 723121

(Detailed address of the manufacturing unit)

for a period from Date of issue to 31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)
Environmental Engineer

W. B. Pollution Control Board
Operation & Execution Cell

ANNEXURE

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at Vill: Madandih, P.O. - Bastoria, P.S. - Nethuria,
Dist- Purulia, Pin- 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	M. S. Billets	9700 MT/Month
02	Ferro Manganese	3050 MT/Month
03	Silico Manganese	2210 MT/Month
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed KL.
04. Daily discharge of domestic liquid effluent shall not exceed 3.0 KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.
06. The *Applicant* shall discharge liquid effluent to Septic Tank (place of discharge)
 through 01 nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the *Applicant* shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Alavadi
14/08/20
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

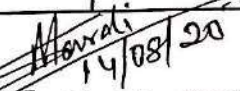
(4)

Consent to M/s. Shakambhari Dept & Power Ltd.
for its unit at Vill: Madandih, P.O. - Bastonia, P.S. - Neturia,
Dist- Purulia, Pin- 723121.

- 11. The Applicant shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.
- 12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
- 13. The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the Standard as given in Table-II below : See Annexure-I

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed			Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)		
S-1								
S-2								
S-3								
S-4								
S-5								
S-6								
S-7								
S-8								
S-9								
S-10								


 14/08/20
 (Member Secretary/Chief Engr./ Sr. Env. Engr./ Env. Engr. / Asst. Env. Engr.)
Environmental Engineer
W. B. Pollution Control Board
 Operation & Execution Cell

CO128973

(5)

Consent to M/s. Shakambhari Espal & Power Ltd.
 for its unit at Vill. Madandih, P.O. - Bastonia, P.S. - Neturia
Dist- Purulia, Pin-723121

14. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01			
02			
03			
04			
05			

16. The Applicant shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :- See Annexure - II

Type of waste	Quantity	Treatment	Disposal

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 09 p.m.)	65
Night Time (09 p.m. to 06 a.m.)	55

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage / plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Harde
14/08/20
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Consent to M/s. Shakambhari Paper & Power Ltd.
 for its unit at Vill: Madandik, P.O. - Bastonia, P.S. - Aeturia,
Dist - Purulia, Pin - 723121.

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Application* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See Annexure - III.


(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Annexure - I

Annexure to Consent Letter Number - CO128973

Additional Conditions issued to M/s. Shakambhari Ispat & Power Limited at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S- Neturia, Dist- Purulia, PIN--723121.

Stack No.	Stack height from G.L (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm ³ /hr	Velocity of gas emission m/sec	Concentration of parameters not to exceed				Frequency of emission sampling
					PM (mg/Nm ³)	CO (% v/v)			
S-1	30.0 m (common)	Induction Furnaces (2x25Ton/batch) provided with Individual APCD(Bag Filter)	-	-	50	1			Quarterly
S-2	30.0 m	Individual stack, individual APCD -Bag Filter provided to Submerged Electric Arc Furnaces(2x9MVA)	-	-	50	1			Quarterly


 Environmental Engineer
 West Bengal Pollution Control Board
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Annexure - II

Annexure to Consent Letter Number - CO128973

Additional Conditions issued to M/s. Shakambhari Ispat & Power Limited at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S- Neturia, Dist- Purulia, PIN--723121.

Type of waste	Quantity	Treatment	Disposal
Ferro Manganese Slag	3050 MT/month	-	Reused in process
Induction Furnace Slag	1464 MT/month	-	Disposal to Iron recovery unit
Silico Manganese Slag	2210 MT/month	-	Land filling
MS Scrap	775 MT/month	-	Reused in process
Dust from SEAF de-dusting unit	88 MT/month	-	Reused in process
Dust from IF de-dusting unit	12 MT/month	-	Land filling


14/08/20
Environmental Engineer
West Bengal Pollution Control Board

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Annexure-III

Annexure to Consent Letter Number – CO128973

Additional Conditions issued to M/s. Shakambhari Ispat & Power Limited at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

1. The unit should comply all the conditions issued in earlier Environmental Clearance, Consent to Establish and Consent to Operate.
2. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
3. The unit shall construct the concrete road around raw material handling area within 4 months.
4. The unit shall minimized fugitive emission at emission sources and working areas.
5. This consent may be revoked at any time on violation of environmental norms.
6. The unit shall submit a status of compliance of the conditions stipulated in EC.
7. The unit shall develop greenbelt at least 33% of the total plant area.
8. This consent to Operate is valid for operation of newly installed Induction Furnaces(2x25 Ton/batch) for manufacturing of M.S.Billets-9700 MT/Month and Submerged Electric Arc Furnaces(2x9MVA) for manufacturing Ferro Manganese-3050 MT/month & Silico Manganese-2210 MT/month.

Abir
14/08/20
Environmental Engineer
West Bengal Pollution Control Board

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell



West Bengal Pollution Control Board
(Department of Environment, Government of West Bengal)
Paribesh Bhawan, Bldg. 10A, Block LA
Sector III, Bidhannagar, Kolkata 700 106
Tel: 2335-6730, 2335-9088/7428/8211/6731/0261/8861
Fax: (0091) (033) 2335-2813

Memo No. **233-** WPBA/Red(Prl)/Cont(82)/02-Pt-VI Date : **16 / 03 / 2021**

To

M/s. Shakambhari Ispat & Power Limited
Vill- Madandih, P.O-Bartoria,
P.S-Neturia, Dist- Purulia, PIN--723121.

Sub.: Amendment of Consent to Operate for your unit located at Vill- Madandih, P.O-Bartoria,
P.S-Neturia, Dist- Purulia, PIN--723121.

Ref. (i) *Consent to Operate* certificate CO128973 issued vide memo no.281-
WPBA/Red(Prl)/Cont(82)/02- Pt-VI dated 14-08-2020.
(ii) Your letter Ref no.SIPL/CTO-AMEND/JAN/2021 dated 15.01.2021.

Sir,

In reference to the above, this is to inform you that the following amendments are made in the above mentioned Consent to Operate certificate issued by this office:-

Conditions:-

01. The consent is valid for manufacture of:-

CTO (CO128973) issued dt. 14/08/2020 (2x9 MVA) for manufacturing	Amendment of CTO (CO128973) (2X9 MVA) for manufacturing
Ferro Manganese-3050 TPM Or Silico Manganese -2210 TPM	Ferro Manganese/Silico Manganese/Ferro Chrome/Ferro Silicon/Pig Iron – 31575 TPA (Maximum) / 2632 TPM(Maximum) (any of above)

The unit shall abide by all other condition as mentioned in amendment Environmental Clearance (EC) issued vide no. F.No.J-11011/201/2013-IA.II(I) dated 29.04.2020 and NOC(NO164512) issued vide memo no.246-2N-21/2012 (E) dated 14.09.2020 in favour of the expansion project.

This letter may be treated as an annexure to the *Consent to Operate* certificate no. CO128973 dated 14.08.2020. All other terms & conditions of the above mentioned Consent to Operate will remain unchanged.

Thanking you,

Yours faithfully,

Mardi
16/03/21

Environmental Engineer
Operation & Execution Cell

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Expansion

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'

Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098



Consent Letter Number : C0128998

Memo Number : 335-WPBA/Red (Pn1)/cont(82)/02 Pt-VI

Date : 13/11/2020

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. Shakambhari Dept & Power Limited.

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at existing unit premises in

Vill:- Madandh, P.O.-Bantonia, P.S.-Neturia,
Dist- Purulia, Pin-723121

(Detailed address of the manufacturing unit)

for a period from date of issue to 31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

ANNEXURE

Consent to M/s. Shaksambani Dept & Power Limited
 for its unit at Villi Madandih, P.O. - Bantania, P.S. - Netunia,
Dist - Purulia, Pin - 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	TMT bars/wires	1,20,000 TPA
02	(Rolling Mill - 400 TPD)	
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed recycled KL.
04. Daily discharge of domestic liquid effluent shall not exceed 1.8 KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.
06. The Applicant shall discharge liquid effluent to Septic tank to soakpit (place of discharge) through 01 (one) nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Harsh
12/11/20
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Consent to M/s. Shakambhari Ispat & Power Limited
 for its unit at Villi Madandih, P.O. - Bantoria, P.S. - Neturia,
Dist - Purulia, Pin - 723121

11. The Applicant shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The Applicant shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the Standard as given in Table-II below :

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1		<i>As per existing arrangement.</i>							
S-2									
S-3									
S-4									
S-5									
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Handwritten
13/11/20

(Member Secretary/Chief Engr./Sr. Env. Engr./ Env. Engr./ Asst. Env. Engr.)
Environmental Engineer
W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

C0128998

(5)

Consent to M/s. Shakambhari Dept & Power Limited
for its unit at Vill: Madandih, P.O. - Bantonia, P.S. - Neturia,
Dist- Purulia, Pin-723121

14. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01			
02			
03			
04			
05			

16. The Applicant shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :-

Type of waste	Quantity	Treatment	Disposal

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 10 ¹⁰ p.m.)	75
Night Time (10 ¹⁰ p.m. to 06 a.m.)	70

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage / plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Environmental Engineer
W. B. Pollution Control Board continued.....
Operation & Execution C.

Expansion CFO

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'

Bldg. No. - 10A, Block - LA, Sector-III

Salt Lake City, Kolkata-700 098



Consent Letter Number : CO/31924

Memo Number : 46-WPBA/Red(Pol)/cont(82)/02 Part - VI

Date : 10/03/2021

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. Shakambhari Ispat & Power Ltd.

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at Vill:- Madandih, P.O. - Bartonaria,
P.S. - Neturia, Dist- Purulia, Pin-723121

(Detailed address of the manufacturing unit)

for a period from date of issue to 31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.

This consent is valid for operating 1X100TPD & 1X600TPD
DRI Kilns for production of Sponge Iron - 224000 Ton/year.
and both the kilns are provided with WHRBs (10TPH & 64TPH).



For and on behalf of the State Board

(Member Secretary/Chief Engr./Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

ANNEXURE

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at Vill. - Madandih, P.O. - Bantoria, P.S. - Neturia,
Dist - Purulia, Pin - 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month ^{Year}
01	Sponge Iron	224000 TPA
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		

02. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. **Daily** discharge of industrial liquid effluent shall not exceed recycled KL.
04. **Daily** discharge of domestic liquid effluent shall not exceed 1.8 KL.
05. **Daily** discharge of mixed (industrial & domestic) liquid effluent shall not exceed Nil KL.
06. The *Applicant* shall discharge liquid effluent to Soakpit (place of discharge)
 through One (01) nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the *Applicant* shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The *Applicant* shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the *Standard* as given in Table-I in page 03.

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

Harschi
10/03/25
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at Vill:- Madandih, P.O. - Bastoria, P.S. - Netunia,
Dist- Purulia, Pin- 723121

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below :

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system. if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1					See Annexure - I				
S-2									
S-3									
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Hardi
 10/03/21
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

C0131924

(5)

Consent to M/s. Shakambhari Dept & Power Ltd.
 for its unit at Villi - Madandih, P.O. - Bastonia, P.S. - Nalbaria,
Dist - Purulia, Pin - 723121

14. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.
15. The Applicant shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Coal	18700 MT/Month	Rotary Kiln (100 TPD & 600 TPD)
02			
03			
04			
05			

16. The Applicant shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :-

Type of waste	Quantity	Treatment	Disposal
Dolochar	3135 MT/Month	-	to be used in AFBC Boiler.

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 10 ¹⁰ p.m.)	65
Night Time (10 ¹⁰ p.m. to 06 a.m.)	55

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The Applicant shall bring about at least 33% of the available open land under the green coverage / plantation.
20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Murali
 10/03/21
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

Consent to M/s. Shakambhari Ispat & Power Ltd
 for its unit at Vill: Madandih, P.O. - Bantonia, P.S. - Neturia,
Dist - Purulia, Pin - 723121

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Applicant* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See Annexure - II

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asst. Env. Engr.)

H. H. H. H.
10/03/21
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Annexure-II to Consent Letter Number – **CO131924**

Additional Conditions issued to **M/s. Shakambhari Ispat & Power Limited** at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

1. The unit should comply all the conditions issued in earlier Environmental Clearance, Consent to Establish and Consent to Operate.
2. The unit shall abide by all other condition as mentioned in amendment Environmental Clearance (EC) issued vide no. F.No.J-11011/201/2013-IA.II(I) dated 29.04.2020 and amendment NOC issued vide memo no.246-2N-09/2012 (E) dated 14.09.2020 in favour of the expansion project.
3. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
4. This consent may be revoked at any time on violation of environmental norms.
5. The unit shall submit a status of compliance of the conditions stipulated in EC.
6. The Consent to Operate is valid for operation of DRI Kilns(1x100 TPD & 1X600TPD) for manufacturing of sponge iron-2,24,000 ton/year and the unit should restricted the total production capacity-5,44,000 ton/year considering all DRI Kilns(4x100 TPD, 2X350 TPD & 1X600TPD).


Mausdi
10/03/21
Environmental Engineer
West Bengal Pollution Control Board
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Annexure – I

Annexure to Consent Letter Number – **CO131924**

Additional Conditions issued to **M/s. Shakambhari Ispat & Power Limited** at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

Stack No.	Stack height from G.L (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm ³ /hr	Velocity of gas emission m/sec	Concentration of parameters not to exceed				Frequency of emission sampling
					PM (mg/Nm ³)	CO (% v/v)			
1	35.0 m (common with 3 rd DRI Kiln)	4 th Rotary Kiln of capacity 100 TPD- 1(one) no. with WHRB-1(one) no. – 10 TPH provided with individual 3 field ESP and connected with Common stack of existing 100TPD 3 rd DRI Kiln	-	-	50	-			Quarterly
2	72.0 m	Rotary Kiln of capacity 600TPD- 1(one) no. with WHRB-1(one) no. – 64 TPH provided with individual 5 field ESP and connected with individual stack.	-	-	50	-			Quarterly
-	-	Pneumatic dust conveying to ABC from Cooler Discharge for 4 th DRI Kiln(100 TPD)	-	-	-	-			-
-	-	Pneumatic dust conveying to ABC from Cooler Discharge for DRI Kiln(600 TPD)	-	-	-	-			-
4	30.0 (common)	Product House for 4 th DRI Kiln(100 TPD) with separate bag filter and connected with existing stack of product house of 3x100TPD Kilns	-	-	50	-			Quarterly


 10/03/25
 Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

5	30.0 (common)	Product House for DRI Kiln(600 TPD) with separate bag filter and connected with existing stack of product house of 2x350TPD Kilns	-	-	50	-			Quarterly
6	30.0 (common)	Iron Ore Crusher for 4 th DRI Kiln(100 TPD) with separate bag filter and connected with existing stack of iron ore crusher of 3x100TPD Kilns	-	-	50	-			Quarterly
7	30.0 (common)	Iron Ore Crusher for DRI Kiln(600 TPD) with separate bag filter and connected with existing stack of iron ore crusher 2x350 TPD Kilns	-	-	50	-			Quarterly
8	30.0 (common)	Coal Crusher for 4 th DRI Kiln(100 TPD) with separate bag filter and connected with existing stack of coal crusher & silo of 3x100TPD Kilns	-	-	50	-			Quarterly
9	30.0 (common)	Coal Crusher for DRI Kiln(600 TPD) with separate bag filter and connected with existing stack of coal crusher & silo of 2x350 TPD Kilns	-	-	50	-			Quarterly
10	30.0 (common)	Intermediate Bin & Product Separation House for 4 th DRI Kiln(100 TPD) with separate bag filter with stack followed by pneumatic dust conveying to common silo is connected with existing stack of Intermediate Bin & Product Separation House of 3x100 TPD Kilns	-	-	50	-			Quarterly
11	30.0	Intermediate Bin & Product Separation House for DRI Kiln(600 TPD) with separate bag filter with separate stack followed by pneumatic dust conveying to common silo of Intermediate Bin & Product Separation House of 2x350 TPD Kilns	-	-	50	-			Quarterly

Handwritten signature
10/03/21

Environmental Engineer
West Bengal Pollution Control Board

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

"Expansion"

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'

Bldg. No. - 10A, Block - LA, Sector-III

Salt Lake City, Kolkata-700 098



Consent Letter Number : CO132113

Memo Number :

348-WPBA/Red(P&I)/Cont(82)/02

Date :

22/12/2021

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

Ms. Shakambhari Tspat & Power Ltd

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at existing premises Vill. Madandih,
P.O - Bastonia, P.S - Netunia, Dist - Purulia, Pin - 723121

(Detailed address of the manufacturing unit)

for a period from

date of issue

to

31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.

For and on behalf of the State Board

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

W. B. Pollution Control Board
Operation & Execution Cell



ANNEXURE

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at existing premises Kill. Madandih, P.O. - Bastania,
P.S. - Aheturia, Dist - Purulia, Pin - 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Ferro Manganese ore	2632 MT/Month
02	Silico Manganese ore	2632 MT/Month
03	Ferro Chrome ore	2632 MT/Month
04	Ferro Silicon ore	2632 MT/Month
05	Pig Iron ore in combination of any	2632 MT/Month
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.

03. Daily discharge of industrial liquid effluent shall not exceed recycled KL.

04. Daily discharge of domestic liquid effluent shall not exceed 1.6 KL.

05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.

06. The Applicant shall discharge liquid effluent to Septic Tank after treatment (place of discharge)
 through 01 (one) nos. outlets / outfalls.

07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.

08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Hardi
22/12/25
 Sr. Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

(4)

Consent to M/s. Shakambhari Ispat & Power Ltd.for its unit at existing premises Vill. Madandih, P.O. - Bastoria,
P.S. - Neturia, Dist - Purulia, Pin - 723121

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below : See Annexure - I

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1									
S-2									
S-3									
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

M. B. Mondal
22/12/21

Sr. Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Continued.....

CO132113

(5)

Consent to M/s. Shakambhari Ispat & Power Ltd.

for its unit at existing premises Vill. Madlandik, P.O. - Basteria,
P.S. - Neturia, Dist - Purulia, Pin - 723121

14. The Applicant shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorised agencies.

15. The Applicant shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01			
02			
03			
04			
05			

16. The Applicant shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :- See Annexure-II

Type of waste	Quantity	Treatment	Disposal

17. The Applicant shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to ¹⁰ 09 p.m.)	75
Night Time (¹⁰ 09 p.m. to 06 a.m.)	70

18. The Applicant shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.

19. The Applicant shall bring about at least 33% of the available open land under the green coverage / plantation.

20. The Applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the Applicant to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the Applicant shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The Applicant shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The Applicant shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23. The Applicant shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

W. B. Pollution Control Board
Operation & Execution Cell

Continued.....

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at existing premises Vill. Madasodih, P.O. - Bantonia,
P.S. - Netunia, Dist - Purulia, Pin - 723121

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Applicant* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See Annexure - III

M. S. D. S.
22/12/21

Annexure-III

Annexure to Consent Letter Number – CO132113

Additional Conditions issued to **M/s. Shakambhari Ispat & Power Limited** at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

1. The unit shall abide by all other condition as mentioned in amendment Environmental Clearance (EC) issued vide no. F.No.J-11011/201/2013-1A.II(I) dated 29.04.2020 and NOC(NO164512) issued vide memo no.246-2N-21/2012 (E) dated 14.09.2020 in favour of the expansion project.
2. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
3. The unit shall construct the concrete road around raw material handling area within 4 months.
4. The unit shall minimized fugitive emission at emission sources and working areas.
5. This consent may be revoked at any time on violation of environmental norms.
6. The unit shall submit a status of compliance of the conditions stipulated in EC.
7. The unit shall develop greenbelt at least 33% of the total plant area.
8. This consent to Operate is valid for operation of newly installed Submerged Electric Arc Furnaces(2x9MVA) for ferro alloy plant of capacity-31575 TPA.


22/12/21
Sr. Environmental Engineer
West Bengal Pollution Control Board

Sr. Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

"Expansion"

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan'

Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098



Consent Letter Number : CO132113

Memo Number : 348-WPBA/Red(Pr)/Cont(82)/02

Date : 22/12/2021

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s Shakambhari Paper & Power Ltd.

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at existing premises Vill. Madandih,
P.O - Bastonia, P.S - Netunia, Dist - Purulia, Pin - 723121

(Detailed address of the manufacturing unit)

for a period from date of issue to 31/07/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.

For and on behalf of the State Board

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

[Signature]
22/12/21
Sr. Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell



ANNEXURE

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at existing premises Vill. Madandih, P.O. - Bastonia,
P.S. - Neturia, Dist - Purulia, Pin - 723121

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Ferro Manganese or	2632 MT/Month
02	Silico Manganese or	2632 MT/Month
03	Ferro Chrome or	2632 MT/Month
04	Ferro Silicon or	2632 MT/Month
05	Pig Iron or in combination of any	2632 MT/Month
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed recycled KL.
04. Daily discharge of domestic liquid effluent shall not exceed 1.6 KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed — KL.
06. The Applicant shall discharge liquid effluent to Septic Tank after treatment (place of discharge) through 01 (one) nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Haridi
22/12/21
 Sr. Environmental Engineer
 W. B. Pollution Control Board Continued.....
 Operation & Execution Cell

Consent to M/s. Shakambhari Dpat & Power Ltd.
 for its unit at existing premises Vill. Madandih, P.O. - Bantoria,
P.S. - Neturia, Dist - Purulia, Pin - 723121

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below : See Annexure - I

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed				Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)			
S-1									
S-2									
S-3									
S-4									
S-5									
S-6									
S-7									
S-8									
S-9									
S-10									

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

M. Mondal
 22/12/21
 Sr. Environmental Engineer
 W. B. Pollution Control Board
 Operation & Execution Cell

Continued.....

C0132113

(5)

Consent to M/s. Shakambhari Ispat & Power Ltd.
for its unit at existing premises Vill. Madlandih, P.O. - Bastoria,
P.S. - Aleturia, Dist - Purulia, Pin - 723121

14. The *Applicant* shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.
15. The *Applicant* shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01			
02			
03			
04			
05			

16. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :- See Annexure-II

Type of waste	Quantity	Treatment	Disposal

17. The *Applicant* shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to ¹⁰ 09 p.m.)	65
Night Time (¹⁰ 09 p.m. to 06 a.m.)	55

18. The *Applicant* shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.
19. The *Applicant* shall bring about at least 33% of the available open land under the green coverage / plantation.
20. The *Applicant* shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the *Applicant* to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the *Applicant* shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.
21. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.
22. The *Applicant* shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
23. The *Applicant* shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

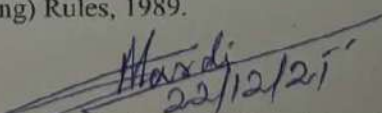
W. B. Pollution Control Board
Sr. Environmental Engineer
Operation & Execution Cell

Continued.....

Consent to M/s. Shakambhari Ispat & Power Ltd.
 for its unit at existing premises Vill. Madandih, P.O. - Bantoria,
P.S. - Neturia, Dist - Purulia, Pin - 723121

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Application* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions See Annexure - III


 (Member Secretary/Chief Engr./ Sr. Engr./ Asst. Engr./ Asst. Env. Engr.)
 W. B. Pollution Control Board
 Operation & Execution Cell

Annexure - I

Annexure to Consent Letter Number - CO132113

Additional Conditions issued to M/s. Shakambhari Ispat & Power Limited at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S- Neturia, Dist- Purulia, PIN-723121.

Stack No.	Stack height from G.L (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm ³ /hr	Velocity of gas emission m/sec	Concentration of parameters not to exceed		Frequency of emission sampling
					PM (mg/Nm ³)	CO (% v/v)	
1	30.0 m	Individual stack, individual APCD -Bag Filter provided to Submerged Electric Arc Furnaces(2x9MVA)	-	-	50	1	Quarterly
2	10.50 m	D.G.Set(500 KVA) with canopy system	-	-	150		Quarterly

Sr. Environmental Engineer
West Bengal Pollution Control Board

Handwritten signature
22/11/21

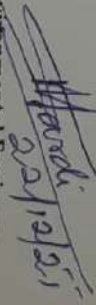
Sr. Environmental Engineer
W.B. Pollution Control Board
Operation & Execution Cell

Annexure to Consent Letter Number – COI132113

Annexure – II

Additional Conditions issued to M/s. Shakambhari Ispat & Power Limited at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-
Neturia, Dist- Purulia, PIN--723121.

Type of waste	Quantity	Treatment	Disposal
Ferro Manganese slag	3050 MT/month	-	Re-use in process
Silico Manganese slag	2210 MT/month	-	Land filling
Ferro chrome slag	3050 MT/month	-	to be TSDF facility
Ferro Silico slag	3155 MT/month	-	Re-use in Induction Furnace
Pig Iron slag	1315 MT/month	-	To be sold to cement mfg unit
Dust from SEAF de-dusting unit	88 MT/month	-	Reused in process


Sr. Environmental Engineer
West Bengal Pollution Control Board

W. B. Pollution Control Board
Operation & Execution Cell

Annexure-III

Annexure to Consent Letter Number – CO132113

Additional Conditions issued to M/s. **Shakambhari Ispat & Power Limited** at existing factory premises - Vill- Madandih, P.O-Bartoria, P.S-Neturia, Dist- Purulia, PIN--723121.

1. The unit shall abide by all other condition as mentioned in amendment Environmental Clearance (EC) issued vide no. F.No.J-11011/201/2013-IA.II(I) dated 29.04.2020 and NOC(NO164512) issued vide memo no.246-2N-21/2012 (E) dated 14.09.2020 in favour of the expansion project.
2. The unit should obtain all the statutory licenses as applicable from other concerned Govt. Department.
3. The unit shall construct the concrete road around raw material handling area within 4 months.
4. The unit shall minimized fugitive emission at emission sources and working areas.
5. This consent may be revoked at any time on violation of environmental norms.
6. The unit shall submit a status of compliance of the conditions stipulated in EC.
7. The unit shall develop greenbelt at least 33% of the total plant area.
8. This consent to Operate is valid for operation of newly installed Submerged Electric Arc Furnaces(2x9MVA) for ferro alloy plant of capacity-31575 TPA.

Mardi
22/12/21
Sr. Environmental Engineer
West Bengal Pollution Control Board

Sr. Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell



WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Government of West Bengal)

Asansol Regional Office

Dr. B.C. Roy Road, Mouza-Shitla,
Kalyanpur Satellite Township Project (KSTP),
City-Asansol, PO-Dakhin Dhadka, PS-Asansol (North),
Pin-713302, Dist.-Paschim Bardhaman
Phone-0341-2999280/2999281

Memo No.: 1292-WPBA/Red (PrI)/Cont(82)/02 Part-VI

Date: 17/11/2022

To

M/s. Shakambhari Ispat & Power Ltd.

Vill : Madandih,

P.O. Bartoria, P.S.Neturia,

Dist- Purulia , Pin : 723121.

Sub: Amendment of Consent to Operate-Regarding

Ref: Consent letter no. CO110135 issued vide memo no.1767 -WPBA/Red (PrI)/Cont(81)/2002 dated 09/08/2018.

Sir,

With reference to as stated above, 'Consent to Operate' was granted vide Consent letter Number CO110135 dated 09/08/2018 and the same is hereby amended as mentioned below:

- 1) In Page no. 2 under conditions-01 & in under 'Name of products and by-products' under Sl. No. 02 Electricity generation should be read as 16.5 MW in place of 29 MW.
- 2) Under Annexure-A in Table -II under Sl no.03 the 'Stack height from G.L.(Meters)' should be read as 35.0 mtrs in place of 42.0 mtrs.

All other conditions mentioned in the 'Consent to Operate' will remain unchanged.

This letter may be considered as an annexure to 'Consent to Operate' issued vide Memo No. Memo No. 1767 -WPBA/Red (PrI)/Cont(81)/2002 dated 09/08/2018. .

Yours faithfully,

Environmental Engineer
Asansol Regional Office

ANNEXURE-13A, 13B



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCB
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



Certificate No. TC-6014

FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	: Shakambhari Ispat & Power Limited.
2.	Address	: Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	: Steel & Power Unit
4.	Sampling Plan & Procedure	: ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	: No
6.	Type of Sample	: Work Zone Noise
7.	Sample ID	: ENV/425/M/(TR)N/1/22-23
8.	Date of Study	: 22/02/2023
9.	Reporting Date	: 28/02/2023
10.	Method No.	: IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	: 20 Minutes
12.	Height from Ground Level	: 4 feet
13.	Sample Monitoring by	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :10:00 – 10:20A.M

DAY TIME

1. Location : In-between AFBC Boiler & DRI 4 X 100 TPD

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	76.4	80.2	78.70	East Side
02.	dB(A)	78.6	81.8	80.49	West Side
03.	dB(A)	78.8	82.2	80.82	North Side
04.	dB(A)	75.4	78.6	77.29	South Side
Average dB(A) Leq				79.32	

Reviewed By:

Dy. Quality Manager

Approved By:

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCC
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



Certificate No. TC-6014

FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	: Shakambhari Ispat & Power Limited.
2.	Address	: Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	: Steel & Power Unit
4.	Sampling Plan & Procedure	: ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	: No
6.	Type of Sample	: Work Zone Noise
7.	Sample ID	: ENV/425/M/(TR)N/II/22-23
8.	Date of Study	: 22/02/2023
9.	Reporting Date	: 28/02/2023
10.	Method No.	: IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	: 20 Minutes
12.	Height from Ground Level	: 4 feet
13.	Sample Monitoring by	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :10:30 - 10:50A.M

DAY TIME

2. Location : Near Control Room (SMS Division)

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	75.8	80.6	78.83	East Side
02.	dB(A)	77.5	79.8	78.80	West Side
03.	dB(A)	80.4	82.2	81.39	North Side
04.	dB(A)	74.6	78.8	77.19	South Side
Average dB(A) Leq				79.05	

Reviewed By:

Approved By:

Dy. Quality Manager

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCB
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	:	Shakambhari Ispat & Power Limited.
2.	Address	:	Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	:	Steel & Power Unit
4.	Sampling Plan & Procedure	:	ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	:	No
6.	Type of Sample	:	Work Zone Noise
7.	Sample ID	:	ENV/425/M/(TR)N/III/22-23
8.	Date of Study	:	22/02/2023
9.	Reporting Date	:	28/02/2023
10.	Method No.	:	IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	:	20 Minutes
12.	Height from Ground Level	:	4 feet
13.	Sample Monitoring by	:	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :11:00 - 11:20 A.M

DAY TIME

3. Location : Inside Rolling Mill

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	72.2	76.8	75.08	East Side
02.	dB(A)	75.4	78.6	77.29	West Side
03.	dB(A)	76.6	79.8	78.49	North Side
04.	dB(A)	74.8	80.6	78.60	South Side
Average dB(A) Leq				77.36	

Reviewed By:

Dy. Quality Manager

Approved By:

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCB
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



Certificate No. TC-6014

FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	:	Shakambhari Ispat & Power Limited.
2.	Address	:	Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	:	Steel & Power Unit
4.	Sampling Plan & Procedure	:	ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	:	No
6.	Type of Sample	:	Work Zone Noise
7.	Sample ID	:	ENV/425/M/(TR)N/IV/22-23
8.	Date of Study	:	22/02/2023
9.	Reporting Date	:	28/02/2023
10.	Method No.	:	IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	:	20 Minutes
12.	Height from Ground Level	:	4 feet
13.	Sample Monitoring by	:	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :11:30 - 11:50 A.M

DAY TIME

4. Location : In front of MCC Building (DRI 2 X 350 TPD)

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	75.7	78.2	77.13	East Side
02.	dB(A)	74.4	73.6	74.02	West Side
03.	dB(A)	76.6	81.2	79.48	North Side
04.	dB(A)	78.8	80.7	79.85	South Side
Average dB(A) Leq				77.62	

Reviewed By:

Dy. Quality Manager

Approved By:

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCC
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	: Shakambhari Ispat & Power Limited.
2.	Address	: Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	: Steel & Power Unit
4.	Sampling Plan & Procedure	: ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	: No
6.	Type of Sample	: Work Zone Noise
7.	Sample ID	: ENV/425/M/(TR)N/V/22-23
8.	Date of Study	: 22/02/2023
9.	Reporting Date	: 28/02/2023
10.	Method No.	: IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	: 20 Minutes
12.	Height from Ground Level	: 4 feet
13.	Sample Monitoring by	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :12:00 – 12:20 P.M

DAY TIME

4. Location : In front of MCC Building (DRI 600 TPD)

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	74.8	79.4	77.68	East Side
02.	dB(A)	75.3	80.5	78.64	West Side
03.	dB(A)	76.9	81.8	80.01	North Side
04.	dB(A)	77.3	81.6	79.96	South Side
Average dB(A) Leq				79.07	

Reviewed By:

Dy. Quality Manager

Approved By:

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCC
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



Certificate No. TC-6014

FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	:	Shakambhari Ispat & Power Limited.
2.	Address	:	Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	:	Steel & Power Unit
4.	Sampling Plan & Procedure	:	ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	:	No
6.	Type of Sample	:	Work Zone Noise
7.	Sample ID	:	ENV/425/M/(TR)N/VI/22-23
8.	Date of Study	:	22/02/2023
9.	Reporting Date	:	28/02/2023
10.	Method No.	:	IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	:	20 Minutes
12.	Height from Ground Level	:	4 feet
13.	Sample Monitoring by	:	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time : 12:30 - 12:50 P.M

DAY TIME

5. Location : Near SAF Control Room (Ferro Alloy Division)

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	81.4	83.6	82.64	East Side
02.	dB(A)	78.6	82.4	80.90	West Side
03.	dB(A)	79.8	81.7	80.85	North Side
04.	dB(A)	80.9	82.7	81.89	South Side
Average dB(A) Leq				81.57	

Reviewed By:

Approved By:

Dy. Quality Manager

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCC
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



Certificate No. TC-6014

FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	:	Shakambhari Ispat & Power Limited.
2.	Address	:	Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	:	Steel & Power Unit
4.	Sampling Plan & Procedure	:	ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	:	No
6.	Type of Sample	:	Work Zone Noise
7.	Sample ID	:	ENV/425/M/(TR)N/VII/22-23
8.	Date of Study	:	22/02/2023
9.	Reporting Date	:	28/02/2023
10.	Method No.	:	IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	:	20 Minutes
12.	Height from Ground Level	:	4 feet
13.	Sample Monitoring by	:	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :1:00 - 1:20 P.M

DAY TIME

4. Location : Near TG Building (CFBC Boiler)

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	70.4	76.5	74.44	East Side
02.	dB(A)	69.8	71.9	70.98	West Side
03.	dB(A)	74.6	77.2	76.09	North Side
04.	dB(A)	75.9	79.1	77.79	South Side
Average dB(A) Leq				74.82	

Reviewed By:

Dy. Quality Manager

Approved By:

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB, JSPCB & OSPCB
Accredited by NABL (ISO/IEC 17025:2005)
Certified by ISO 9001:2008, ISO 14001 : 2015 & OHSAS 18001:2007



Certificate No. TC-6014

FORMAT NO. : ENV/FM/53

TEST REPORT

1.	Name of the Industry / Project	:	Shakambhari Ispat & Power Limited.
2.	Address	:	Vill. - Madandih, P.O - Bartoria, P.S - Nuturia, District - Purulia, Pin - 723121
3.	Type of Industry	:	Steel & Power Unit
4.	Sampling Plan & Procedure	:	ENV/SOP/02
5.	Deviation from the Sampling Method & Plan	:	No
6.	Type of Sample	:	Work Zone Noise
7.	Sample ID	:	ENV/425/M/(TR)N/VIII/22-23
8.	Date of Study	:	22/02/2023
9.	Reporting Date	:	28/02/2023
10.	Method No.	:	IS 15575 (Part 2), 2022
11.	Time of Duration of Noise	:	20 Minutes
12.	Height from Ground Level	:	4 feet
13.	Sample Monitoring by	:	Mr. Sujoy Dasgupta

RESULT OF NOISE LEVEL STUDY

Time :1:30 - 1:50 P.M

DAY TIME

4. Location : Near Coal Shed Area (RMH Yard)

Sl. No.	Unit	Minimum dB(A)	Maximum dB(A)	Leq dB(A)	Remarks
01.	dB(A)	72.8	75.1	74.10	East Side
02.	dB(A)	73.7	77.8	76.22	West Side
03.	dB(A)	74.9	80.5	78.55	North Side
04.	dB(A)	73.1	81.6	79.16	South Side
Average dB(A) Leq				77.00	

Reviewed By:

Dy. Quality Manager

Approved By:

Quality Manager

>End of Report<



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001 : 2018



NOISE MONITORING REPORT

Shakambhari Ispat & Power Limited

Vill. – Madandih, P.O – Bartoria, P.S – Neturia, District – Purulia, Pin – 723121

MONITORED BY :

ENVIROCHECK
189, Rastraguru Avenue,
Calcutta - 700 028

Report No : ENV/425/M/(TR)N/I/2022-2023

Sampling Locations :	Near Main Gate	Date of Study :	22.02.2023
Category :	Steel & Power Unit	Day time :	6 AM to 10 PM

Time (hrs.)	L _{min}	L _{max}	L _{eq}	Day time L _{eq}
6:00 AM to 7:00 AM	73.9	77.2	75.86	73.36
7:00 AM to 8:00 AM	72.3	75.8	74.39	
8:00 AM to 9:00 AM	70.0	77.9	75.54	
9:00 AM to 10:00 AM	71.2	74.5	73.16	
10:00 AM to 11:00 AM	70.4	74.3	72.77	
11:00 AM to 12:00 PM	74.2	76.7	75.63	
12:00 PM to 1:00 PM	71.2	74.5	73.16	
1:00 PM to 2:00 PM	70.4	74.3	72.77	
2:00 PM to 3:00 PM	74.2	76.7	75.63	
3:00 PM to 4:00 PM	71.3	75.4	73.82	
4:00 PM to 5:00 PM	72.3	77.2	75.41	
5:00 PM to 6:00 PM	68.2	75.9	73.57	
6:00 PM to 7:00 PM	64.6	69.1	67.41	
7:00 PM to 8:00 PM	62.8	65.9	64.62	
8:00 PM to 9:00 PM	60.5	62.6	61.68	
9:00 PM to 10:00 PM	60.2	61.5	60.90	

Date of Study :	22.02.2023 to 23.02.2023	Night time :	10 PM to 6 AM
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Time(hrs.)	L _{min}	L _{max}	L _{eq}	Night time L _{eq}
10:00 PM to 11:00 PM	59.4	62.8	61.42	61.71
11:00 PM to 12:00 AM	58.2	60.6	59.56	
12:00 AM to 1:00 AM	57.2	59.9	58.76	
1:00 AM to 2:00 AM	58.2	59.6	58.96	
2:00 AM to 3:00 AM	57.5	58.3	57.92	
3:00 AM to 4:00 AM	60.2	64.1	62.57	
4:00 AM to 5:00 AM	62.5	64.6	63.68	
5:00 AM to 6:00 AM	63.8	66.2	65.16	

L_{min} : Minimum Noise level

L_{max} :Maximum Noise level

L_{eq} :Equivalent sound energy

Compiled by : (Signature)
Dr. Ajoy Paul

Envirocheck Seal
Date : 28.02.2023



Certified by : (Signature)
Dr. S. B. Chowdhury

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 (033-25792891/25497490, Fax : 033-25299141
Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 (033-25792889
Email : envcheck@cal2.vsnl.net.in/envirocheck50@gmail.com / Website : www.envirocheck.org
Branch Office : * Siliguri * Haldia * Durgapur * Dhanbad * Gangtok * Port Blair * Dehradun * New Delhi
Overseas : * UAE * Qatar * Netherlands



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001 : 2018



NOISE MONITORING REPORT

Shakambhari Ispat & Power Limited

Vill. – Madandih, P.O – Batoria, P.S – Neturia, District – Purulia, Pin – 723121

MONITORED BY :

ENVIROCHECK

189, Rastraguru Avenue,

Calcutta - 700 028

Report No : ENV/425/M/(TR)N/II/2022-2023

Sampling Locations :	Madandih Village	Date of Study :	22.02.2023
Category :	Steel & Power Unit	Day time :	6 AM to 10 PM

Time (hrs.)	L _{min}	L _{max}	L _{eq}	Day time L _{eq}
6:00 AM to 7:00 AM	41.9	51.5	48.94	55.03
7:00 AM to 8:00 AM	42.8	51.6	49.13	
8:00 AM to 9:00 AM	45.7	54.6	52.12	
9:00 AM to 10:00 AM	49.4	56.3	54.10	
10:00 AM to 11:00 AM	48.1	55.3	53.05	
11:00 AM to 12:00 PM	59.6	60.1	59.83	
12:00 PM to 1:00 PM	58.2	60.0	59.16	
1:00 PM to 2:00 PM	57.4	59.2	58.28	
2:00 PM to 3:00 PM	55.1	58.6	56.86	
3:00 PM to 4:00 PM	52.8	59.6	57.41	
4:00 PM to 5:00 PM	50.3	55.8	53.78	
5:00 PM to 6:00 PM	52.5	58.4	56.15	
6:00 PM to 7:00 PM	43.8	47.5	46.03	
7:00 PM to 8:00 PM	45.9	51.2	49.31	
8:00 PM to 9:00 PM	40.6	41.9	41.30	
9:00 PM to 10:00 PM	41.6	45.9	44.27	

Date of Study :	22.02.2023 to 23.02.2023	Night time :	10 PM to 6 AM
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Time(hrs.)	L _{min}	L _{max}	L _{eq}	Night time L _{eq}
10:00 PM to 11:00 PM	40.7	43.2	42.13	44.65
11:00 PM to 12:00 AM	40.2	42.8	41.69	
12:00 AM to 1:00 AM	43.5	44.6	44.08	
1:00 AM to 2:00 AM	39.4	42.5	41.22	
2:00 AM to 3:00 AM	39.0	41.7	40.56	
3:00 AM to 4:00 AM	41.6	45.9	44.27	
4:00 AM to 5:00 AM	43.8	47.5	46.03	
5:00 AM to 6:00 AM	45.9	51.2	49.31	

L_{min} : Minimum Noise level

L_{max} :Maximum Noise level

L_{eq} :Equivalent sound energy

Compiled by : (Signature)
Dr. Ajoy Paul

Envirocheck Seal
Date : 28.02.2023



Certified by : (Signature)
Dr. S. B. Chowdhury

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 (033-25792891/25497490, Fax : 033-25299141
Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 (033-25792889
Email : envcheck@cal2.vsnl.net.in/envirocheck50@gmail.com / Website : www.envirocheck.org
Branch Office : • Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi



ENVIROCHECK

Recognised by MoEF&CC, WBPCB & JSPCB
Accredited by NABL (ISO/IEC 17025:2017)
Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001 : 2018



NOISE MONITORING REPORT

Shakambhari Ispat & Power Limited

Vill. – Madandih, P.O – Bartoria, P.S – Neturia, District – Purulia, Pin – 723121

MONITORED BY :

ENVIROCHECK

189, Rastraguru Avenue,
Calcutta - 700 028

Report No : ENV/425/M/(TR)N/III/2022-2023

Sampling Locations :	Near DM Plant	Date of Study :	22.02.2023
Category :	Steel & Power Unit	Day time :	6 AM to 10 PM

Time (hrs.)	L _{min}	L _{max}	L _{eq}	Day time L _{eq}
6:00 AM to 7:00 AM	64.5	69.6	67.98	69.40
7:00 AM to 8:00 AM	60.2	64.8	63.89	
8:00 AM to 9:00 AM	65.6	68.4	66.91	
9:00 AM to 10:00 AM	63.1	68.2	66.15	
10:00 AM to 11:00 AM	60.2	66.6	63.67	
11:00 AM to 12:00 PM	60.4	63.7	62.78	
12:00 PM to 1:00 PM	62.3	64.5	63.90	
1:00 PM to 2:00 PM	69.1	74.9	72.90	
2:00 PM to 3:00 PM	67.9	78.7	76.04	
3:00 PM to 4:00 PM	66.1	76.4	73.78	
4:00 PM to 5:00 PM	65.9	72.8	70.60	
5:00 PM to 6:00 PM	67.2	72.5	70.10	
6:00 PM to 7:00 PM	60.2	68.5	66.81	
7:00 PM to 8:00 PM	61.3	64.6	63.15	
8:00 PM to 9:00 PM	60.5	63.2	62.67	
9:00 PM to 10:00 PM	59.9	60.4	60.16	

Date of Study :	22.02.2023 to 23.02.2023	Night time :	10 PM to 6 AM
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Time(hrs.)	L _{min}	L _{max}	L _{eq}	Night time L _{eq}
10:00 PM to 11:00 PM	55.3	59.4	57.82	62.65
11:00 PM to 12:00 AM	54.3	58.9	57.18	
12:00 AM to 1:00 AM	53.5	57.6	56.02	
1:00 AM to 2:00 AM	52.4	58.6	56.52	
2:00 AM to 3:00 AM	56.7	59.1	58.06	
3:00 AM to 4:00 AM	62.8	65.4	64.29	
4:00 AM to 5:00 AM	63.4	66.1	64.96	
5:00 AM to 6:00 AM	65.9	69.4	67.99	

L_{min} : Minimum Noise level

L_{max} : Maximum Noise level

L_{eq} : Equivalent sound energy

Compiled by : (Signature)
Dr. Ajoy Paul

Envirocheck Seal
Date : 28.02.2023



Certified by : (Signature)
Dr. S. B. Chowdhury

H.O. : 63/B, Rastraguru Avenue, Kolkata - 700028 (033-25792891/25497490, Fax : 033-25299141
 Laboratory : 189,190&192 Rastraguru Avenue, Kolkata - 700028 (033-25792889
 Email : envcheck@cal2.vsnl.net.in/envirocheck50@gmail.com / Website : www.envirocheck.org
 Branch Office : Siliguri • Haldia • Durgapur • Dhanbad • Gangtok • Port Blair • Dehradun • New Delhi
 Overseas : UAE • Qatar • Netherlands



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 Certified by ISO 9001:2015, ISO 14001:2015 & ISO 45001 : 2018



NOISE MONITORING REPORT

Shakambhari Ispat & Power Limited

Vill. – Madandih, P.O – Bartoria, P.S – Neturia, District – Purulia, Pin – 723121

MONITORED BY :

ENVIROCHECK
 189, Rastraguru Avenue,
 Calcutta - 700 028

Report No : ENV/425/M/(TR)N/IV/2022-2023

Sampling Locations :	Near Laboratory Building (SMS Division)	Date of Study :	22.02.2023
Category :	Steel & Power Unit	Day time :	6 AM to 10 PM

Time (hrs.)	L _{min}	L _{max}	L _{eq}	Day time L _{eq}
6:00 AM to 7:00 AM	60.3	64.3	62.35	67.46
7:00 AM to 8:00 AM	61.8	64.7	63.45	
8:00 AM to 9:00 AM	60.7	62.3	61.48	
9:00 AM to 10:00 AM	61.8	62.9	62.56	
10:00 AM to 11:00 AM	60.7	67.7	65.90	
11:00 AM to 12:00 PM	62.8	66.2	64.15	
12:00 PM to 1:00 PM	64.7	72.1	69.82	
1:00 PM to 2:00 PM	64.9	68.6	65.96	
2:00 PM to 3:00 PM	63.9	70.8	65.15	
3:00 PM to 4:00 PM	65.1	73.5	71.08	
4:00 PM to 5:00 PM	68.9	76.7	74.36	
5:00 PM to 6:00 PM	65.9	69.7	67.78	
6:00 PM to 7:00 PM	63.8	67.3	65.10	
7:00 PM to 8:00 PM	62.3	67.1	63.90	
8:00 PM to 9:00 PM	61.9	66.3	64.78	
9:00 PM to 10:00 PM	62.2	69.9	65.89	

Date of Study :	22.02.2023 to 23.02.2023	Night time :	10 PM to 6 AM
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Time(hrs.)	L _{min}	L _{max}	L _{eq}	Night time L _{eq}
10:00 PM to 11:00 PM	60.7	68.1	65.89	64.95
11:00 PM to 12:00 AM	60.7	65.7	63.91	
12:00 AM to 1:00 AM	61.6	67.2	63.78	
1:00 AM to 2:00 AM	60.2	62.8	61.65	
2:00 AM to 3:00 AM	61.8	68.5	63.86	
3:00 AM to 4:00 AM	62.9	66.1	64.79	
4:00 AM to 5:00 AM	63.4	68.5	66.66	
5:00 AM to 6:00 AM	64.6	68.2	66.76	

L_{min} : Minimum Noise level

L_{eq} :Equivalent sound energy

(Signature)

(Signature)

Compiled by : (Signature)
 Dr. Ajoy Paul

Envirocheck Seal
 Date : 28.02.2023

Certified by : (Signature)
 Dr. S. B. Chowdhury



ANNEXURE-14



GURU GOPIRAM HOSPITAL

(A Unit of Guru Gopiram Institute of Health Annexe Trust)

Ref. No. 07

Date: 25-07-22

Ananda Chatterjee Age - 47y/M

BP - 100/80 mmHg

PP - 80/min

O₂ - 96% (RA)

T - 37

W - 49.4 kg

CO - Nausea & weakness

H/O - Episodic wheezing
Inhaler (Asthelin)

AD - Normal G/O/D/C

- CXR - PA view
- BCL all leads

Blood for - TC, DC, Hb%.

ESR

Adv

1) Continue Home Medicines in Inhaler.

2) Tab Montek - 1c 1x/12hrs
7D

3) Tab. Roflum (150) 1x/12hrs
7D

4) Consult Chest Physician.

DR. DEEPTANGSHU G.
M.B.B.S., M.D.

Reg. No. 66736 (WBMC)

Eye.

C/O - DOV. (For Near)

Adv.

Rx
Plano. (P.R.E) 6/6.

Near Add \rightarrow +1.75 DS. (P.R.E) N₆

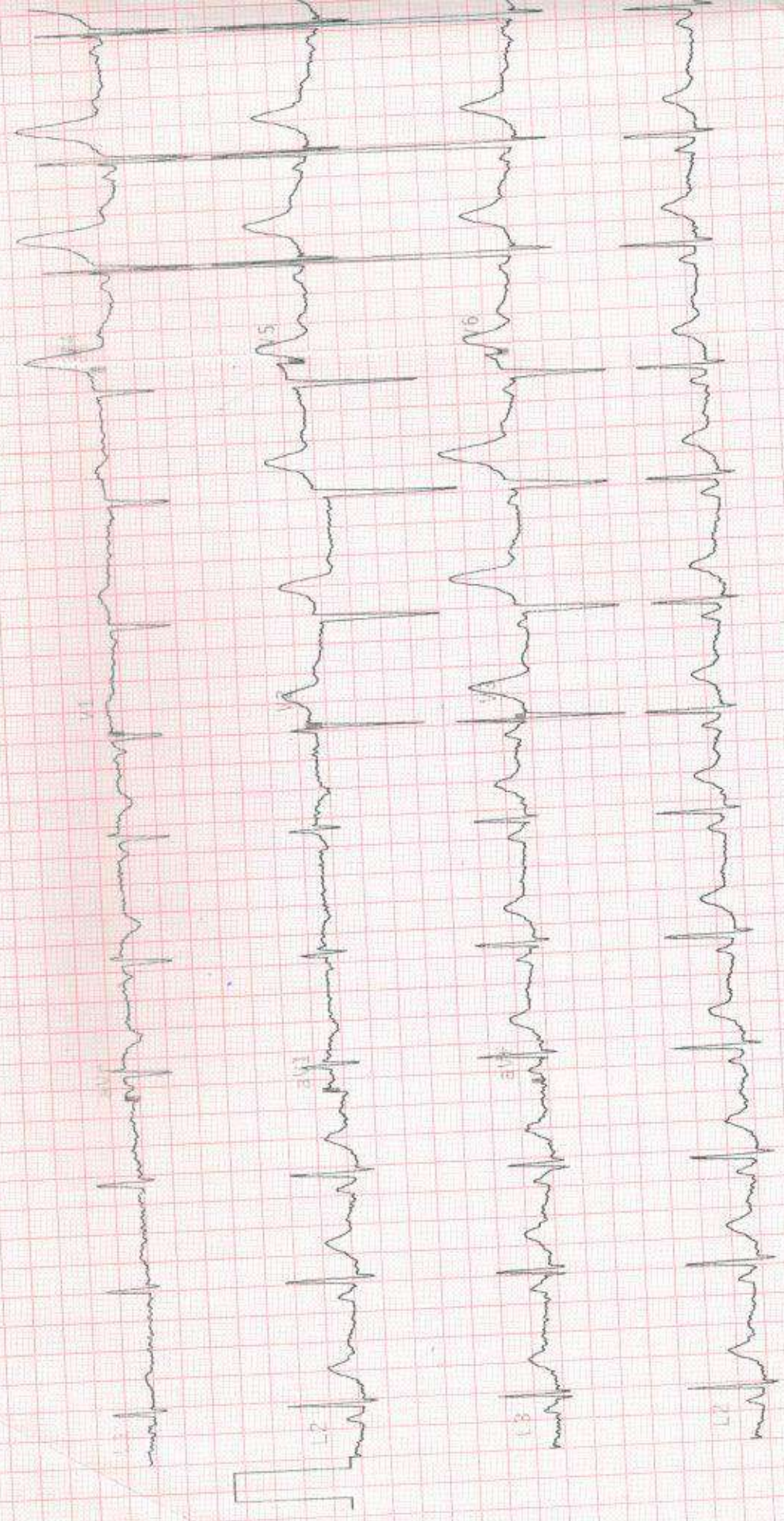
Vit $\left\{ \begin{array}{l} 6/6, N_{12} \\ 6/6, N_{12} \end{array} \right.$

Colour m $\left\{ \begin{array}{l} \text{normal} \\ \text{normal} \end{array} \right.$

Dr. Kirti Srivastav
B.OPTM
Regd. No. - 131491210019

DR. BEERANKAR
M.B.S., M.D.
P.D. IN O.P.T. (M.B.M.C.)

Date: _____
 Time: _____
 Patient Name: _____
 Age: _____ Sex: _____
 Ref: _____
 Physician: _____
 Hospital: _____





Shivakshi Rehabilitation Centre for Speech & Hearing

Ref. No. 01

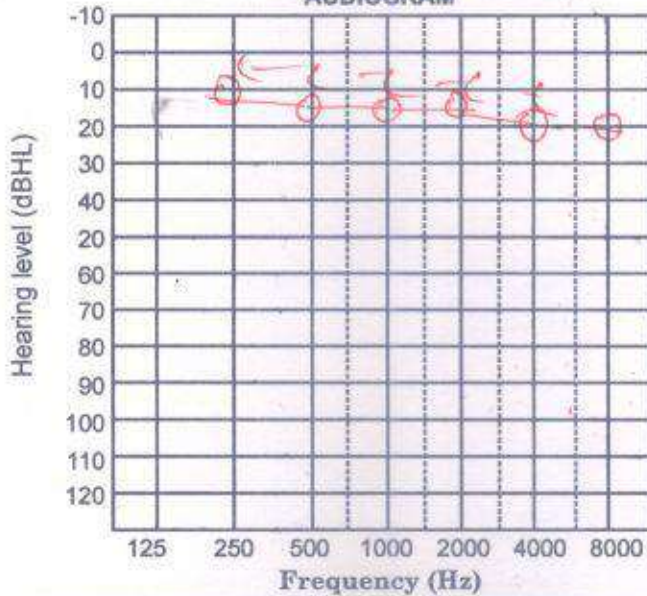
Date 25/07/22

PURE TONE AUDIOMETRY

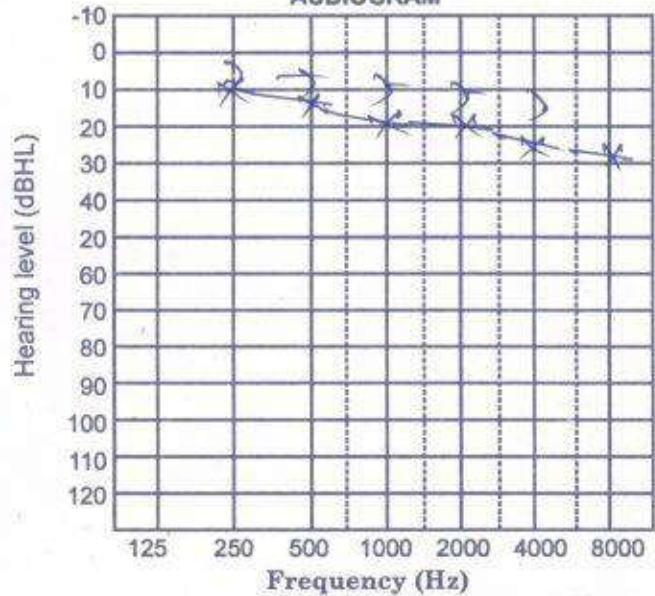
NAME: ANANDA CHATTERJEE

AGE/SEX: 27 M

**RIGHT EAR
AUDIOGRAM**



**LEFT EAR
AUDIOGRAM**



Right Ear	PTA	Left Ear
<u>15</u> : dBHL	<u>I</u>	<u>18.3</u> : dBHL
	<u>II</u>	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	×
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

Pk
PRAN KUMAR
 ASST. AUDIOLOGIST
 Reg. No: B43731

Provisional Diagnosis: Bk Hearing Sensitivity
with normal find

Counseling
done

SIPL 7 - ANANDA CHATTERJEE
 47 Years / Male / Ht 163 Cms / 49 Kgs / Non-Smoker

FVC TEST

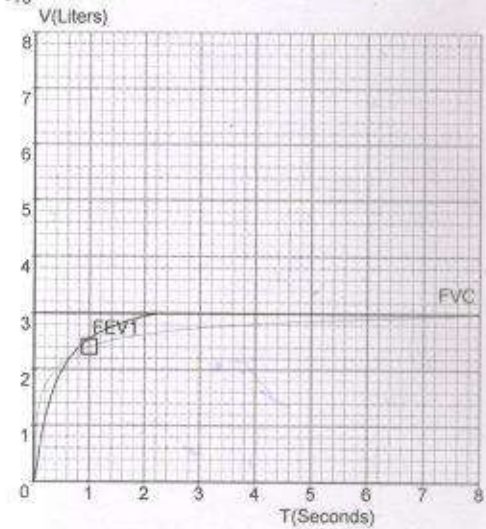
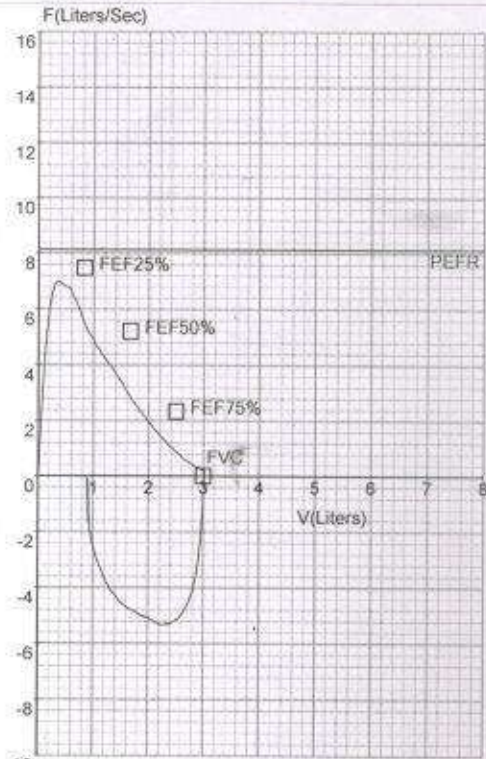
Date: 02-08-2022 (T1)

Pred Eqn : CLARITY

Eth.Corr : 100

Temp : 0°C

Ref By : NONE



Parameter		Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.00	3.02	101	--	--	--
FEV1	[L]	2.40	2.57	107	--	--	--
FEV.5	[L]	--	2.02	--	--	--	--
FEV3	[L]	2.91	--	--	--	--	--
FEV6	[L]	--	--	--	--	--	--
PEFR	[L/s]	8.11	6.99	86	--	--	--
FEF25-75	[L/s]	3.49	3.45	99	--	--	--
FEF75-85	[L/s]	--	1.08	--	--	--	--
FEF.2-1.2	[L/s]	6.06	5.62	93	--	--	--
FEF25%	[L/s]	7.50	6.53	87	--	--	--
FEF50%	[L/s]	5.23	3.64	70	--	--	--
FEF75%	[L/s]	2.34	1.34	58	--	--	--
FEV.5/FVC	[%]	--	66.76	--	--	--	--
FEV1/FVC	[%]	80.05	85.02	106	--	--	--
FEV3/FVC	[%]	97.00	--	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--	--
FET	[S]	--	2.21	--	--	--	--
ExpTime	[S]	--	0.06	--	--	--	--
LungAge	[Y]	47.00	44.00	94	--	--	--
FIVC	[L]	--	2.12	--	--	--	--
PIFR	[L/s]	--	5.33	--	--	--	--
FIF25%	[L/s]	--	7.66	--	--	--	--
FIF50%	[L/s]	--	5.57	--	--	--	--
FIF75%	[L/s]	--	3.79	--	--	--	--
FIV.5	[L]	--	2.07	--	--	--	--
FIV1	[L]	--	--	--	--	--	--
FIV3	[L]	--	--	--	--	--	--
FIV.5/FIVC	[%]	--	97.83	--	--	--	--
FIV1/FIVC	[%]	--	--	--	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--	--

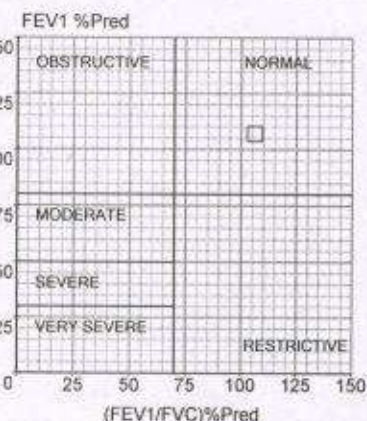
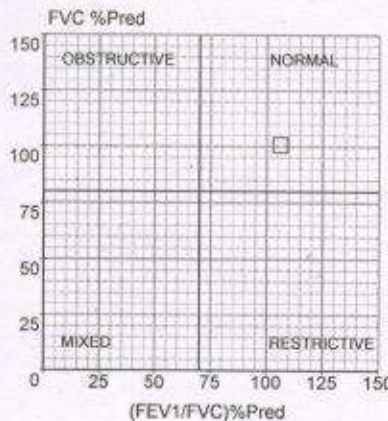
- Pre Medication Report :
 Spirometry within Normal range as FVC% \geq 80 And
 FEV1/FVC% $>$ 70

- Pre COPD Severity Report:

Pre Test within Normal range

M.P.S., M.D.
 Reg. No. 66735 (WBMG)

- Doctor's Comments :



R



GURU GOPIRAM HOSPITAL, SITARAMPUR.
ANANDA CHATTERJEE/ 47yrs/ CHEST PA M 25/7/22 001





GURU GOPIRAAM
HOSPITAL

MULTI-SPECIALITY HOSPITAL

SITARAMPUR, ASANSOL

7091118888

• C.T.Scan • Digital X-Ray • Ultrasound • Echo Cardiography • E.C.G. • E.M.G. • EEG • NCV • OPG • Mammography • BERA • Endoscopy
• Pathology • OPD • Pharmacy • Uroflowmetry

Patients Name : ANANDA CHATTERJEE	Date of receipt : 25/07/22
Age : 47 years	Date of report : 25/07/22
Sex : Male / Female	
Ref. by Dr : Self	

(4)

HAEMATOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	15.8	Male: - 13.8 - 17.2 Female: - 12.0 - 15.0	gm/dl
TLC	8200	4,000 - 11,000	cells/cu.mm
DLC			
i) Neutrophil	65	40-80	%
ii) Lymphocyte	28	20-40	%
iii) Monocyte	02	2 - 10	%
iv) Eosinophil	05	1 - 6	%
v) Basophil	00	< 1	%
ESR	17	0 - 20	mm/h

Blood Group " A "

Rh Typing POSITIVE

DR. Satabdi Mitra M.D. (PATH)

Consultant Pathologist

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: -

Date: -

Age: -

Sex: -

Interpretation of ECG:-

- Rate:- 78/min.
- Rhythm:- Regular
- Axis:- (N)
- PR interval:- 128 ms
- QRS complex:- 94 ms
- QT interval:- 378 ms
- ST segment:- 55 ms
- T waves:- Inversion in AVL, V1

Impression:-

Repeat ECG.

DR. DEEPTANSHU GANGULY
M.B.B.S., M.D.

Reg. No. 56745 (WBMC)

Disclaimer: In no way this report can be utilized for any medico legal purpose. If there is any clinical discrepancy, this investigation may be repeated or reassessed.

Patient Name:	MR ANANDA CHATERJEE	Age / Gender:	47 YR/ M
RefdBy:		Date:	25/08/2022

X-RAY OF CHEST(PA VIEW)

FINDINGS:-

Radiopacity seen tracking along the left lateral chest wall causing blunting of left CP angle Suggest pleural effusion.

Trachea shifted to left side left upper lobe collapse suggestive of atelectasis.

Fibrocystic opacities noted at left upper and mid and lower zone-Old infective.

Tiny nodular opacities noted at right mid and lower zones-infective.

Both the costo-phrenic and cardio-phrenic angles are normal.

Cardiac size is within normal limits.

There is no evidence of pleural effusion or pneumothorax.

Bony thoracic cage appears normal.

IMPRESSION:-

Above X-ray Findings are suggestive of Old Infective etiology ? Bacterial In origin likely tuberculosis.

ADV CT IF CLINICALLY INDICATED.



**Dr K. Nerella
MD Radiologist
Consultant Radiologist
Reg Num-95228**

Disclaimer: It is an online interpretation of medical imaging based on clinical data. modern machines/procedures have their own limitation. If there is any clinical discrepancy, this investigation may be repeated or reassessed by other tests. Patients identification in online reporting is not established, so in no way can this report be utilized for any medico legal purpose. Any error in typing should be corrected immediately.



GURU GOPIRAM HOSPITAL

(A Unit of Guru Gopiram Institute of Health Annexe Trust)

Ref. No. 19

Date : ... 25.07.22

Avisekh kumar Sinha Age - 33y / M

BP - 120/70 mmHg

W - 73.6 kg

T - (N)

PR - 72/min

SpO2 - 99% (RA)

3

Ad

- ECG all leads
- CXR - PA view

Eye

Regular checkup

DR. DEEPTANGSHU GANGULY
 M.B.B.S., M.D.
 Reg. No. 66735 (WBMC)

RA < b/l, N5
 b/l, N6

CV < normal
 normal

No glass is required at present.

Dr. Kriti Srivastav
 B.OPTM
 DR. DEEPTANGSHU GANGULY
 M.B.B.S., M.D.
 Reg. No. 66735 (WBMC)



Shivakshi Rehabilitation Centre for Speech & Hearing

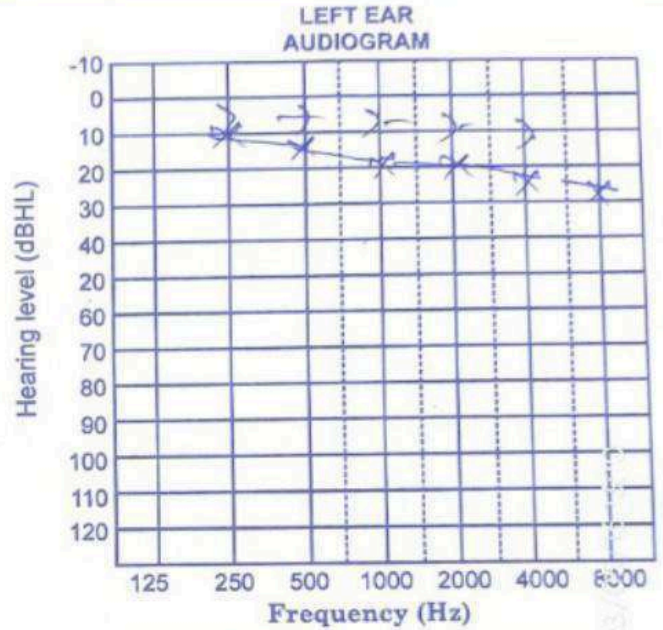
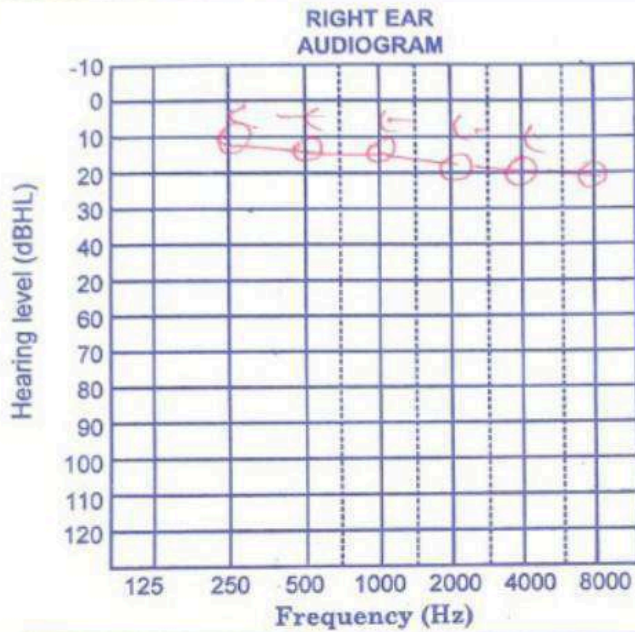
Ref. No. 19

Date 25/01/22

PURE TONE AUDIOMETRY

NAME: ARISHTEK KUMAR SINGH

AGE/SEX: 33/M



Right Ear	PTA	Left Ear
16.6: dBHL	I	18.3: dBHL
	II	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	X
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

PR. VIKAS KUMAR
ASST. AURAL LOGIST
Reg. No. 2731

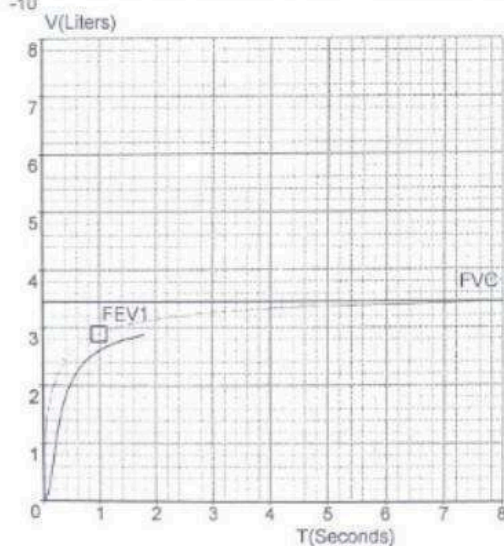
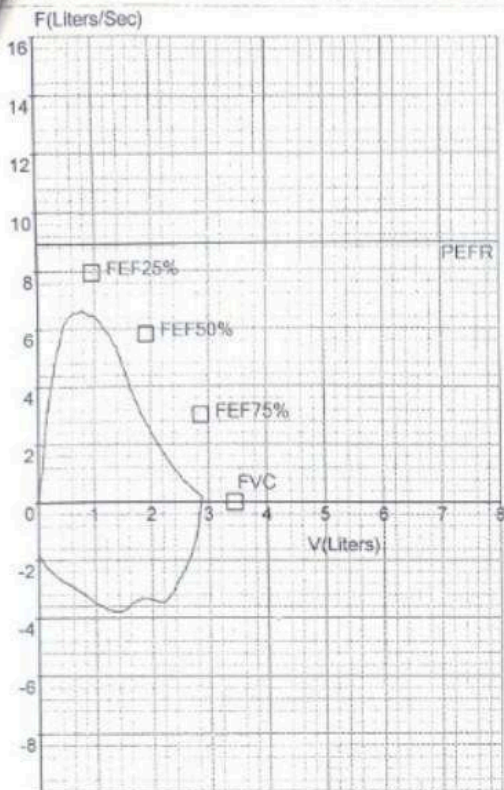
Provisional Diagnosis: Bil-Hearng Sensing
with normal ling,
I Counsel up follow up

19 - AVISEKH KUMAR SINHA
 Years / Male / Ht 168 Cms / 73 Kgs / Non-Smoker

FVC TEST

Date: 25-07-2022 (T1)

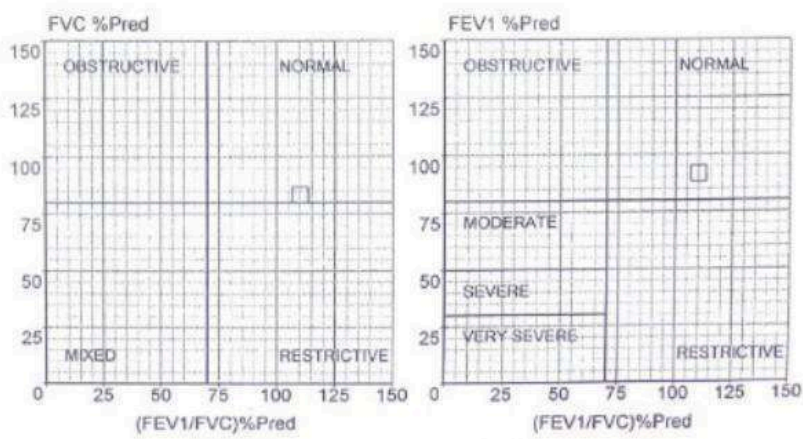
Pred Eqn : CLARITY Eth.Corr : 100 Temp : 0°C
 Ref By : NONE



Parameter	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.45	2.88	83	--	--
FEV1	[L]	2.90	2.66	92	--	--
FEV.5	[L]	--	2.20	--	--	--
FEV3	[L]	3.34	--	--	--	--
FEV6	[L]	--	--	--	--	--
PEFR	[L/s]	8.95	6.64	74	--	--
FEF25-75	[L/s]	4.22	4.79	114	--	--
FEF75-85	[L/s]	--	1.53	--	--	--
FEF.2-1.2	[L/s]	7.26	5.91	81	--	--
FEF25%	[L/s]	7.95	7.47	94	--	--
FEF50%	[L/s]	5.78	5.65	98	--	--
FEF75%	[L/s]	2.98	1.93	65	--	--
FEV.5/FVC	[%]	--	76.35	--	--	--
FEV1/FVC	[%]	84.02	92.40	110	--	--
FEV3/FVC	[%]	97.00	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--
FET	[S]	--	1.64	--	--	--
ExpITime	[S]	--	0.18	--	--	--
LungAge	[Y]	33.00	36.00	109	--	--
FIVC	[L]	--	3.13	--	--	--
PIFR	[L/s]	--	3.82	--	--	--
FIF25%	[L/s]	--	7.47	--	--	--
FIF50%	[L/s]	--	5.77	--	--	--
FIF75%	[L/s]	--	1.93	--	--	--
FIV.5	[L]	--	1.06	--	--	--
FIV1	[L]	--	2.67	--	--	--
FIV3	[L]	--	--	--	--	--
FIV.5/FIVC	[%]	--	33.73	--	--	--
FIV1/FIVC	[%]	--	85.25	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--

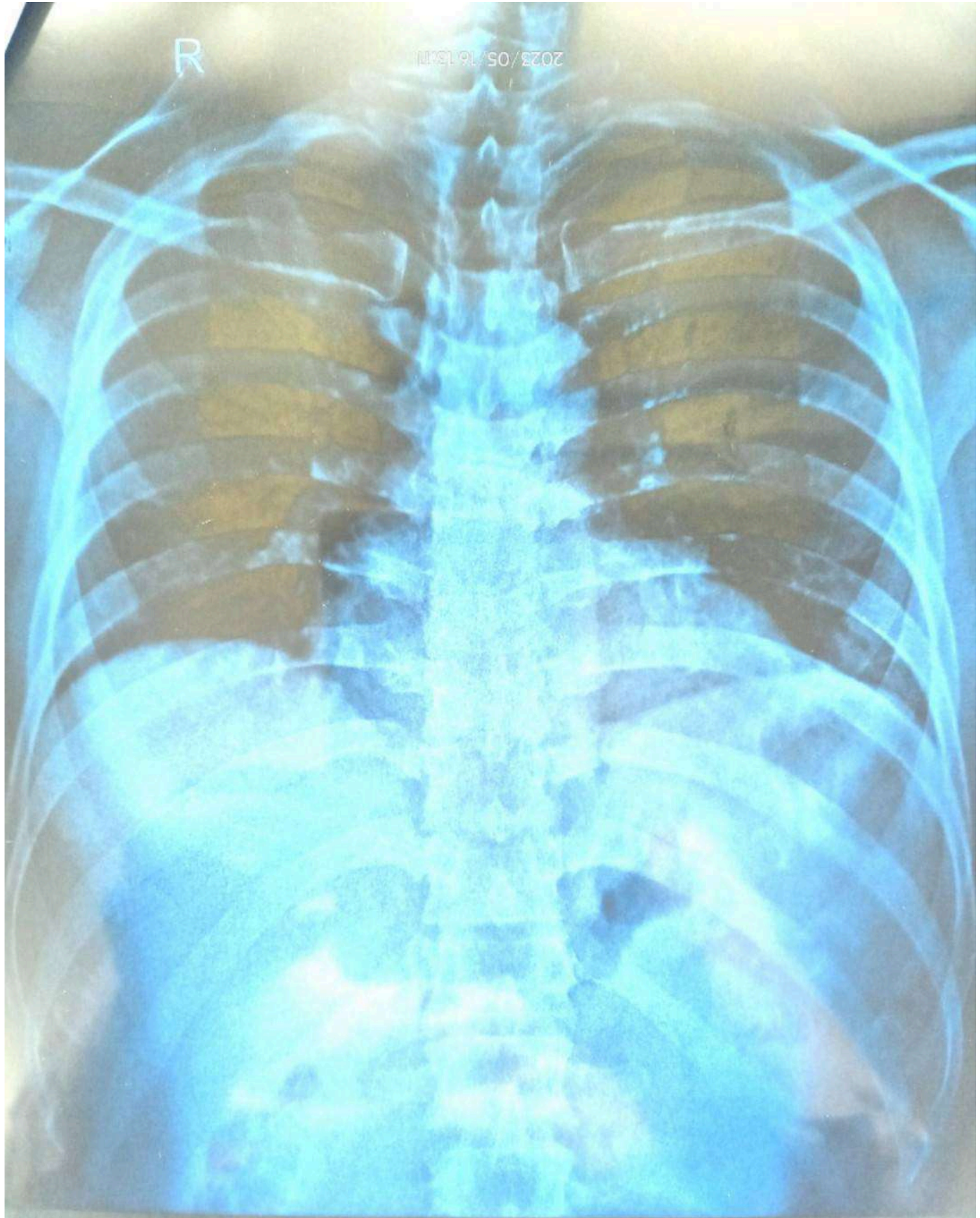
- Pre Medication Report :
 Spirometry within Normal range as FVC% >= 80 And FEV1/FVC% > 70

- Pre COPD Severity Report:
 Test within Normal range
DR. DEEPTANSHU GANGULY
M.B.B.S., M.D.
 Reg. No. 66735 (WPMO)



R

2023/05/16 13:11



GURU GOPIRAM HOSPITAL SITARAMPUR.

AVISEKH KR SINHA 33yrs/ CHE ST / PA M 25/7/22 007

Patients Name : AVISEKH KUMAR SINHA	Date of receipt : 25/07/22
Age : 33 years	Date of report : 25/07/22
Sex : Male / Female	(19)
Ref. by Dr : Self	

HAEMATOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	15.0	Male: - 13.8 - 17.2 Female: - 12.0 - 15.0	gm/dl
TLC	5950	4,000 - 11,000	cells/cu.mm
DLC			
i) Neutrophil	45	40-80	%
ii) Lymphocyte	47	20-40	%
iii) Monocyte	03	2 - 10	%
iv) Eosinophil	05	1 - 6	%
v) Basophil	00	< 1	%
ESR	12	0 - 20	mm/h

Blood Group : **" B "**

Rh Typing : **POSITIVE**


DR. Satabdi Mitra M.D. (PATH)

Consultant Pathologist

2023/05/16 13:11

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: - Anisekh Kumar Sinha Date: - 25-7-22

Age: - 33 y

Sex: - M

Interpretation of ECG:-

- Rate:- 75/min.
- Rhythm:- Regular
- Axis:-
- PR interval:- 178ms
- QRS complex:- 107ms
- QT interval:- 387ms
- ST segment:- 105ms
- T waves:- Inversion in L3

Impression:-

Repeat ECG.

DR. DEEPTANSHU GANGULY
M.B.B.S., M.D.
Reg. No. 54735 (WBMC)

Disclaimer: In no way this report can be utilized for any medico legal purpose. If there is any clinical discrepancy, this investigation may be repeated.

Patient Name:	MR AVISEKH KR SINHA	Age / Gender:	YR/ M
RefdBy:		Date:	25/08/2022

X-RAY OF CHEST(PA VIEW)

FINDINGS:-

Prominent bilateral hilar shadows.

Both the costo-phrenic and cardio-phrenic angles are normal.

Trachea and the mediastenum are in the midline.

Cardiac size is within normal limits.

There is no evidence of pleural effusion or pneumothorax.

Bony thoracic cage appears normal.

IMPRESSION:-

Prominent bilateral hilar shadows.

Clinical and lab correlation is recommended for confirmation



Dr K. Nerella
MD Radiologist
Consultant Radiologist
Reg Num-95228

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GURU GOPIRAM HOSPITAL

(A Unit of Guru Gopiram Institute of Health Annexe Trust)

Ref. No. 19

Date : ... 25.07.22

Avisekh kumar Sinha Age - 33y / M

BP - 120/70 mmHg

W - 73.6 kg

T - (N)

PR - 72/min

SpO2 - 99% (RA)

3

Ad

- ECG all leads

- CXR - PA view

Eye

Regular checkup

DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)

RA < b/l, N5
b/l, N6

CV < normal
normal

No glasses is required at present.

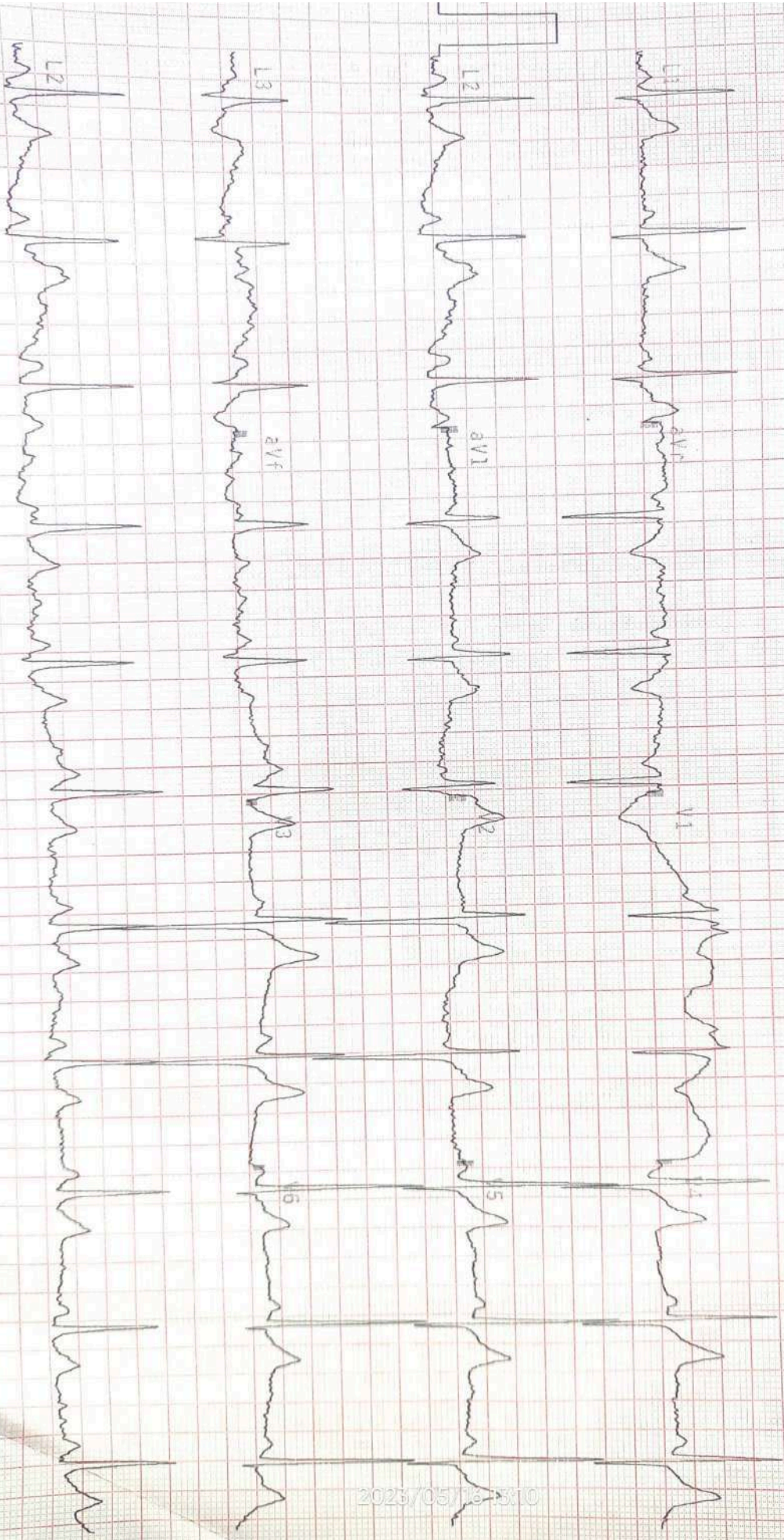
Dr. Kriti Srivastav
B.OPTM

DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.

Biswakarma Nagar, Sitarampur - 713359, Dist. Paschim Bardhaman

Mob. No. : 7091118888, E-mail : ad@ggghospital.com

UNIVERSITI SAINS MALAYSIA
 HOSPITAL ASAM
 No. :
 Date :
 Age : 000 (Y)
 Gender :
 Height : 000 (cm)
 Weight : 000 (kg)
 I : 3
 PRS : 10
 T : 13
 (Interval)
 07 44 01 00 240
 ST 15



2023/05/16 8:10



Shivakshi Rehabilitation Centre for Speech & Hearing

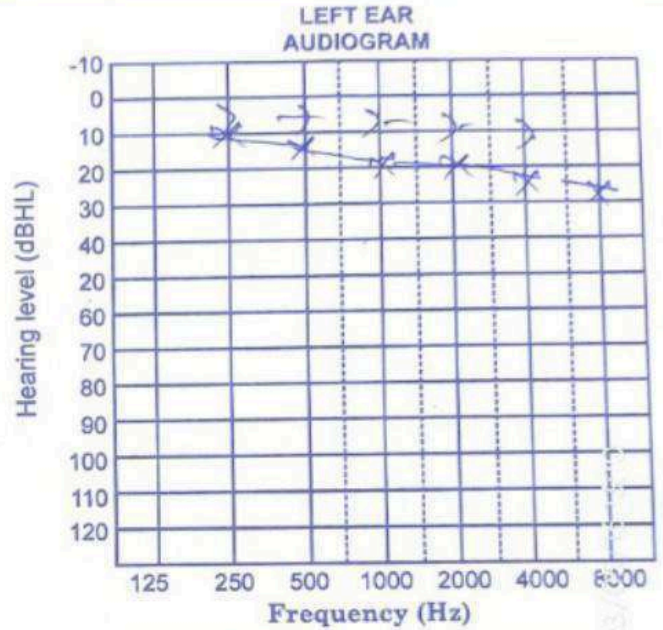
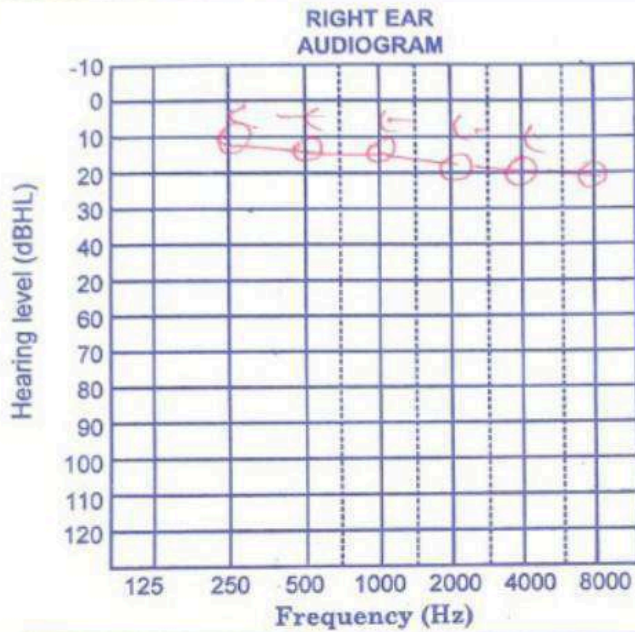
Ref. No. 19

Date 25/01/22

PURE TONE AUDIOMETRY

NAME: ARISHTEK KUMAR SINGH

AGE/SEX: 33/M



Right Ear	PTA	Left Ear
16.6: dBHL	I	18.3: dBHL
	II	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	X
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

PR. VIKRUMAR
ASST. AURAL LOGIST
Reg. 2731

Provisional Diagnosis: Bil-Hearng Sensing
with normal ling,
I Counsel up follow up

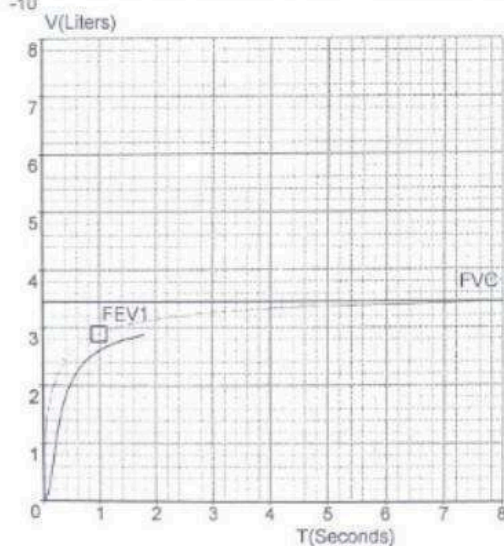
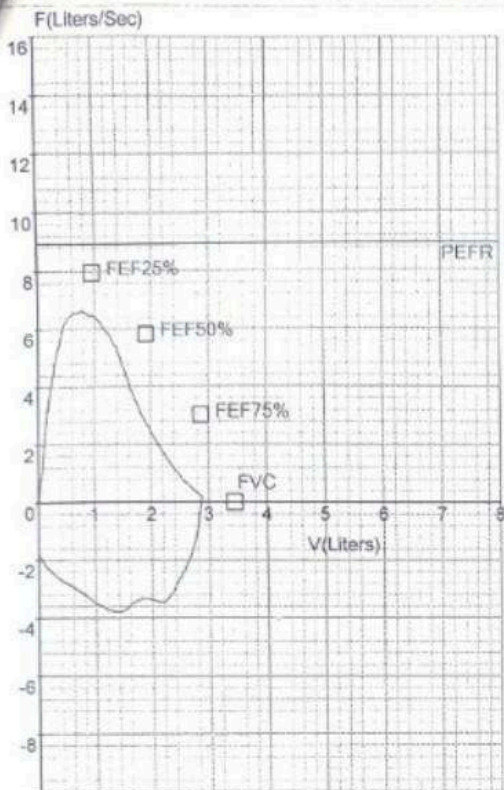
19 - AVISEKH KUMAR SINHA
 Years / Male / Ht 168 Cms / 73 Kgs / Non-Smoker

FVC TEST

Date: 25-07-2022 (T1)

Pred Eqn : CLARITY Eth.Corr : 100 Temp : 0°C

Ref By : NONE

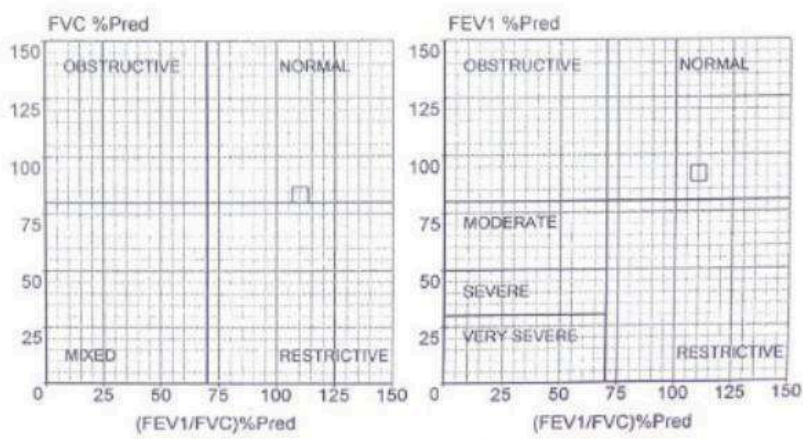


Parameter	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.45	2.88	83	--	--
FEV1	[L]	2.90	2.66	92	--	--
FEV.5	[L]	--	2.20	--	--	--
FEV3	[L]	3.34	--	--	--	--
FEV6	[L]	--	--	--	--	--
PEFR	[L/s]	8.95	6.64	74	--	--
FEF25-75	[L/s]	4.22	4.79	114	--	--
FEF75-85	[L/s]	--	1.53	--	--	--
FEF.2-1.2	[L/s]	7.26	5.91	81	--	--
FEF25%	[L/s]	7.95	7.47	94	--	--
FEF50%	[L/s]	5.78	5.65	98	--	--
FEF75%	[L/s]	2.98	1.93	65	--	--
FEV.5/FVC	[%]	--	76.35	--	--	--
FEV1/FVC	[%]	84.02	92.40	110	--	--
FEV3/FVC	[%]	97.00	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--
FET	[S]	--	1.64	--	--	--
ExptTime	[S]	--	0.18	--	--	--
LungAge	[Y]	33.00	36.00	109	--	--
FIVC	[L]	--	3.13	--	--	--
PIFR	[L/s]	--	3.82	--	--	--
FIF25%	[L/s]	--	7.47	--	--	--
FIF50%	[L/s]	--	5.77	--	--	--
FIF75%	[L/s]	--	1.93	--	--	--
FIV.5	[L]	--	1.06	--	--	--
FIV1	[L]	--	2.67	--	--	--
FIV3	[L]	--	--	--	--	--
FIV.5/FIVC	[%]	--	33.73	--	--	--
FIV1/FIVC	[%]	--	85.25	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--

- Pre Medication Report :
 Spirometry within Normal range as FVC% >= 80 And FEV1/FVC% > 70

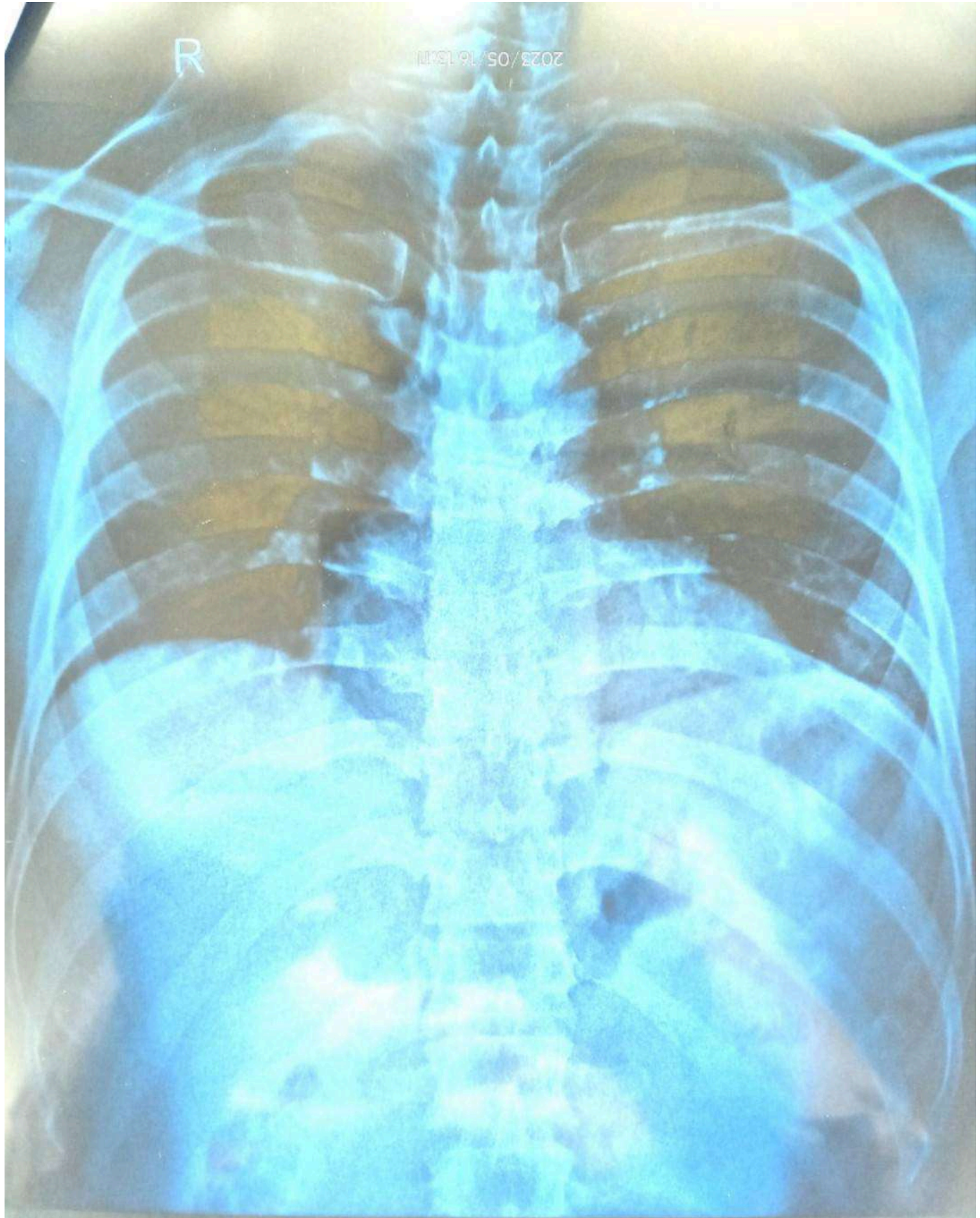
- Pre COPD Severity Report:

Test within Normal range
DR. DEEPTANSHU GANGULY
M.B.B.S., M.D.
 Reg. No. 66735 (WPMO)



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2023/05/16 13:11



GURU GOPIRAM HOSPITAL SITARAMPUR.

AVISEKH KR SINHA 33yrs/ CHE ST / PA M 25/7/22 007

Patients Name : AVISEKH KUMAR SINHA	Date of receipt : 25/07/22
Age : 33 years	Date of report : 25/07/22
Sex : Male / Female	(19)
Ref. by Dr : Self	

HAEMATOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	15.0	Male: - 13.8 - 17.2 Female: - 12.0 - 15.0	gm/dl
TLC	5950	4,000 - 11,000	cells/cu.mm
DLC			
i) Neutrophil	45	40-80	%
ii) Lymphocyte	47	20-40	%
iii) Monocyte	03	2 - 10	%
iv) Eosinophil	05	1 - 6	%
v) Basophil	00	< 1	%
ESR	12	0 - 20	mm/h

Blood Group : **" B "**

Rh Typing : **POSITIVE**


DR. Satabdi Mitra M.D. (PATH)

Consultant Pathologist

2023/05/16 13:11

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: - Anisekh Kumar Sinha Date: - 25-7-22

Age: - 33 y

Sex: - M

Interpretation of ECG:-

- Rate:- 75/min.
- Rhythm:- Regular
- Axis:-
- PR interval:- 178ms
- QRS complex:- 107ms
- QT interval:- 387ms
- ST segment:- 105ms
- T waves:- Inversion in L3

Impression:-

Repeat ECG.

DR. DEEPTANSHU GANGULY
M.B.B.S., M.D.
Reg. No. 54735 (WBMC)

Disclaimer: In no way this report can be utilized for any medico legal purpose. If there is any clinical discrepancy, this investigation may be repeated.

Patient Name:	MR AVISEKH KR SINHA	Age / Gender:	YR/ M
RefdBy:		Date:	25/08/2022

X-RAY OF CHEST(PA VIEW)

FINDINGS:-

Prominent bilateral hilar shadows.

Both the costo-phrenic and cardio-phrenic angles are normal.

Trachea and the mediastenum are in the midline.

Cardiac size is within normal limits.

There is no evidence of pleural effusion or pneumothorax.

Bony thoracic cage appears normal.

IMPRESSION:-

Prominent bilateral hilar shadows.

Clinical and lab correlation is recommended for confirmation



Dr K. Nerella
MD Radiologist
Consultant Radiologist
Reg Num-95228

Disclaimer: It is an online interpretation of medical imaging based on clinical data. modern machines/procedures have their own limitation. If there is any clinical discrepancy, this investigation may be repeated or reassessed by other tests. Patients identification in online reporting is not established, so in no way can this report be utilized for any medico legal purpose. Any error in typing should be corrected immediately.

ferro



GURU GOPIRAM HOSPITAL

(A Unit of Guru Gopiram Institute of Health Annexe Trust)

Ref. No. 39

Date : ... 25.07.22

Amar Kumar Bagdi Age - 25y / M

BP - 120/80 mm/Hg

W - 86.6 kg

SpO2 - 98% (RA)

PR - 73/min

T - (N)

- CXR - PA view

- ECG all leads.

check \rightarrow N/A

DR. DEEPTI GANGLY
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)

eye:

Regular checkup.

VA $\left\{ \begin{array}{l} 6/6, N_6 \\ 6/6, N_6 \end{array} \right.$

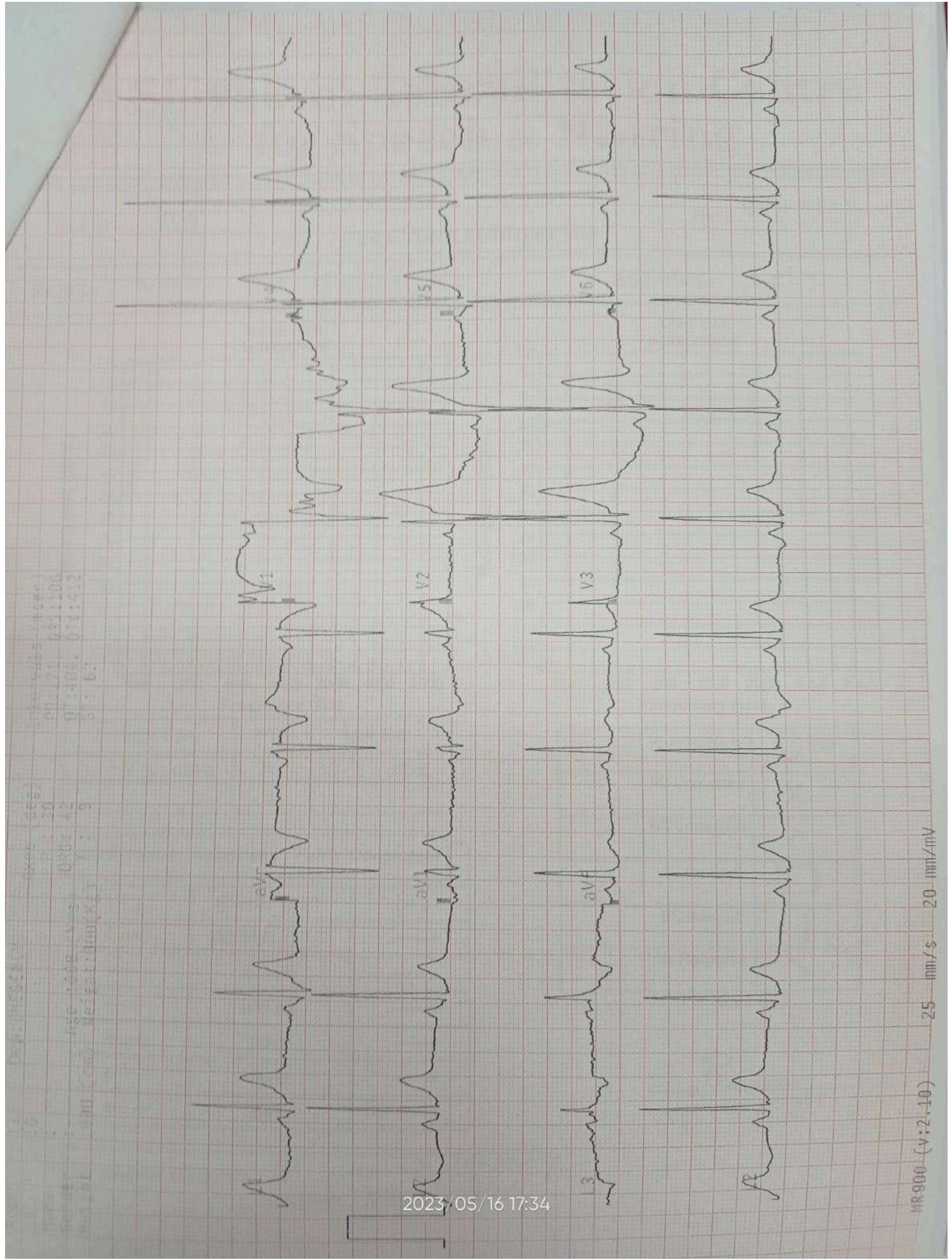
CV $\left\{ \begin{array}{l} \text{only 1st plate can} \\ \text{identify.} \end{array} \right.$

only 1st plate
can identify.

Dr. Kriti Srivastav
B.OPTM

Regd. No. - 15149

2023/05/16 17:33



Shivakshi Rehabilitation Centre for Speech & Hearing

Ref. No. 39

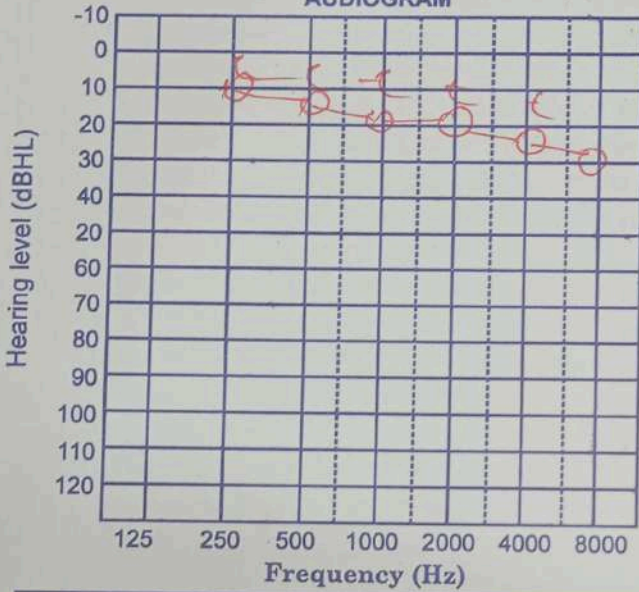
Date 25/07/22

PURE TONE AUDIOMETRY

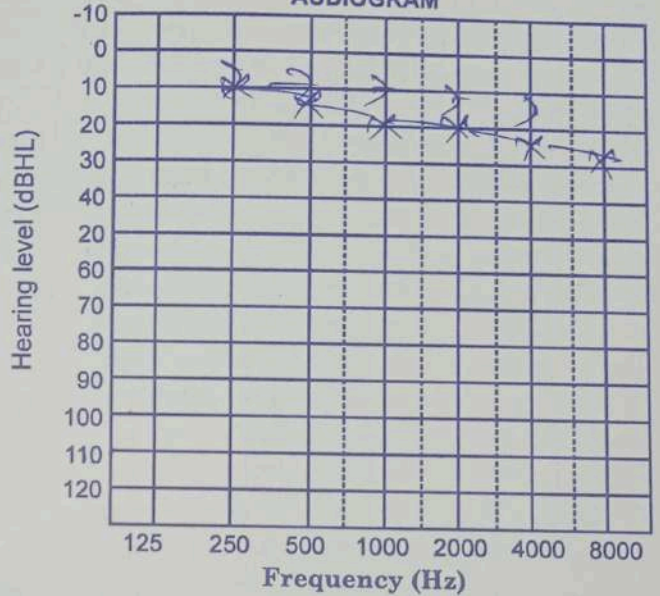
NAME: AMAR KR. BAUDI

AGE/SEX: 25 M

RIGHT EAR
AUDIOGRAM



LEFT EAR
AUDIOGRAM



Right Ear	PTA	Left Ear
18-20 : dBHL	I	18-20 : dBHL
	II	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	×
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

PRAVIN KUMAR
ASST. AUDIOLOGIST
R... 3731

Provisional Diagnosis: Bilateral hearing sensitivity with normal findings

Amalika,
...

2023/05/16 17:34

AMAR KUMAR BAGDI

rs / Male / Ht 170 Cms / 86 Kgs / Non-Smoker

FVC TEST

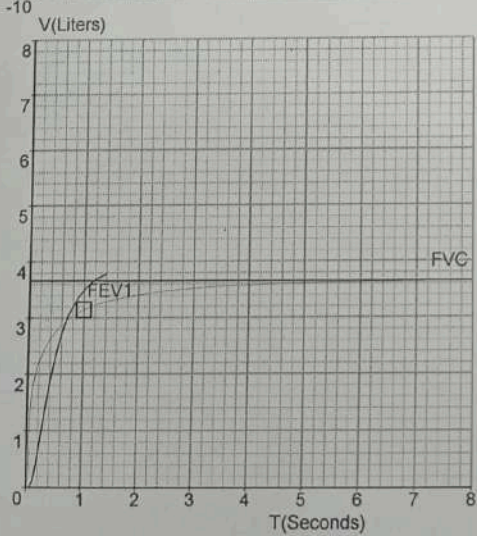
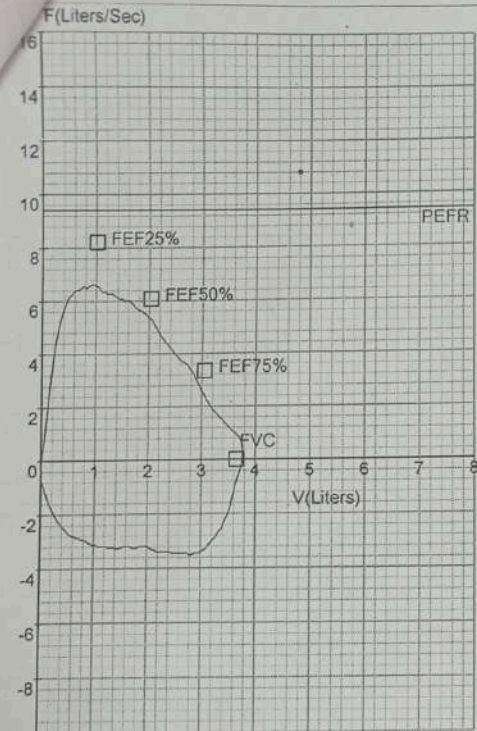
Date: 25-07-2022 (T1)

Pred Eqn : CLARITY

Eth.Corr : 100

Temp : 0°C

Ref By : NONE



Parameter	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.66	3.77	103	--	--
FEV1	[L]	3.15	3.61	115	--	--
FEV.5	[L]	--	2.76	--	--	--
FEV3	[L]	3.55	--	--	--	--
FEV6	[L]	--	--	--	--	--
PEFR	[L/s]	9.38	6.60	70	--	--
FEF25-75	[L/s]	4.62	5.29	115	--	--
FEF75-85	[L/s]	--	2.67	--	--	--
FEF.2-1.2	[L/s]	7.91	5.91	75	--	--
FEF25%	[L/s]	8.18	7.51	92	--	--
FEF50%	[L/s]	6.07	6.33	104	--	--
FEF75%	[L/s]	3.34	3.51	105	--	--
FEV.5/FVC	[%]	--	73.15	--	--	--
FEV1/FVC	[%]	85.93	95.88	112	--	--
FEV3/FVC	[%]	97.00	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--
FET	[S]	--	1.34	--	--	--
ExpiTime	[S]	--	0.24	--	--	--
LungAge	[Y]	25.00	21.00	84	--	--
FIVC	[L]	--	3.80	--	--	--
PIFR	[L/s]	--	3.52	--	--	--
FIF25%	[L/s]	--	7.50	--	--	--
FIF50%	[L/s]	--	6.51	--	--	--
FIF75%	[L/s]	--	4.10	--	--	--
FIV.5	[L]	--	0.69	--	--	--
FIV1	[L]	--	2.35	--	--	--
FIV3	[L]	--	--	--	--	--
FIV.5/FIVC	[%]	--	18.10	--	--	--
FIV1/FIVC	[%]	--	61.88	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--

- Pre Medication Report :

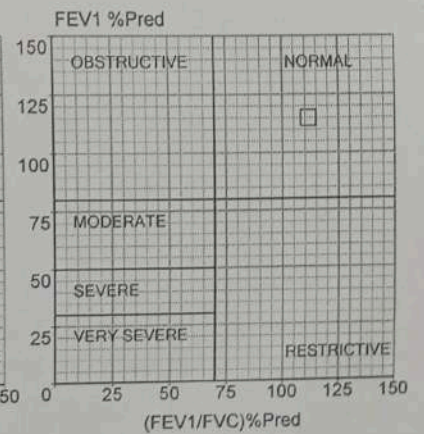
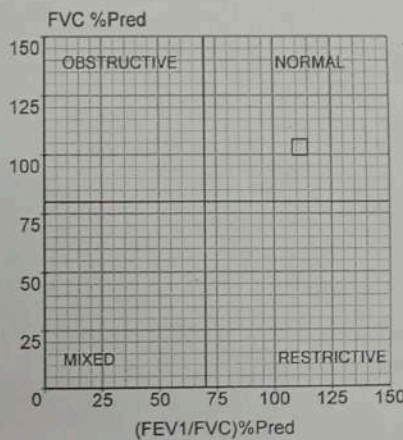
Spirometry within Normal range as FVC% >= 80 And FEV1/FVC% > 70

- Pre COPD Severity Report:

Spirometry within Normal range

DR. DESHVIK KUMAR
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)

- Doctor's Comments :



2023/05/16 17:34

NONE
NA

Patients Name : AMAR KUMAR BAGDI	Date of receipt : 25/07/22
Age 31 : years	Date of report : 25/07/22
Sex : <input checked="" type="checkbox"/> Male / Female	(39)
Ref. by Dr : Self	

HAEMATOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	15.6	Male: - 13.8 -17.2 Female:-12.0 – 15.0	gm/dl
TLC	9000	4,000 – 11,000	cells/cu.mm
DLC			
i) Neutrophil	48	40-80	%
ii) Lymphocyte	38	20-40	%
iii) Monocyte	02	2 - 10	%
iv) Eosinophil	12	1 - 6	%
v) Basophil	00	< 1	%
ESR		0 – 20	mm/h

Blood Group " **O** "

Rh Typing **POSITIVE**

Smitra
DR. Satabdi Mitra M.D. (PATH)
Consultant Pathologist

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: - Anwar Kumar Bagdi

Date: -

Age: - 25y

Sex: -

Interpretation of ECG:-

- Rate:- 75/min
- Rhythm:- Regular
- Axis:- (N)
- PR interval:- 171ms
- QRS complex:- 100ms
- QT interval:- 407ms
- ST segment:- 63ms
- T waves:- Inversion in L3

Impression:-

Repeat ECG.

2023/05/16 17:34

DR. DEEPTANOSHU GANGULY
M.B.B.S., M.D.
Reg. No. 66735 (WBM.),

Disclaimer: In no way this report can be utilized for any medico legal purpose. If there is any clinical discrepancy, this investigation may be repeated or reassessed.



GURU GOPIRAM HOSPITAL

(A Unit of Guru Gopiram Institute of Health Annexe Trust)

Ref. No. 70

Date: 25.07.22

Ajay Kumar Singh Age - 45y / M

WT → 69.9kg

SpO₂ → 97%

PR → 77/M

BP → 110/80 mmHg

Ani 5, eye, d, 62°

chest → normal

Uo - Acidotic

Adv

① Tab. Ranta (150)
1x 100pc x 20d

② Tab. Adv & gold
1x 100pc x 20d

③ Attus eye 0.1%

- CXR - PA view

- ELC - all lead

DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.
REG. No. 66735 (WBMC)

Cl. - Dov. - PSE

MA $\left\{ \begin{array}{l} 6/24P. \\ 6/24P. \end{array} \right.$

Refer to Hospital

Sign:

Dr. Kriti Srivastav
B.OPTM
Regd. No. - 131491210019

MR 900 (v:2.10) 25 mm/s 20 mm/mV
 L1 L2 L3 L4
 V1 V2 V3 V4 V5 V6
 PR: 160ms QRS: 80ms QT: 340ms
 QTc: 38ms ST-T: Normal





Shivakshi Rehabilitation Centre for Speech & Hearing

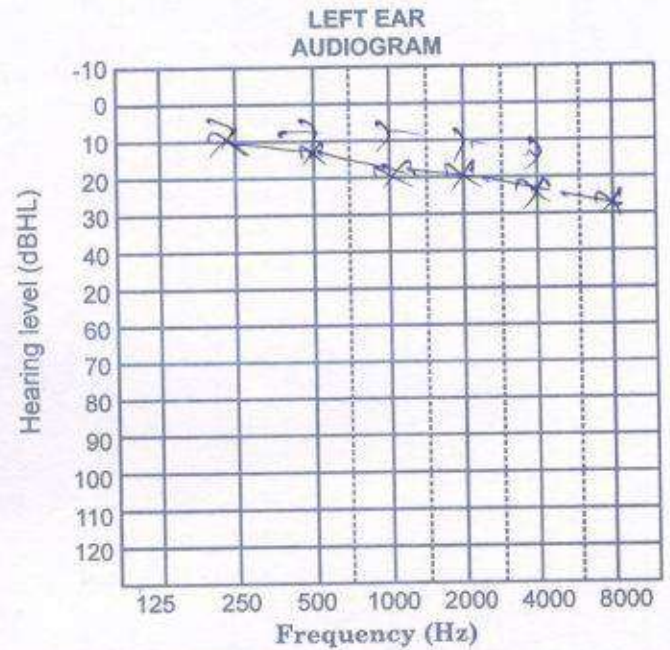
Ref. No. 70

Date 28/03/22

PURE TONE AUDIOMETRY

NAME: AJAY KR. SINGH

AGE/SEX: 45m



Right Ear	PTA	Left Ear
<u>18-3</u> : dBHL	<u>I-</u>	<u>18-3</u> : dBHL
	<u>II</u>	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	X
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

PK KUMAR
ASST AUDIOLOGIST
Reg. No- B43731

Provisional Diagnosis : B/c - Hearing Loss
within normal limit.

Counseling
following

70 - AJAY KUMAR SINGH

55 Years / Male / Ht 168 Cms / 69 Kgs / Non-Smoker

FVC TEST

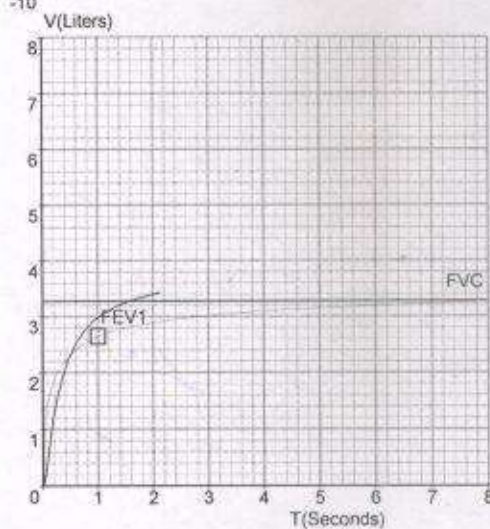
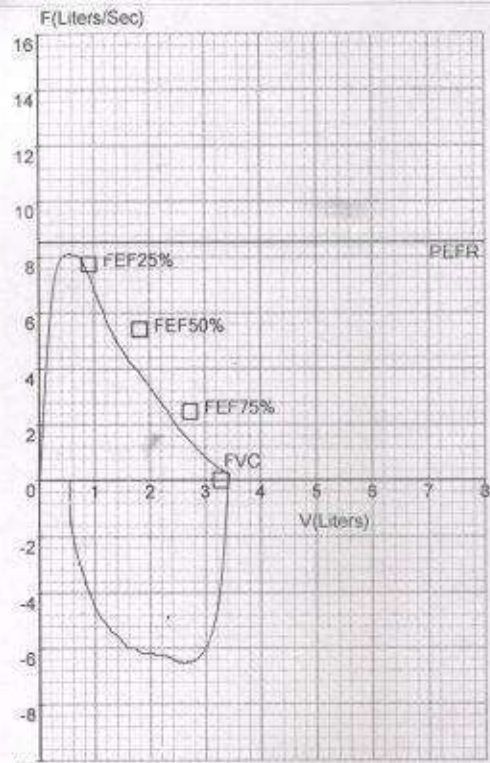
Date: 02-08-2022 (T1)

Pred Eqn : CLARITY

Eth.Corr : 100

Temp : 0°C

Ref By : NONE



Parameter	Unit	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.38	3.43	105	--	--	--
FEV1	[L]	2.55	3.01	114	--	--	--
FEV.5	[L]	--	2.40	--	--	--	--
FEV3	[L]	3.13	--	--	--	--	--
FEV6	[L]	--	--	--	--	--	--
PEFR	[L/s]	8.53	8.11	95	--	--	--
FEF25-75	[L/s]	3.68	4.34	118	--	--	--
FEF75-85	[L/s]	--	1.42	--	--	--	--
FEF.2-1.2	[L/s]	6.45	7.13	111	--	--	--
FEF25%	[L/s]	7.71	8.45	110	--	--	--
FEF50%	[L/s]	5.42	4.53	84	--	--	--
FEF75%	[L/s]	2.49	1.78	72	--	--	--
FEV.5/FVC	[%]	--	69.92	--	--	--	--
FEV1/FVC	[%]	80.64	87.72	109	--	--	--
FEV3/FVC	[%]	97.00	--	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--	--
FET	[S]	--	2.01	--	--	--	--
ExptTime	[S]	--	0.09	--	--	--	--
LungAge	[Y]	45.00	39.00	87	--	--	--
FVC	[L]	--	2.88	--	--	--	--
PIFR	[L/s]	--	6.52	--	--	--	--
FIF25%	[L/s]	--	9.13	--	--	--	--
FIF50%	[L/s]	--	5.85	--	--	--	--
FIF75%	[L/s]	--	3.69	--	--	--	--
FIV.5	[L]	--	2.46	--	--	--	--
FIV1	[L]	--	--	--	--	--	--
FIV3	[L]	--	--	--	--	--	--
FIV.5/FVC	[%]	--	85.24	--	--	--	--
FIV1/FVC	[%]	--	--	--	--	--	--
FIV3/FVC	[%]	--	--	--	--	--	--

- Pre Medication Report :

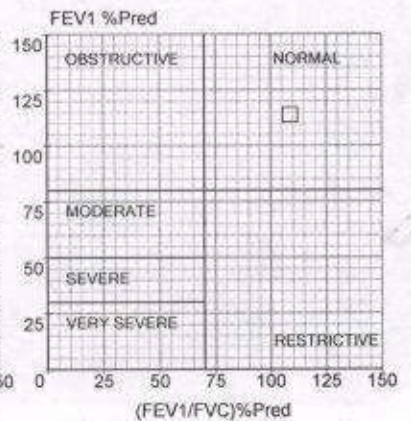
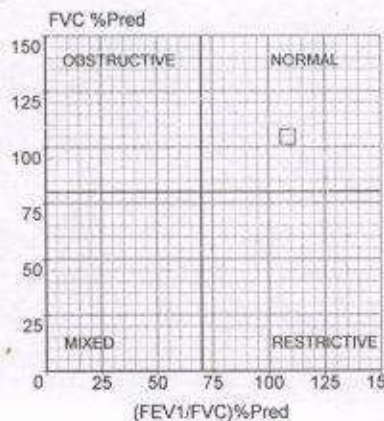
Spirometry within Normal range as FVC% \geq 80 And FEV1/FVC% $>$ 70

- Pre COPD Severity Report:

Test within Normal range

DR. DEERTANGSHU GANGULY
M.B.S., M.D.
Reg. No. 56735 (WBMC)

- Doctor's Comments :



Patients Name : <i>Ajay Kumar Singh</i>	Date of receipt : <i>25/07/22</i>
Age : <i>45</i> years	Date of report : <i>25/07/22</i>
Sex : <input checked="" type="checkbox"/> Male / <input type="checkbox"/> Female	
Ref. by Dr : <i>Self</i>	

(70)

HAEMATOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	<i>13.7</i>	Male: - 13.8 - 17.2 Female: - 12.0 - 15.0	gm/dl
TLC	<i>6100</i>	4,000 - 11,000	cells/cu.mm
DLC			
i) Neutrophil	<i>57</i>	40-80	%
ii) Lymphocyte	<i>37</i>	20-40	%
iii) Monocyte	<i>02</i>	2-10	%
iv) Eosinophil	<i>04</i>	1-6	%
v) Basophil	<i>00</i>	<1	%
ESR	<i>20</i>	0-20	mm/h

Blood Group "*A*"

Rh Typing *Positive*

Smitra
DR. Satabdi Mitra M.D. (PATH)
Consultant Pathologist

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: - *Ajay K.R. Singh*

Date: -

Age: -

Sex: - *M*

Interpretation of ECG:-

- Rate:- *75/min*
- Rhythm:- *Regular*
- Axis:- *? LAD*
- PR interval:- *152ms*
- QRS complex:- *126ms*
- QT interval:- *44ms*
- ST segment:- *80ms*
- T waves:- *Inversion in L3*

Impression:- *Repeat ECG.*

DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.
Reg. No. 66725 (WBMC)

Ref. No.07.....

Date : 26.07.22

Amal Bawri Age - 38y / M

WT - 54.8 kg

SpO2 - 95% (RA)

PR - 67 / M

BP - 130/90 mmHg

Adv

① CXR - PA view

② ECG - all leads

Ani, S, eye, di, od

Chol -> NAD
Uo ->

③ Tab. Melcol (500)
1000 x 7D

DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)

Regular checkup.

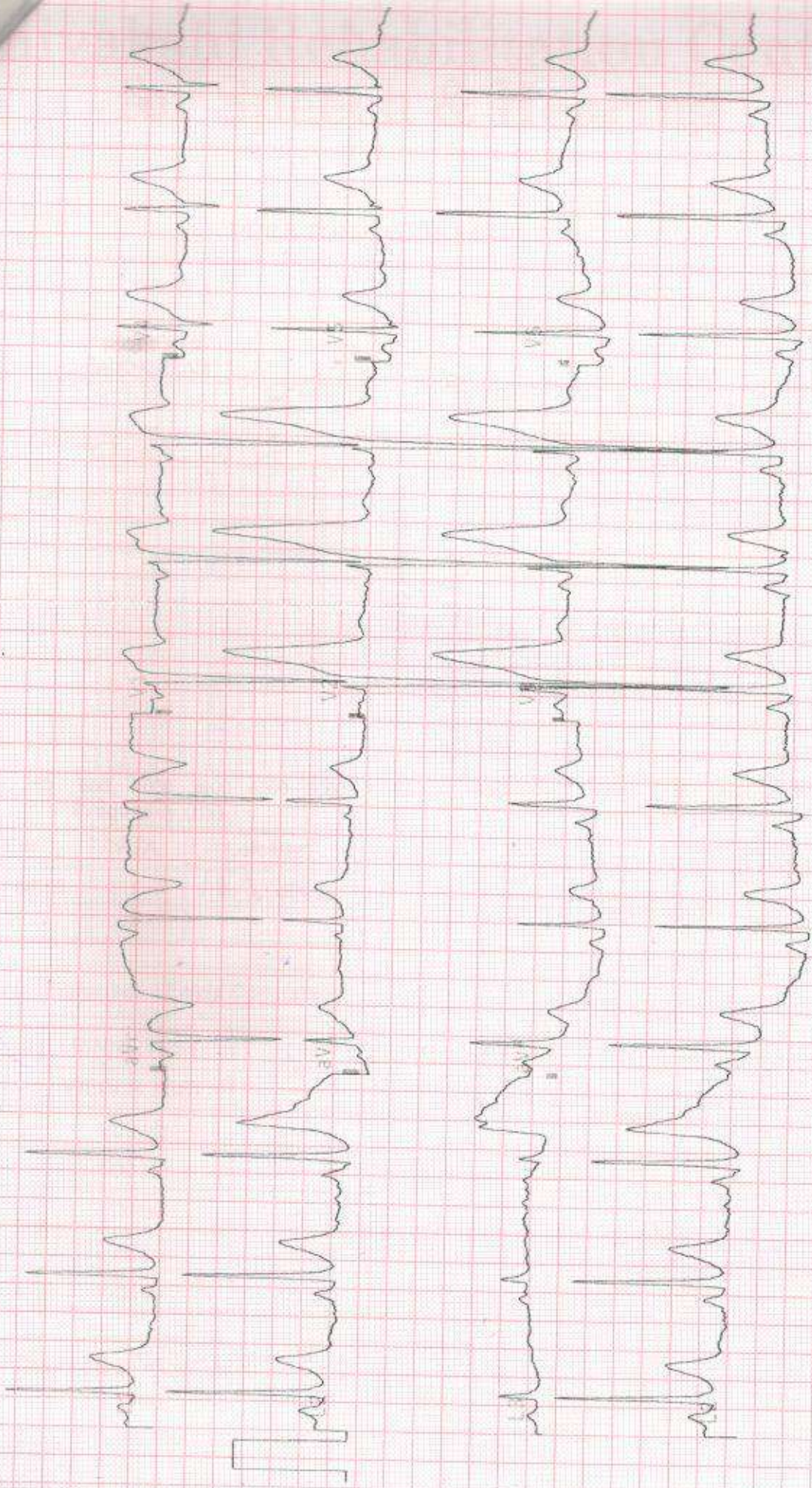
VA -> b/b, N6P.
b/b, N6P.

CV -> normal
normal.

Dr. Kirti Srivastava
B.OPTM
Regd. No. - 131491210019

Plan -> O (Pbk) b/b

Neuro Add -> +1.00 DS. (Pbk) N6



Anivakshi Rehabilitation Centre for Speech & Hearing

Ref. No. 03

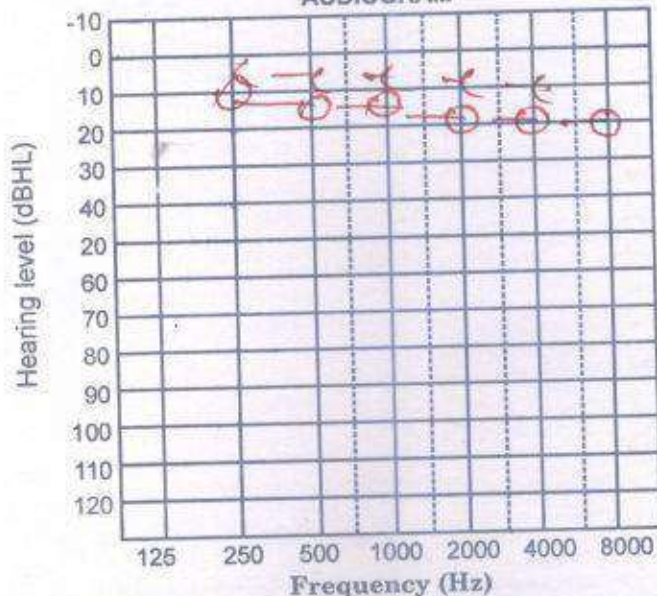
Date 24/02/22

PURE TONE AUDIOMETRY

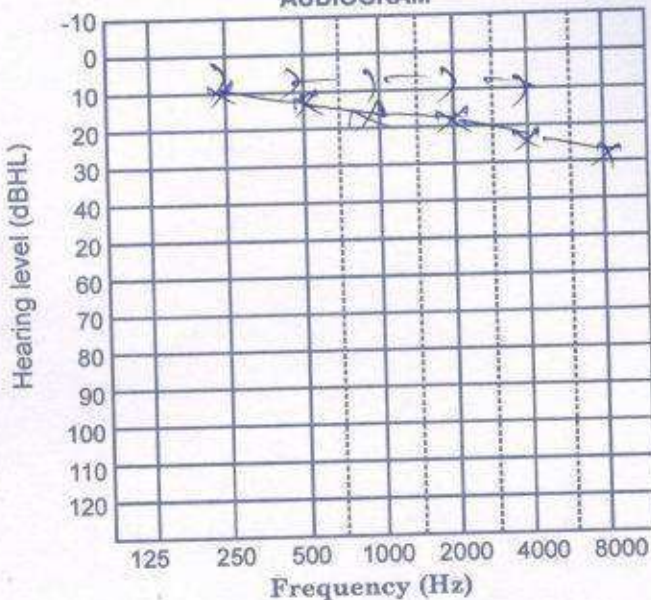
NAME: AMAL BAURI

AGE/SEX: 38/m

RIGHT EAR
AUDIOGRAM



LEFT EAR
AUDIOGRAM



Right Ear	PTA	Left Ear
16.6 : dBHL	I	18.3 : dBHL
	II	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	X
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

Provisional Diagnosis: BC-Hearing Sensitivity within normal limits.

Counselor
Amal To

REKHA SHARMA
ASST. AUDIOLOGIST
Reg No. 543731

BAURI
 / Ht 168 Cms / 75 Kgs / Non-Smoker

FVC TEST

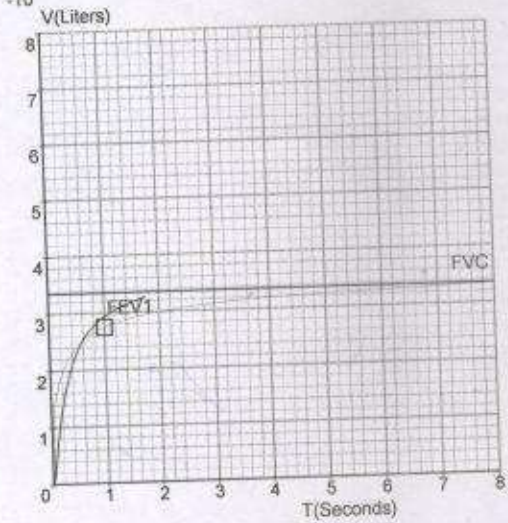
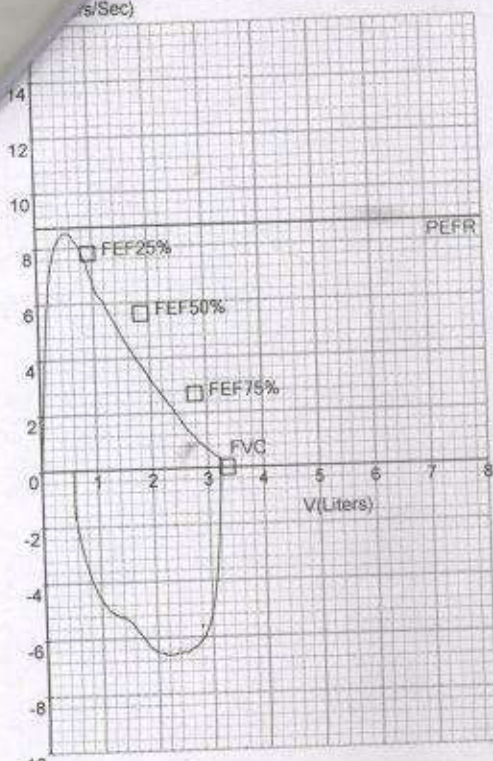
Date: 02-08-2022 (T1)

Pred Eqn : CLARITY

Eth.Corr : 100

Temp : 0°C

Ref By : NONE

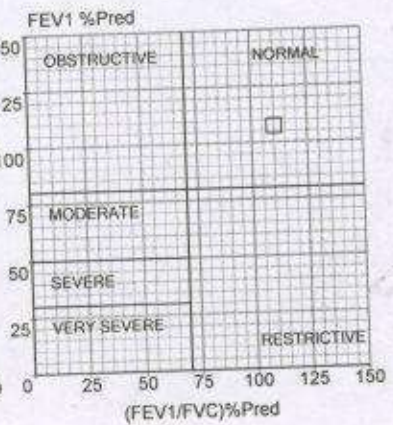
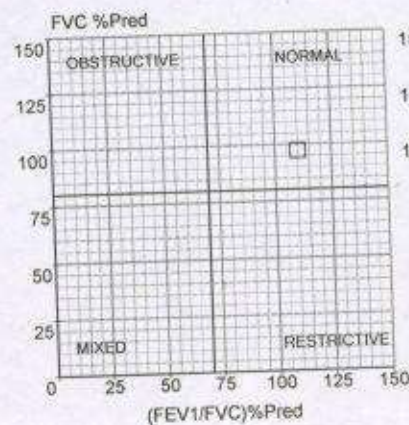


Parameter	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.35	3.26	97	--	--
FEV1	[L]	2.75	2.95	107	--	--
FEV.5	[L]	--	2.38	--	--	--
FEV3	[L]	3.25	--	--	--	--
FEV6	[L]	--	--	--	--	--
PEFR	[L/s]	8.71	8.53	98	--	--
FEF25-75	[L/s]	3.90	4.59	118	--	--
FEF75-85	[L/s]	--	1.58	--	--	--
FEF.2-1.2	[L/s]	6.79	7.30	108	--	--
FEF25%	[L/s]	7.81	8.72	112	--	--
FEF50%	[L/s]	5.57	4.89	88	--	--
FEF75%	[L/s]	2.69	2.00	74	--	--
FEV.5/FVC	[%]	--	73.08	--	--	--
FEV1/FVC	[%]	82.09	90.44	110	--	--
FEV3/FVC	[%]	97.00	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--
FET	[S]	--	1.67	--	--	--
ExpiTime	[S]	--	0.07	--	--	--
LungAge	[Y]	40.00	37.00	93	--	--
FVC	[L]	--	2.69	--	--	--
PIFR	[L/s]	--	6.63	--	--	--
FIF25%	[L/s]	--	9.53	--	--	--
FIF50%	[L/s]	--	6.51	--	--	--
FIF75%	[L/s]	--	4.09	--	--	--
FIV.5	[L]	--	2.46	--	--	--
FIV1	[L]	--	--	--	--	--
FIV3	[L]	--	--	--	--	--
FIV.5/FVC	[%]	--	91.44	--	--	--
FIV1/FVC	[%]	--	--	--	--	--
FIV3/FVC	[%]	--	--	--	--	--

- Pre Medication Report :
 Spirometry within Normal range as FVC% >= 80 And
 FEV1/FVC% > 70

- Pre COPD Severity Report:
 Pre Test within Normal range

DR. DEEPTA YASHU GANGULY
 M.B.B.S., M.D.
 Doctor's Reg. No. 08105 (W/BMC)



NONE
 NA

Patients Name : <i>Amal Bouri</i> Age : <i>38</i> years Sex : <i>Male / Female</i> Ref. by Dr : <i>Self</i>	Date of receipt : <i>26/07/22</i> Date of report : <i>26/07/22</i>
--	---

(7)

HAEMATOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	<i>14.0</i>	Male: - 13.8 - 17.2 Female: - 12.0 - 15.0	gm/dl
TLC	<i>5900</i>	4,000 - 11,000	cells/cu.mm
DLC			
i) Neutrophil	<i>44</i>	40-80	%
ii) Lymphocyte	<i>48</i>	20-40	%
iii) Monocyte	<i>03</i>	2 - 10	%
iv) Eosinophil	<i>05</i>	1 - 6	%
v) Basophil	<i>00</i>	< 1	%
ESR	<i>19</i>	0 - 20	mm/h.

Blood Group "*B₂*"

Rh Typing *Positive*

[Signature]
 DR. Satabdi Mitra M.D. (PATH)
 Consultant Pathologist

K.S

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: - Anmol Bawani

Date: - 26-7-22

Age: - 38y

Sex: - M

Interpretation of ECG:-

- Rate:- 75/min
- Rhythm:- Regular
- Axis:- (M)
- PR interval:- 175ms
- QRS complex:- 110ms
- QT interval:- 394ms
- ST segment:- 91ms
- T waves:- ?

Impression:-

Tall T.

DR. DEEPTANGU GANGULY
M.B.B.S. M.D.
Reg. No. 66135 (WBMC)



GURU GOPIRAM HOSPITAL

(A Unit of Guru Gopiram Institute of Health Annexe Trust)

Ref. No.83.....

Date : 25.07.22

Abinash prasad Age - 24y/14

WT → 68.3 kg

SpO₂ → 97%

PR → 68/110

BP → 120/80 mmHg

AS

Ant. J. eye. U₁, O₂

To attend eye op

Mo - Burning sensation
in eye.

DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)

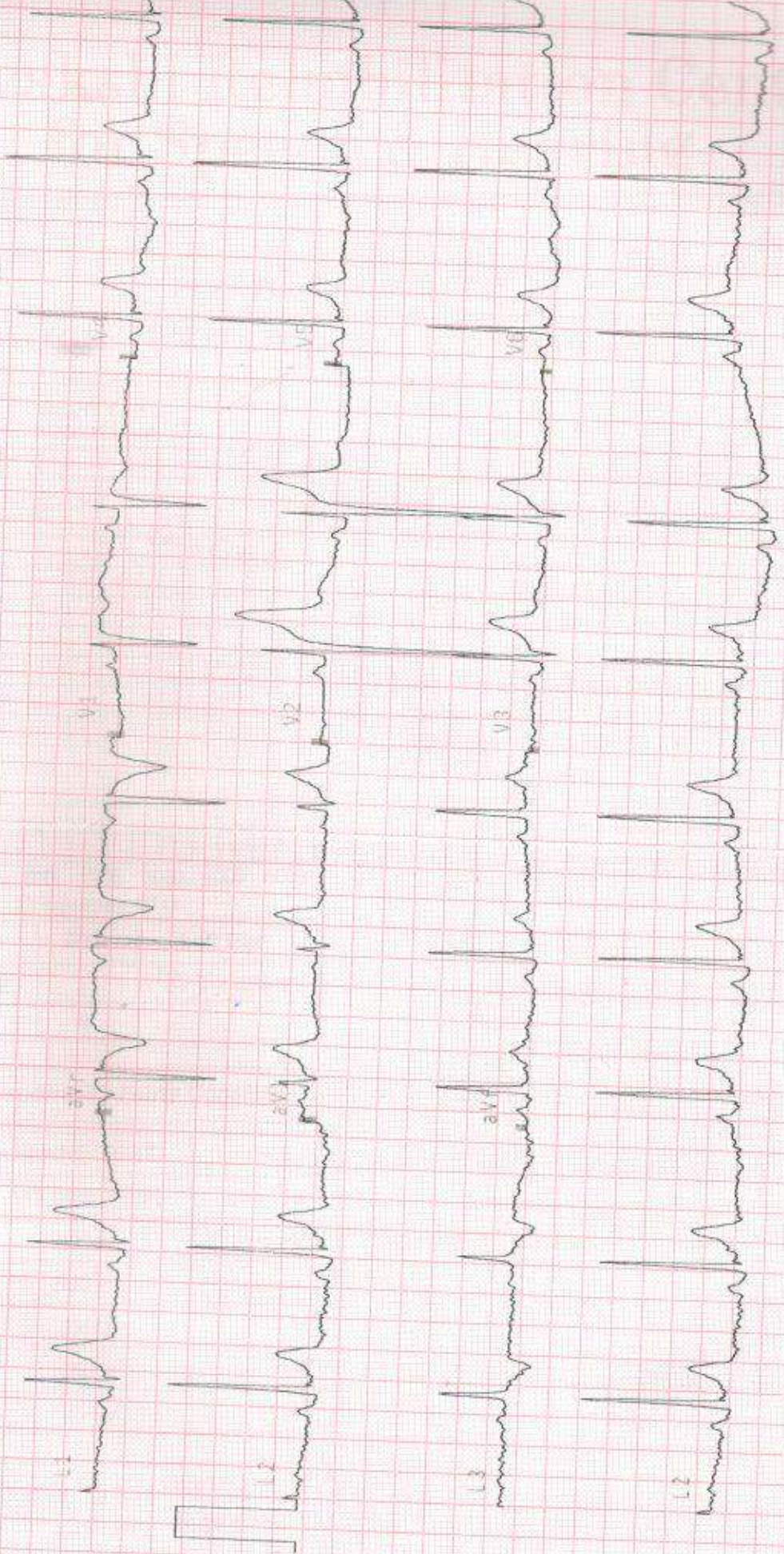
Regular checkup.

VA → 6/6, N6
6/6, N6

CV → normal
normal.

Dr. Kriti Srivastav
B.OPTM
DR. DEEPTANGSHU GANGULY
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)

NAME: [unclear] A. [unclear]
 SEX: [unclear]
 AGE: [unclear]
 DATE: [unclear]
 TIME: [unclear]
 HOSPITAL: [unclear]
 PHYSICIAN: [unclear]



MR 900 (V:2.10) 25 mm/s 20 mm/mV

Shivakshi Rehabilitation Centre for Speech & Hearing

Ref. No. 83

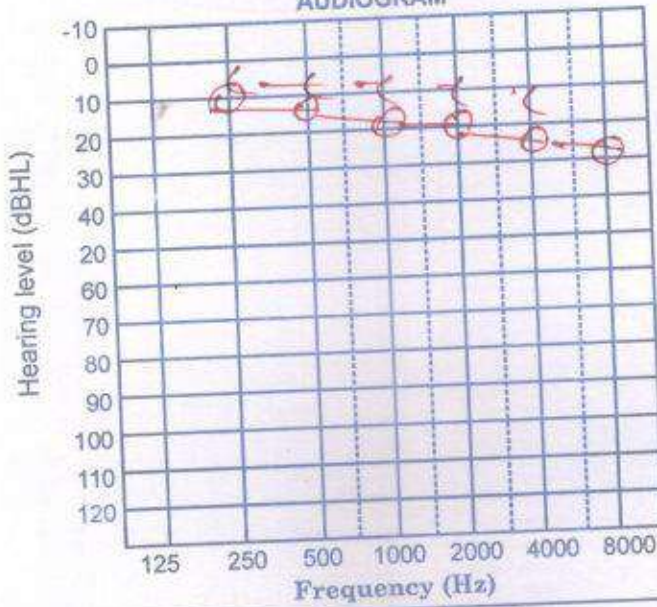
Date 25/02/22

PURE TONE AUDIOMETRY

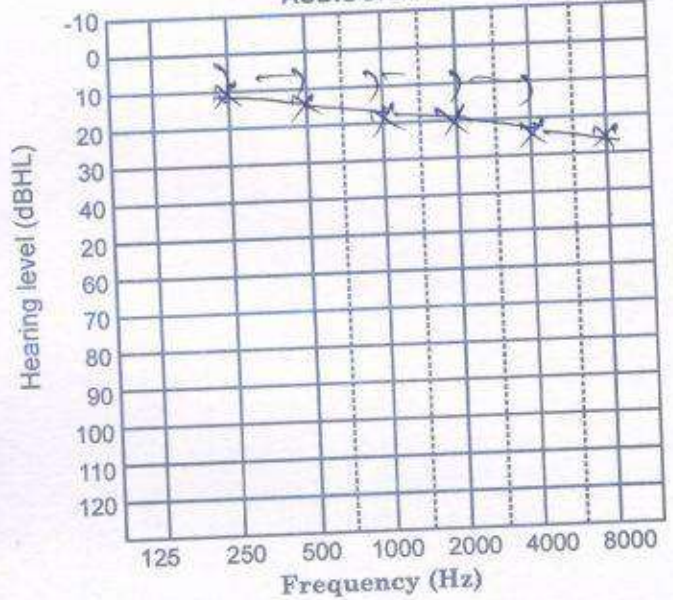
NAME: ABENUSH PRASAD

AGE/SEX: 24/m

RIGHT EAR
AUDIOGRAM



LEFT EAR
AUDIOGRAM



Right Ear	PTA	Left Ear
<u>18.3</u> : dBHL	<u>18.3</u>	<u>18.3</u> : dBHL
	<u>18</u>	

(Rt) Ear	SYMBOLS	(Lt) Ear
○	AC Unmasked	X
<	BC Unmasked	>
△	AC masked	□
[BC masked]
↙	No Response	↘

Audiometric responses : Fairly Consistent

(+)	RINNE TEST	(+)
←	WEBER TEST	→
←	250 Hz	→
←	500 Hz	→
←	1kHz	→
←	2kHz	→
←	4kHz	→

Provisional Diagnosis: HL - Hearing sensitivity within normal limits,

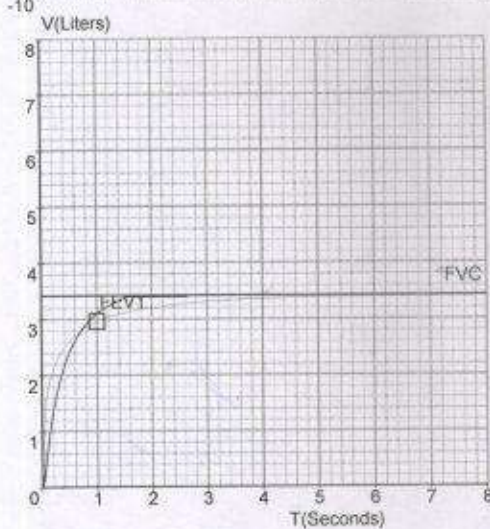
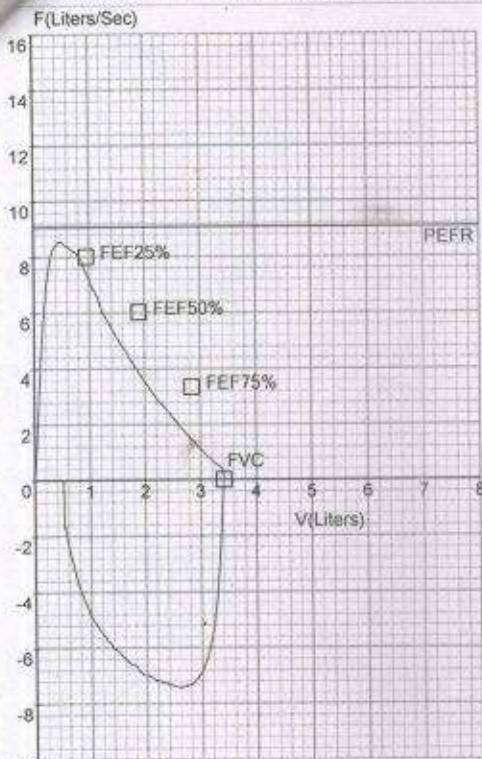
conell +
shilpa

Pravin Kumar
ASST AUDIOLOGIST
Reg No- B43731

ABINASH PRASAD
 45 years / Male / Ht 165 Cms / 64 Kgs / Non-Smoker

FVC TEST
 Date: 02-08-2022 (T1)

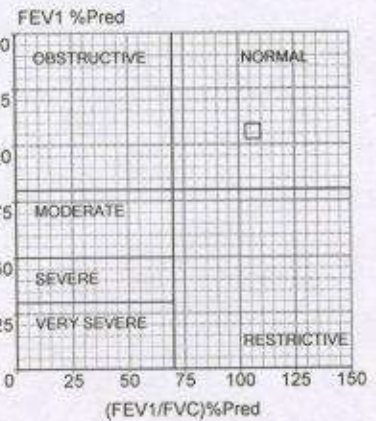
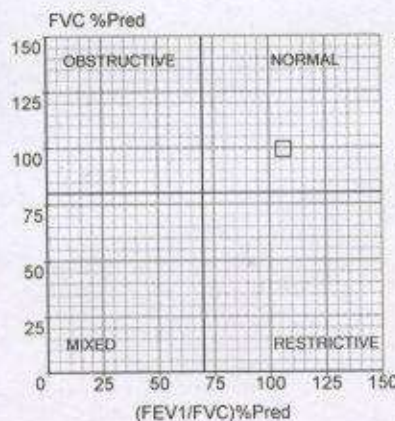
Pred Eqn : CLARITY Eth.Corr : 100 Temp : 0°C
 Ref By : NONE



Parameter	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.42	3.40	99	--	--
FEV1	[L]	2.97	3.13	106	--	--
FEV.5	[L]	--	2.46	--	--	--
FEV3	[L]	3.32	--	--	--	--
FEV6	[L]	--	--	--	--	--
PEFR	[L/s]	9.06	8.55	94	--	--
FEF25-75	[L/s]	4.57	4.69	103	--	--
FEF75-85	[L/s]	--	1.79	--	--	--
FEF.2-1.2	[L/s]	7.72	7.47	97	--	--
FEF25%	[L/s]	8.03	8.85	110	--	--
FEF50%	[L/s]	5.97	5.05	85	--	--
FEF75%	[L/s]	3.31	2.22	67	--	--
FEV.5/FVC	[%]	--	72.51	--	--	--
FEV1/FVC	[%]	86.62	92.22	106	--	--
FEV3/FVC	[%]	97.00	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--
FET	[S]	--	2.63	--	--	--
ExpiTime	[S]	--	0.07	--	--	--
LungAge	[Y]	24.00	23.00	96	--	--
FIVC	[L]	--	2.91	--	--	--
PIFR	[L/s]	--	7.44	--	--	--
FIF25%	[L/s]	--	9.31	--	--	--
FIF50%	[L/s]	--	6.40	--	--	--
FIF75%	[L/s]	--	3.94	--	--	--
FIV.5	[L]	--	2.76	--	--	--
FIV1	[L]	--	--	--	--	--
FIV3	[L]	--	--	--	--	--
FIV.5/FIVC	[%]	--	94.95	--	--	--
FIV1/FIVC	[%]	--	--	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--

- Pre Medication Report :
 Spirometry within Normal range as FVC% >= 80 And
 FEV1/FVC% > 70

- Pre COPD Severity Report:
 Pre Test within Normal range
DR. DEEPTI SINGH GANGLY
M.B.B.S., M.D.
Reg. No. 66735 (WBMC)
 - Doctor's Comments :



Patients Name : <u>Abinash Prasad</u> Age : <u>24</u> years Sex : <u>Male / Female</u> Ref. by Dr : <u>Self</u>	Date of receipt : <u>25/08/22</u> Date of report : <u>25/08/22</u>
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(83)

HAEMATOTOLOGY

Test description	Result	Reference range	Unit
Haemoglobin	<u>14.8</u>	Male: - 13.8 - 17.2 Female: - 12.0 - 15.0	gm/dl
TLC	<u>7600</u>	4,000 - 11,000	cells/cu.mm
DLC			
i) Neutrophil	<u>59</u>	40-80	%
ii) Lymphocyte	<u>34</u>	20-40	%
iii) Monocyte	<u>02</u>	2 - 10	%
iv) Eosinophil	<u>05</u>	1 - 6	%
v) Basophil	<u>00</u>	< 1	%
ESR	<u>10</u>	0 - 20	mm/h

Blood Group "A"

Rh Typing Positive

Sun
DR. Satabdi Mitra M.D. (PATH)
Consultant Pathologist

GURU GOPIRAAM HOSPITAL

(A Unit of Guru Gopiraam Institute of Health Annexe Trust)

Name: - *Abinash Prasad*

Date: - *15-7-22*

Age: - *34*

Sex: - *M*

Interpretation of ECG:-

- Rate:- *60/min*
- Rhythm:- *Regular*
- Axis:- *MA*
- PR interval:- *152ms*
- QRS complex:- *100ms*
- QT interval:- *369ms*
- ST segment:- *61ms*
- T waves:- *9mmension in L3*

Impression:-

Repeat ECG.

DR. DEEPTANGSHU GANGULY
MBBS., M.D.
Reg. No. 66735 (WBMC)

Disclaimer: In no way this report can be utilized for any medico legal purpose. If there is any clinical discrepancy, this investigation may be repeated or reassessed.

ANNEXURE-15

