

Date: 30/05/2023

To.

The Regional Officer,
Ministry of Environment, Forest & Climate Change,
Room No. 407, Aranya Bhawan, Near CH-3 Circle, Sector-10A
Gandhinagar, Gujarat-382010

Subject: Half Yearly Compliance to Environmental Clearance of Welspun Metallics Ltd.

Ref.: Environmental Clearance F.No. J-11011/136/2015-IA-II (I) dated 22/03/2021.

Dear Sir,

With reference to the above subject, we are submitting herewith the Half Yearly Environment Clearance Compliance report of Welspun Metallics Ltd. Anjar, Kutch, Gujarat for the period of October 2022 to March 2023.

Welspun Metallics Ltd. has been commissioned and started the production of its state of the art Blast Furnace (0.5 MTPA) and Sinter Plant (0.72MTPA) on 21/07/2022.

Thanking You.

Yours faithfully, For Welspun Metallics Ltd.

Vijay Khanzode Vice President

Encl: As above

CC:

- 1) Gujarat Pollution Control Board, Parayavaran Bhawan Sector-10-A, Gandhinagar
- 2) Regional Office ,Central Pollution Control Board, Parivesh Bhawan, Aatmajyoti Ashram Road, Opp.-VMC Ward office No.10,Subhanpura, Vadodara, Gujarat-390023.

Welspun Metallics Limited

7th Floor, Welspun House, Kamala Mills Compound, Lower Parel (West), Mumbai-400013, India.

Tel: +91 22 6613 6000 /2490 8000, F: +91 22 2490 8020

E-mail: companysecretary_wml@welspun.com Website: www.welspun.com

Registered Address: "Welspun City", Survey No.618/P,619/P,620/1,623 to 631/P, 632/P, 673 & 890

Village-Versamedi, Taluka- Anjar- 370 110, Dist. Kutch (Gujarat) India T. 02826 662222

Corporate Identity Number U27100GJ2020PLC115168

located at Village: Versamedi, Tehsil: Anjar, District: Kutch, Gujrat. (EC F No. J-11011/136/2015-IA-II(I) dated 22nd March 2021) Half Yearly Environment Clearance Compliance Report for M/s. Welspun Metallics Limited (WML)

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Continuous slab casting		Steel Melt Shop	Blast Furnace with matching pig casting facility (Along with Pig casting Machine of Capacity)	Sinter plant	Coke Oven & By products Recovery Plant (COBP)		Name of facility	Specific Condition	
1x1 Strand	LF- 2 x 165 T VD- 1x 165 T	BOF-2 x 165 T	1x 4300 m ³	1x496 m ²	2 x 58 No. Ovens	configuration	Exiting Units		
1.6		3.	ა. ა.4	5.28	1.37	Production MTPA	Units		
1	BOF-1x 165 T LF-1 x 165 T	(Un	1	1	ı	configuration	Proposed units		Conditions
1		(-)1.55	1	1	1	Production MTPA	d units		
1x1 Strand	LF- 1 x 165 T VD- 1x 165 T	BOF- 1x 165 T	1x 4300 m ³	1x496 m ²	2 x 58 No. Ovens	configuration	Total Units (Existing +Proposed)		
1.6 MTPA Slab		1.55	3.34	5.28	1.37	Production MTPA	nits roposed)		đ
TO ALLO			Point noted.						Compliance

12	=	10	9	00	7	6
Foundry Shop for Metal Fitting and other casting using Heating and Melting Furnace (Induction Furnace) and	DI Pipe Plant (Including Induction Furnaces, Convertor, Centrifugal Casting Machine, Annealing Furnace, Finishing Line.)	Cement grinding Plant	Lime/dolo Plant	Captive Power Plant	Rolling Mill Plate & Coil Mill	Continuous Billet casting
3 		I unit	2 x 600 TPD	Gas based	1 unit	1x 6 Stand
1	,	1.5	0.34	200 MW	1.37	1.4
1 Unit	2 unit	1 unit	(Un proposed) 1 x 600 TPD	I	1 unit	(Un proposed) (1 x 6 stand)
0.1 MTPA	0.5 (2x 0.25)	1.5	(-) 0.17	ļ	(-)1.37	(-)1.4
I Unit	2 unit	I unit	1 x 600 TPD	Gas based	r	1
0.1 MTPA	0.5	1.5	0.17	200 MW	0.0	0.0

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DI Pipe Plant (Including Induction Furnaces, Convertor, Centrifugal Casting Machine, Appealing Furnace and Friedling Line) has	A STALLOO	2 X 0.25 MTPA-0.5 MTPA	Ol Pipe Plant (Including Induction	0.
Noted.	Slab caster – Lx L Strand 1.6 MTPA	Siab caster -1 x I Strand 1.6 MTPA	Casting	, ,
Noted.	BOF - 1 x 165 T LF - 1 x 165 T VD - 1 x 165 T 1.55 MTPA	BOF - 2 x 165 T LF - 2 x 165 T VD - 1 x 165 T 1.55 MTPA	Steel Melt Shop	4.
Welspun Metallics Ltd (WML) has installed the Blast Furnace of capacity 0.5 MTPA.	1 x 4300 m3- 3.34 MTPA Hot Metal	1 x 4300 m3- 3.34 MTPA Hot Metal	Blast Furnace	
Welspun Metallics Ltd (WML) has installed the Sinter Plant of capacity 0.72MTPA.	1 x 496 sq m -5.28 MTPA	1 x 496 sq m -5.28 MTPA	Sinter Plant	10
			products Recovery Plant (COBP)	
Welspun Metallics Ltd (WML) has installed the coke oven plant of Capacity 0.25 MTPA.	2 X 58 No. Ovens -1.37 MTPA Gross Coke	2 X 58 No. Ovens -1.37 MTPA Gross Coke	Coke Ovens & By-	÷
			Units/Facilities	0
Noted.	Village Versamedi, Tehsil Anjar, District Kutch, Gujarat Latitude- 23° 6′23"N to 23° 7′53"N Longitude-70° 4′3"E to 70° 5′56"E	Village Versamedi, Tehsil Anjar, District Kutch, Gujarat Latitude- 23° 6'23"N to 23° 7'53"N Longitude-70° 4'3"E to 70° 5'56"E	Location	m
	Installation of 3.0 MTPA Integrated Steel Plant including 1.5 MTPA Cement Plant and 200MW CPP by by M/s Welspun Metallics Ltd., located at Village Versamedi, Tehsil Anjar, District Kutch, Gujarat	Installation of 3.0 MTPA Integrated Steel Plant including 1.5 MTPA Cement Plant and 200MW CPP by M/s Welspun Metallics Ltd., located at Village Versamedi, Tehsil Anjar, District Kutch, Gujarat	Title of the Project	>
Compliance status	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) Parent Company (WML)	Total Capacity as per EC recommended upper para 7 (ii)	Item	No.

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Process Description	Cement Grinding unit	Power Plant	Lime/dolo Calcining Plant 1 x 600 TPD	Foundry Shop for Metal Fitting and other casting using Heating and Melting Furnace (Induction Furnace) and Sand Moulding Facility	Furnaces, Convertor, Centrifugal Casting Machine, Annealing Furnace, Finishing Line.)	Item
 Production of coke in Coke Ovens Production of Sinter in Sinter plant 	1.5 MTPA	2 X 100 MW (Gas based) 165 MW BF- TRT, CDQ & Sinter Cooler 35 MW	2 x 600 TPD 0.17 MTPA	0.1 MTPA		Total Capacity as per EC recommended upper para 7 (ii)
 Production of coke in Coke Ovens Production of Sinter in Sinter plant 	1.5 MTPA	2 X 100 MW (Gas based) 165 MW BF- TRT, CDQ & Sinter Cooler 35 MW	1 x 600 TPD 0.17 MTPA	0.1 MTPA		Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) Parent Company (WML)
Noted.	Noted.	Noted.	Noted.	Noted.	already been commissioned & started Production.	Compliance status

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Requirement Raw Material		Item
231.58 ha (77.2 ha -33.3% Greenbelt) Iron Ore (Fines) – 4.08 MTPA Iron ore (Lump) – 1.91 MTPA Coking Coal – 2.01 MTPA Non Coking Coal – 0.09 MTPA PCI Coal – 0.64 MTPA	 Production of Steel through BF-BOF route, with Blast Furnace having hot metal production capacity of 3.34 MTPA followed by 1.6 MTPA slab casting Power generation through waste heat recovery. Cement Grinding unit based on BF Slag Production of DI Pipes using Blast furnace Hot metal from WML followed by desulphurization (if required) and scrap charging Superheating of molten metal in induction furnace, Magnesium treatment in convertor; Centrifugally casting of pipes using molten metal in CCMs; Heat treatment in annealing furnace to give ductility to the casted pipes. Cement lining, zinc and bitumen coatings & stampings 	Total Capacity as per EC recommended upper para 7 (ii)
(68.33 ha -33.3% Greenbelt) Iron Ore (Fines) – 4.08 MTPA Iron ore (Lump) – 1.88 MTPA Coking Coal – 2.01 MTPA Non Coking Coal – 0.09 MTPA	 Production of Steel through BF-BOF route, with Blast Furnace having hot metal production capacity of 3.34 MTPA followed by 1.6 MTPA slab casting Power generation through waste heat recovery. Cement Grinding unit based on BF Slag 	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) Parent Company (WML)
Noted.		Compliance status

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	Air Pollution Control	Pollution Witigation Measures	Pollutants			Requirement	Fuel	Requirement	Power	Requirement	Water											Item
based process gas cleaning in Sinter plant and CPP	 Dry fogging and bag filter based DE system in material handling Charging and pushing Emission control in coke ovens Electrostatic Precipitator (ESP) 	ation Measures	PM –273.1Kg/hr SO2 –551.8 Kg/hr NOx –869.3 Kg/hr	 Propane – 20 TPD Fuel Oil – 600 TPD 	 BF Gas (BFG) – 587155 Nm³/hr BOF Gas (BOFG) – 28310 Nm³/hr 		Coke Oven gas (COG) − 48127		211 MW		47232 m ³ /day (1755 m ³ /hr)	 Mg-6600 TPA Calcined Lime-600 TPA 	 Fe-si-16800 TPS 	 Zinc wire-2600 TPA 	 Steel scrap-0.08 MTPA 	 Dolomite – 0.51 MTPA 	 Limestone – 1.22 MTPA 				recommended upper para 7 (ii)	Total Capacity as per EC
 low NOx stage combustion burners 	 Dry fogging and bag filter based DE system in material handling Charging and pushing Emission control in coke ovens 		PM – 258.9 Kg/hr SO2 – 547 Kg/hr NOx – 862 Kg/hr	Propane – 20 TPD	 BF Gas (BFG) – 587155 Nm³/hr BOF Gas (BOFG) – 14155 Nm³/hr 		 Coke Oven gas (COG) – 48127 		195 MW		37224 m ³ /dav			 Calcined lime-600 TPAS 	 Dolomite – 0.41 MTPA 	 Limestone – 0.92 MTPA 	 PCI Coal – 0.64 MTPA 	Parent Company (WML)	Company (WDI)	Parent Company (WML) to New	in EC and subsequent partial	Facilities/ Utilities after amendment
METALL!	WML has installed the Dry Fogging system in material handling. Electrostatic Precipitator (ESP) based process gas cleaning and Bag Filter based DE system has already been installed.		Noted.				Noted.		Noted.		Noted.											Compliance status

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																	Control	Pollution	Noise											Item
	Periodical monitoring of work	in such a way that the noise	units will be designed/operated	 All the equipment in different 	designed for minimum vibration.	 The fans and ductwork will be 	дв (A).	Noise level at 1m from	houses.	 Noise absorber systems in pump 	operator's cabin.	the shift office and pulpit	 Design of absorber system for 	and taking necessary steps.	regular monitoring of vibration	speed rotating machines by	 Reducing vibration of high 	pressure gas/air pipelines.	 Plugging leakages in high- 	Annealing furnaces	 low NOx oxy-fuel burners in 	 Bag filter based DE system 	SMS	Cast house, stock house and	 ESP based DE systems in BF 				recommended upper para 7 (ii)	Total Capacity as per EC
(A).	level shall not exceed 85 dB	units will be designed/operated	 All the equipment in different 	vibration.	designed for minimum	 The fans and ductwork will be 	dB (A).	Noise level at Im from	pump houses.	 Noise absorber systems in 	operator's cabin.	the shift office and pulpit	 Design of absorber system for 	and taking necessary steps.	regular monitoring of vibration	speed rotating machines by	 Reducing vibration of high 	pressure gas/air pipelines.	 Plugging leakages in high- 	SMS	Cast house, stock house and	 ESP based DE systems in BF 	Sinter plant and CPP	based process gas cleaning in	 Electrostatic Precipitator (ESP) 	Parent Company (WML)	Company (WDI)	transfer of DI Pipe Plant from EC of	in EC and subsequent partial	Facilities/ Utilities after amendment
N Mer	NAT.														VA.				Point noted and are being complied.										×	Compliance status

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U		No.
Generation And Management		Item
0 0		rec
Zero Liquid Discharge outside plant boundary Effluent generated from coke ovens would be separately	Un-manned high noise zone will be marked as "High Noise Zone". In shops where measures are not feasible, attempts shall be made to provide operators with sound-proof enclosure to operate the system. Workers exposed to noise level will be provided with protection devices like earnuffs and will be advised to use them regularly, while at work. Workers exposed to noisy work place shall be provided with rotational duties. All workers will be regularly checked medically for any noise related health problem and if detected, they will be provided with alternative duty.	Total Capacity as per EC recommended upper para 7 (ii)
0 0	0 0 0 0 0 0	Facilit in transfe Pare
Zero Liquid Discharge outside plant boundary Effluent generated from coke ovens would be separately	Periodical monitoring of work zone noise and outside plant premises. Un-manned high noise zone will be marked as "High Noise Zone". In shops where measures are not feasible, attempts shall be made to provide operators with sound-proof enclosure to operate the system. Workers exposed to noise level will be provided with protection devices like earmuffs and will be advised to use them regularly, while at work. Workers exposed to noisy work place shall be provided with rotational duties. All workers will be regularly checked medically for any noise related health problem and if detected, they will be provided with alternative duty.	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) Parent Company (WML)
WML is a Zero Liquid Discharge plant. WML will treat the wastewater in our Common CETP of WIL.		Compliance status

4		No.
Solid and Hazardous Wastes		Item
		rec
All non-hazardous solid wastes shall be utilized in-house in Sinter Plant/BOF. BF/BOF Slag shall be utilized in house or sold to cement manufacturers or used for road construction.	treated in Biological Oxidation and Dephenolization (BOD) treatment unit for removal of phenolic compounds and cyanide Cooling tower blow downs and treated effluent from BOD plant of coke ovens would be taken to the CETP for further treatment and reuse as make-up water. Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level. ETP shall be provided for DI plant exclusively with the provision of safe handling of hazardous waste generated in DI plant.	Total Capacity as per EC recommended upper para 7 (ii)
0 0	0 0 0	Facili in transf Par
All non-hazardous solid wastes shall be utilized in-house in Sinter Plant/BOF. BF/BOF Slag shall be utilized in house or sold to cement manufacturers or used for road construction.	treated in Biological Oxidation and Dephenolization (BOD) treatment unit for removal of phenolic compounds and cyanide Cooling tower blow downs and treated effluent from BOD plant of coke ovens would be taken to the CETP for further treatment and reuse as make-up water. Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) Parent Company (WML)
	Hazarc and di Gujrat	
All non-hazardous solid wastes are being utilized in-house in Sinter Plant. BF Slag are being sold to cement manufacturers. All hazardous wastes are being handed over to authorized dealers for statutory norms.	Hazardous waste generated are being collected and disposed through authorized recycler of Gujrat Pollution Control Board.	Compliance status

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4 ETP sh provisio Plant 5 PM leve 6 100 % to ensured				3 Zn dı	2 Venti be in	1 CEM be re instal	Specific Condition	Sr.	
Plant Plant PM level from the stacks shall be less than 30 mg/Nm3 100 % use / recycle of solid waste generated in DI plant shall be ensured.	evel from the stacks shall be less than 30 mg/Nm3		ETP shall be provided for DI plant exclusively with the provision of safe handling of hazardous waste generated in DI	Zn dust monitoring in AAQ in DI plant shall. He carried out.	Ventilation system for odour control in bitumen coating area shall be included.	CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant	dition	Conditions	
Not applicable, DI plant is not part of this project.	K	We are maintaining PM level 30 mg/Nm3 from the all process stack.	Not applicable, DI plant is not part of this project.	Not applicable, DI plant is not part of this project.	Not applicable, as Bitumen coating is not occurring at our site.	We have already installed CEMS on all process stacks. The signal is being received in the plant control room for central control of APCDs installed in the plant. The connection of CEMS to Gujrat Pollution Control Board & Central Pollution Control board is under progress		Compliance	

8 Both plants 9 Validity of 10 More effic		Sr. No.
Both plants shall have their independent green belts Validity of split ECs shall be from Feb 2017. More efficient bags such as PTFE bags shall be used in the filter		Conditions
Point noted. Point noted. More efficient bags such as PTFE bags are being used in the filter bag house and	Point noted and will be complied	Compliance

Ui		4	w	2		Sr.
Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards	be provided as per CPCB guidelines for manual monitoring of manual monitoring of emissions.	Sampling facility at process stacks and at quenching towers shall	The cameras shall be installed at suitable location for 24*7 recording of battery emissions on the both sides of coke oven batteries and videos shall be preserved for at least one-month recordings.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	in Environment (Protection) Rules 1986 as amended from time to Control Board time. The CEMS and CAAQMS shall be connected to SPCB and online servers CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Conditions
M/s Welspun Metallics Ltd (WML) has installed ESP as well Bag Filters for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emissions standards.	manual monitoring of emissions.	Sampling facility at process stacks and at quenching towers shall Sampling facility at process stacks has been provided as per CPCB guidelines for	Point noted.	Point noted and are being complied.	Control Board is under progress. CAAQMS shall be connected to GPCB & CPCB online servers.	Compliance

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Monitor CO HC and 02 in flue gases of the coke oven battery to Point noted	Land-based APC system shall be installed to control coke pushing emissions.	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/agglomeration.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Secondary emission control system shall be provided at SMS Converters.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Conuntions
Point noted	Point noted and will be complied.	Point noted and will be complied.	M/s Welspun Metallics Ltd (WML) is using leakproof trucks/dumpers carrying coal & other raw materials and cover them with tarpaulin.	M/s Welspun Metallics Ltd (WML) is recycling & reusing iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the Sinter Plant.	Point noted and will be complied.	Point noted and will be complied.	Point noted and will be complied.	сопризисе

2		III	20	19	50	17	16	22	4		Sr.
The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 315t March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Water Quality monitoring and preservation	Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke.	The project proponent shall install Dry Gas Cleaning Plant with bag filter for Blast Furnace and SMS converter	Design the ventilation system for adequate air changes, as per- prevailing norms for all. tunnels, motor houses, Oil Cellars	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	The coke oven gas shall be subjected to desulphurization if the Sulphur content in the coal exceeds 1%.	In case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furans. Suitable NOx control facility shall be provided to meet the prescribed standards.	Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.	detect combustion efficiency and cross leakages in the combustion chamber.	Conditions
We are using fresh water from our sister company WIL.	Noted. WML is a Zero Liquid Discharge Plant.		Waste Heat Recovery Boiler has been installed & Power being generated.	Complied. M/s Welspun Metallics Ltd has installed dry Gas Cleaning Plant for Blast Furnace with bag filter.	Point noted.	Point noted.	Point noted.	Point noted.	Point noted.		Compliance

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Treated water from ETP of COBP shall not be used for coke quenching.	The project proponent shall practice rainwater harvesting to maximum possible extent.	CO2 injection shall be provided in GCP of SMS to reduce pH in circulating water to ensure optimal recycling of treated water for converter gas cleaning.	Tyre washing facilities shall be provided at the entrance of the plant gates.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Adhere to 'Zero Liquid Discharge'	The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;	numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Conditions
Point noted and will be complied.	Point noted and will be complied.	Point noted.	Point noted and Shall be complied.	Point noted and will be complied.	Sewage Treatment Plant shall be provided for treatment of Domestic waste water of M/s WML is sent to M/s WIL for further treatment. domestic wastewater to meet the prescribed standards.	Noted and agreed to complied.	Point noted.		Compliance

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5 Use hot charging of slabs and billets/blooms as far as possible	4 Use torpedo ladle for hot metal transfer as far as possible, not used, provide covers for open top ladles.	3 Waste heat shall be recovered from Sinter Plants coolers and Sinter Machines.		The project proponent shall provi	V. Energy Conservation measures	1 Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation And Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	IV. Noise monitoring and prevention	12 The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Water meters shall be provided at the inlet to all unit processes in the steel plants.	No.
as far as possible. Point noted and will be complied.	ir as possible. If ladles Point noted and will be complied.	ants coolers and Sinter Point noted.	be provided for coke Point noted.			the prescribed Noise Point noted and are being complied & report has been attached as a part of six- 2000 and report in this monthly compliance. ser of the Ministry as a		s to minimize water Point noted and will be complied. y segregation of used ng treated water.	water meters have been installed to all unit process in the steel plant.	Сотриансе

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7	Explore feasibility to install WHRS at Waste Gases from BF Noted stoves; Sinter Machine; Sinter Cooler, and all reheating furnaces and if feasible shall be installed.
×	Restrict Gas flaring to < 1%. Point noted and will be compl
9	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
10	Provide LED lights in their offices and residential areas. The company has provided L1
	Ensure installation of regenerative type burners on all reheating Noted. furnaces.
VI.	Waste management
-	An attrition grinding unit to improve the bulk density of BF Point noted granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.
2	Tar Sludge and waste oil shall be blended with coal charged in Point noted and will be complied coke ovens.
w	Carbon recovery plant to recover the elemental carbon present Point noted and being Practiced. in GCP slurries for use in Sinter plant shall be installed.
4	Waste recycling Plant shall be installed to recover scrap, metallic Point noted and flux for recycling to sinter plant and SMS.
Un	Used refractories shall be recycled as far as possible. Point noted and will be complied.
5	SMS slag after metal recovery in waste recycling facility shall be complied conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
7	100% utilization of fly ash shall be ensured. All the fly ash shall Point noted and will be complied be provided to cement and brick manufacturers for further and Memorandum of Understanding in this

∞ ZS.	Conditions regard shall be submitted to the Ministry's Regional Office Oil Collection pits shall be provided in oil cellars to colle
<i>∞</i>	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area. Kitchen waste shall be composted or converted to biogas for
9	Kitchen waste shall be composted or converted to biogas for further use.
	Green Belt The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same
VIII.	Public hearing and Human health issues
-	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
2	The project proponent shall carry out heat stress analysis for the We are regularly providing Personal Protection Equipment (PPE) for all employees as workmen who work in high temperature work zone and provide per norms of the Factory Act. Personal Protection Equipment (PPE) as per the norms of Factory Act.
w	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.
\mathbb{X}	Corporate Environment Responsibility
-	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 30/09/2020.
2	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements/deviation/violation

basis: 4 The p namel emissi and di public	basis.	3 The p	2 The c the pr and N Gover the da	1 The p cleara condit if at le one s in add websi	X. Misc	3 A sep head of the co	of the sharel this re month	Sr.	
public and put on the website of the company.	The project proponent shall monitor the criteria pollutants level namely; PK°, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Miscellaneous	A separate Environmental Cell both at the project and company Complied head quarter level, with qualified personnel shall be set up under A separate the control of senior Executive, who will directly to the head of under the the organization.	of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy Of the board resolution in this regard shall be submitted to the MoEF & CC as a part of sixmonthly report.	Conditions	
	Point noted and being complied.	M/s WML is uploading the status of compliance of stipulated environment clearance conditions, including results of monitored data on the company website and updating the same on half yearly basis.	The copies of the EC have been submitted to all relevant offices of the government.	We have already Published the EC in two local newspapers.		A separate Environmental Cell both at the project and company Complied. head quarter level, with qualified personnel shall be set up under A separate Environment Management Cell has been set up, with qualified personnel the control of senior Executive, who will directly to the head of under the control of senior Executive, who is directly reporting the head of the plant the organization.		Compliance	

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14 Any appeal against this EC shall lie with the National Tribunal, if preferred, within a period of 30 days as pres	13 The of 1 furl	12 The fou imp	11 The	10 Cor rest acti	9 No out and	8 The man to t	7 The the prodev	6 The for con Env	and	Sr.	
Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project	The project proponent shall submit the environmental statement M/s WML will submit the environmental statement for each fin for each financial year in Form-V to the concerned State pollution March in Form-V to the Gujarat State Pollution Control Board control Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	and Climate Change at environment clearance portal.	Conditions	
Noted.	Point noted and will be complied.	Noted.	Noted.	Noted.	Point noted and will be complied.	Point noted and are being complied.	Welspun Metallics Ltd. (WML) has commissioned of its state-of-the-art Blast Furnace and Sinter plant on 21/07/2022.	The project proponent shall submit the environmental statement M/s WML will submit the environmental statement for each financial year ending 31st for each financial year in Form-V to the concerned State pollution March in Form-V to the Gujarat State Pollution Control Board. control Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.		Compliance	



Ref. No.: 4001/11/2022-23

Date: 30/11/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626. Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 1
01	Stack Attached to	-	Blast Furnace (Stove Stack)
02	Date of Sampling	***	17/11/2022
03	Time of Sampling		09:00
04	Air Pollution Control Measures	<u></u>	
05	Stack Height	Meter	60
UU	Stack Temperature	٠.	122
07	Ambient Temperature	°C	29
08	Average Velocity of Flue Gases	M/Sec.	7.2
09	Isokinetic flow rate for P.M. Sampling	LPM	21
10	Gaseous Sampling Flow Rate	LPM	2.0
11	Permissible Limit for P.M.*	mg/Nm³	30
12	Measured Concentration of P.M.	mg/Nm ³	23
13	Permissible Limit for SO ₂ *	mg/Nm³	200
14	Measured Concentration of SO ₂	mg/Nm³	14.5
15	Permissible Limit for NO _x *	mg/Nm³	150
16	Measured Concentration of NO _x	mg/Nm ³	33.7

Instruments Used : Ecotech stack monitoring kit ESS - 100,

Calibration Done On : 27/12/2021

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* Permissible limits as per GPCB CC&A

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Royal Environment Auditing & Consultancy Service



Ref. No.: 4002/11/2022-23

Date: 30/11/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar. Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 2	Stack No. 3
01	Stack Attached to	144	Common Stack (Sinter & BF) Plant	Sinter (De-dusting system)
02	Date of Sampling	-	18/11/2022	18/11/2022
03	Time of Sampling		10:30	11:50
04	Air Pollution Control Measures		Common ESP	Bag Filter
05	Stack Height	Meter	70	50
06	Stack Temperature	°C	128	125
07	Ambient Temperature	°C	29	29
80	Average Velocity of Flue Gases	M/Sec.	7.1	6.8
09	Isokinetic flow rate for P.M. Sampling	LPM	20	19
10	Permissible Limit for P.M.*	mg/Nm³	30	30
11	Measured Concentration of P.M.	mg/Nm³	25	22.2

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Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 27/12/2021

* Permissible limits as per GPCB CC&A

Royal Environment Auditing & Consultancy Service

Ashish



Ref. No.: 4003/11/2022-23

Date: 30/11/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 1	AAQMS No. 2	AAQMS No. 3
01.	Location of Sampling		Nr. BF Area	Nr. Sinter Plant	Nr. Coke Oven Uni
02.	Date of sampling	****	16/11/2022	16/11/2022	16/11/2022
03.	Time of sampling	Hr.	09:00	10:30	11:15
04.	Dominant Wind Direction (From)		NW	NW	NW
05.	Wind Speed	Km./Hr.	2 to 16	2 to 16	2 to 16
06.	Average flow rate during sampling	m³/minute	1.10	1.20	1.10
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	25	26.1	24.8
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	53.4	55.0	54.6
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	µg/m³	18.5	16.2	17.4
14.	Permissible Limits of NO ₂ *	µg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	22.5	23.7	20.9

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Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On .: 27/12/2021

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service



Ref. No.: 4004/11/2022-23

Date: 30/11/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 4	AAQMS No. 5	AAQMS No. 6
01.	Location of Sampling	_	Nr. Oxygen Plant	Nr. Admin Office	Nr. Stock House
02.	Date of sampling	alex.	17/11/2022	17/11/2022	17/11/2022
03.	Time of sampling	Hr.	9:45	10:20	11:00
04.	Dominant Wind Direction (From)	-	NW	NW	NW
05.	Wind Speed	Km./Hr,	2 to 14	2 to 14	2 to 14
06.	Average flow rate during sampling	m³/minute	1.10	1.10	1.20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	27.5	26.4	28.1
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	50.2	53.6	52.7
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	14.5	13.7	15.2
14.	Permissible Limits of NO ₂ *	µg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	24.1	23.4	22.2

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On . : 27/12/2021

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service





Ref. No.: 4005/11/2022-23

Date: 30/11/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 7	AAQMS No. 8	AAQMS No. 9
01.	Location of Sampling	-	Nr. Coal/ Coke Yard	Nr. Canteen (Bramhasthan)	Nr. Health Center
02.	Date of sampling	-	18/11/2022	18/11/2022	18/11/2022
03.	Time of sampling	Hr.	12:00	12:30	11:15
04.	Dominant Wind Direction (From)		NW	NW	NW
05.	Wind Speed	Km./Hr.	1 to 15	1 to 15	1 to 15
06.	Average flow rate during sampling	m³/minute	1.20	1.10	1.20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	25.7	26.1	27.5
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	µg/m³	51.8	50.4	52.1
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
3.	Measured Concentration of SO ₂	μg/m³	18.5	18.9	17.4
4.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
5.	Measured Concentration of NO ₂	μg/m³	22.5	23.6	21.8

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On . : 27/12/2021

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service

Rajkot Rajkot



Ref. No.: 4006/11/2022-23

Date: 30/11/2022

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 17/11/2022

Sample Collected by : Royal Environment

		The sale of the place of the William Control of the	ample collected by . Royal Environmen
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)
	Time of Sampling	Day Time 6:00 AM - 10:00 PM	Night Time 10:00 PM - 6:00 AM
	Permissible Limits	75.0	70.0
	Monitoring is carried out during	01:00 - 02:00 PM	01:00 - 02:00 AM
01.	Nr. BF Area	71.5	65.2
02.	Nr. Sinter Plant	74.8	67.5
03.	Nr. Coke Oven Unit	70.2	67.1
04.	Nr. Oxygen Plant	71.9	65.8
05.	Nr. Admin Office	65.1	62.3

		CPCB Standards	
Area	Category of Area / Zone	Limit in	dB(A) Leq.
Code		Day Time	Night Time
Α	Industrial Area	75.0	70.0
В	Commercial Area	65.0	55.0
С	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Instruments used: Sound level meter, Model: IL - 006719 (Lutron), Calibration Done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

Rajkot

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Ref. No.: 4007/11/2022-23

Date: 30/11/2022

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626. Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 17/11/2022

Readings Taken by : Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	imits for 8:00 Hrs.	90.0
Monitoring is	carried out during	02:00 to 3:00 PM
	BF Plant	
01	Cast House	82.5
02	PCM	80.1
03	Stock House	81.4
04	GCP	77.2
05	Stoves	83.6
06	Blower	82.7
07	PCI	78.9
	Sinter Plant	
08	Proportionate Building	77.4
09	Waste Gas Fan	78.2
10	Sinter Machine	80.4
11	Screen House	75.0
12	Crushing House	82.8

Instruments used: Lutron Make Sound level meter, Model No. IL- 006719

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service Rajkot



Ref. No.: 4008/11/2022-23

Date: 30/11/2022

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 17/11/2022

Sample Collected by : Royal Environment

Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permis	sible Limit**		3000
Monito	ring is carried out during		11:00 to 11:30 AM
01	BF - Plant	Cast House	2248
02	BF - Plant	Stock House	2641
03	Sinter Plant	Sinter Plant Area	2070

Instruments Used: HVS APM 430, RDS-AAS 217, Calibration done on.: 28/12/2021

** Permissible Limits are as per MoEF Notification 31st March 2012.

Royal Environment Auditing & Consultancy Service

Rajkot

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Ref. No.: 4009/11/2022-23

Date: 30/11/2022

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 17/11/2022

Readings Collected by : Royal Environment

Sr.	No. Location of Sampling	Illumination Lux (As per standards IS - 3646 Part - II : 1966)	Illumination Day Time	Illumination Night Time
		Monitoring is carried out during	10:00 to 11:00 AM	11:30 to 12:30 PM
0	1 Sinter-Crusher house	200	450	335
0	2 Sinter-Prop. Building	200	460	330
03	3 Sinter-Waste Gas Fan	300	470	330
04	4 Sinter Machine	300	485	325
05	5 Sinter-Circuler Cooler	300	460	320
06	Sinter-Fabrication Yard	300	465	340
07	Sinter-Screen House	200	475	345
08	BF - Plant, Casting Floor	300	480	350
09	BF - Plant, Stock House	200	470	325

Instruments used: Lutron Make Lux Meter, Model No. LX-101A

Calibration done on: 02/09/2021

Rajkot Rajkot

Royal Environment Auditing & Consultancy Service

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Ref. No.: 4011/11/2022-23

Date: 30/11/2022

WATER SAMPLE ANALYSIS REPORT

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 17/11/2022 Source of Sample: Admin Office

Sample Collected by: Royal Environment

				Cample Collecte	u by . Royal Environment
Sr. No.	Parameters	Unit	Acceptable Limit	Permissible Limits(*)	Result
01.	Color	Pt.Co.Scale	5	15	Colorless
02.	Odour		Agreeable	Agreeable	Odorless
03.	Temperature	*c			29
04.	Turbidity	NTU	1	5	NIL
05.	pH	pH Unit	6.5 to 8.5	No Relaxation	7.36
06.	T.D.S.	Mg/L	500	2000	158
07.	Total Hardness	Mg/L	200	600	40
08.	Ca as Ca	Mg/L	75	200	8.0
09.	Mg as Mg	Mg/L	30	100	4.9
10.	Copper	Mg/L	0.05	1.5	< 0.01
11.	Iron	Mg/L	0.3	No Relaxation	< 0.01
12.	Lead	Mg/L	0.01	No Relaxation	< 0.01
13.	Manganese	Mg/L	0.1	0.3	< 0.01
14.	Chloride	Mg/L	250	1000	41.7
15.	Sulphate	Mg/L	200	400	8.4
16.	Nitrate	Mg/L	45	No Relaxation	2.8
17.	Fluoride	Mg/L	1.0	1.5	0.05
18.	Phenolic Compound	Mg/L	0.001	0.002	NIL
19.	Free Residual Chlorine	Mg/L	0.2	1	< 0.01
20.	Total Alkalinity as Calcium Carbonate	Mg/L	200	600	35.0
21.	E - Coli	Coli			Absent

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(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, <u>Brinking Water Specification</u>
Note: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 standard

Royal Environment Auditing & Consultancy Service

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Form No. 37 WORK PLACE MONITORING REPORT

Register containing particulars of monitoring of working environment required under Section 7-A (£,(e).

1 Name of the Department/Plant.: BF-Plant & Sinter Plant of M/s. Welspun Mettalics Ltd., Anjar, Kutch.

2 Raw materials, by products and finished products involved in the process. TOTAL DUST

3 Particulars of sampling

Date of Sampling: 18th November 2022

Signature					TAKA **							
•		Remarks	* . # 5	Refrance Method t	concertration As given in Second Schedule)	ination	Airborne Contamination	-	Airbo	Sampling Instrument used		Sampling Instrument used
samples	samples		being monitored		Mg/m³	Average	Range		Number of sample	Number of semple	Number of semple	Number of semple
		i	2		10	4.25	4,1-4,4		2	Personal 2 Respirable 2		
		1	4		10	2.65	2.5-2.8		2	2	2	Total Dust
3-0	_	1	2		10	1.70	1.5-1.9	_	2	2	2	Total Dust
9.	7.	1	е		10	3.50	3.3-3.7		2	2		
Mr. PATAT	Sh	1	2	Gravimetric	10	3.30	3.1-3.5	_	2	350 2		350
	56	1	6	<u> </u>	10	3.15	2.9-3.4		2	8	2	Total Dust 2
	_	1	4		10	4.10	3.9-4.3		2	2	2	Total Dust
		1	2	_	10	4.25	4.0-4.5		2	2	2	Total Dust
	T	1	6		10	- 2.45	2.2-2.7		2	2	2	Total Dust

Calibration Done On.: 04/03/2022

Royal Environment Auditing & Consultancy Service

Rajkot %

For. Royal Environment Auditing & Consultancy Service



Ref. No.: 5001/12/2022-23

Date: 31/12/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 1
01	Stack Attached to		Blast Furnace (Stove Stack)
02	Date of Sampling		23/12/2022
03	Time of Sampling		09:15
04	Air Pollution Control Measures		-
05	Stack Height	Meter	60
06	Stack Temperature	° C	122
07	Ambient Temperature	° C	27
08	Average Velocity of Flue Gases	M/Sec.	6.9
09	Isokinetic flow rate for P.M. Sampling	LPM	20
10	Gaseous Sampling Flow Rate	LPM	2.0
11	Permissible Limit for P.M.*	mg/Nm³	30
12	Measured Concentration of P.M.	mg/Nm ³	25
13	Permissible Limit for SO ₂ *	mg/Nm³	200
14	Measured Concentration of SO ₂	mg/Nm ³	16.3
15	Permissible Limit for NO _x *	mg/Nm³	150
16	Measured Concentration of NO _x	mg/Nm³	31.4

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Royal Environment Auditing & Consultancy Service

Calibration Done On.: 27/12/2021

Rajkot Rajkot

* Permissible limits as per GPCB CC&A

Ashish



Ref. No.: 5002/12/2022-23

Date: 31/12/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 2	Stack No. 3
01	Stack Attached to		Common Stack (Sinter & BF) Plant	Sinter (De-dusting system)
02	Date of Sampling		23/12/2022	23/12/2022
03	Time of Sampling	! 	10:10	11:30
04	Air Pollution Control Measures		Common ESP	Bag Filter
05	Stack Height	Meter	70	50
06	Stack Temperature	° C	128	125
07	Ambient Temperature	° C	27	27
80	Average Velocity of Flue Gases	M/Sec.	7.3	7.0
09	Isokinetic flow rate for P.M. Sampling	LPM	19	21
10	Permissible Limit for P.M.*	mg/Nm³	30	30
11	Measured Concentration of P.M.	mg/Nm³	28.2	24.9

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On. : 27/12/2021

* Permissible limits as per GPCB CC&A

Royal Environment Auditing & Consultancy Service



Ashish Analyst



Ref. No.: 5003/12/2022-23 Date: 31/12/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 1	AAQMS No. 2	AAQMS No. 3
01.	Location of Sampling		Nr. BF Area	Nr. Sinter Plant	Nr. Coke Oven Unit
02.	Date of sampling		23/12/2022	23/12/2022	23/12/2022
03.	Time of sampling	Hr.	09:30	10:15	11:00
04.	Dominant Wind Direction (From)		NW	NW	NW
05.	Wind Speed	Km./Hr.	2 to 15	2 to 15	2 to 15
06.	Average flow rate during sampling	m³/minute	1.20	1.20	1.10
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	28.6	25.4	26.1
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	54.2	52.6	53.5
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	18.6	15.4	17.8
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	23.8	22.6	21.4

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On . : 27/12/2021

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service





Ref. No.: 5004/12/2022-23

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist .: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 4	AAQMS No. 5	AAQMS No. 6
01.	Location of Sampling		Nr. Oxygen Plant	Nr. Admin Office	Nr. Stock House
02.	Date of sampling		24/12/2022	24/12/2022	24/12/2022
03.	Time of sampling	Hr.	09:40	10:30	11:15
04.	Dominant Wind Direction (From)	7 <u>2000</u>	NW	NW	NW
05.	Wind Speed	Km./Hr.	1 to 16	1 to 16	1 to 16
06.	Average flow rate during sampling	m³/minute	1.20	1.20	1.20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
9.	Measured Concentration of PM 2.5	μg/m³	26.7	28.1	27.4
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	52.6	51.2	53.7
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
3.	Measured Concentration of SO ₂	μg/m³	18.5	17.4	16.2
4.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	22.6	21.8	23.2

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On .: 27/12/2021

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service





Ref. No.: 5005/12/2022-23

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 7	AAQMS No. 8	AAQMS No. 9
01.	Location of Sampling	5555	Nr. Coal/ Coke Yard	Nr. Canteen (Bramhasthan)	Nr. Health Center
02.	Date of sampling		24/12/2022	24/12/2022	24/12/2022
03.	Time of sampling	Hr.	11:45	12:30	13:10
04.	Dominant Wind Direction (From)	2222	NW	NW	NW
05.	Wind Speed	Km./Hr.	2 to 14	2 to 14	2 to 14
06.	Average flow rate during sampling	m³/minute	1.20	1.10	1.20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	26.1	28.8	27.4
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	µg/m³	54.2	53.6	52.4
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	17.2	18.5	16.3
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	25.9	26.3	27.1

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On .: 27/12/2021

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service





Ref. No.: 5006/12/2022-23

Date: 31/12/2022

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of S	ampling : 24/12/2022	S	ample Collected by : Royal Environment
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)
	Time of Sampling	Day Time 6:00 AM - 10:00 PM	Night Time 10:00 PM - 6:00 AM
	Permissible Limits	75.0	70.0
	Monitoring is carried out during	02:00 - 03:00 PM	01:00 - 02:00 AM
01.	Nr. BF Area	72.1	58.6
02.	Nr. Sinter Plant	75.0	59.4
03.	Nr. Coke Oven Unit	69.5	59.0
04.	Nr. Oxygen Plant	70.8	58.2
05.	Nr. Admin Office	67.4	56.9

		CPCB Standards	
Area	Category of Area / Zone	Limit in	dB(A) Leq.
Code	Category of Area / Zone	Day Time	Night Time
Α	Industrial Area	75.0	70.0
В	Commercial Area	65.0	55.0
C	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Instruments used: Sound level meter, Model: SL-4030 (Lutron), Calibration Done on: 04/03/2022

Royal Environment Auditing & Consultancy Service





Ref. No.: 6001/01/2022-23

Date: 01/02/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 1
01	Stack Attached to		Blast Furnace (Stove Stack)
02	Date of Sampling	***	29/01/2023
03	Time of Sampling		09:00
04	Air Pollution Control Measures		-
05	Stack Height	Meter	60
06	Stack Temperature	° C	122
07	Ambient Temperature	° C	22
80	Average Velocity of Flue Gases	M/Sec.	7.1
09	Isokinetic flow rate for P.M. Sampling	LPM	19
10	Gaseous Sampling Flow Rate	LPM	2.0
11	Permissible Limit for P.M.*	mg/Nm³	30
12	Measured Concentration of P.M.	mg/Nm³	28
13	Permissible Limit for SO ₂ *	mg/Nm³	200
14	Measured Concentration of SO ₂	mg/Nm ³	17.5
15	Permissible Limit for NO _x *	mg/Nm³	150
16	Measured Concentration of NO _x	mg/Nm ³	30.2

Instruments Used : Ecotech stack monitoring kit ESS - 100,

Calibration Done On: 26/12/2022

Rajkot Singy

* Permissible limits as per GPCB CC&A





Ref. No.: 6002/01/2022-23

Date: 01/02/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626. Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 2	Stack No. 3
01	Stack Attached to	(Common Stack (Sinter & BF) Plant	Sinter (De-dusting system)
02	Date of Sampling		29/01/2023	29/01/2023
03	Time of Sampling	***	09:45	10:30
04	Air Pollution Control Measures		Common ESP	Bag Filter
05	Stack Height	Meter	70	50
06	Stack Temperature	°C	128	125
07	Ambient Temperature	°C	22	22
80	Average Velocity of Flue Gases	M/Sec.	7,1	6.8
09	Isokinetic flow rate for P.M. Sampling	LPM	21	20
10	Permissible Limit for P.M.*	mg/Nm ³	30	30
11	Measured Concentration of P.M.	mg/Nm ³	26.3	25.1

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

* Permissible limits as per GPCB CC&A







Ref. No.: 6003/01/2022-23

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address : Survey

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 1	AAQMS No. 2	AAQMS No. 3
01.	Location of Sampling	****	Nr. BF Area	Nr. Sinter Plant	Nr. Coke Oven Unit
02.	Date of sampling	-	29/01/2023	29/01/2023	29/01/2023
03.	Time of sampling	Hr.	09:15	10:00	11:15
04.	Dominant Wind Direction (From)	and a	NE	NW	NW
05.	Wind Speed	Km./Hr.	2 to 16	2 to 16	2 to 16
06.	Average flow rate during sampling	m³/minute	1.10	1.20	1.10
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	26.3	28.5	27.4
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μ g/m³	50.2	49.6	48.7
12.	Permissible Limits of SO ₂ *	µg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	17.6	19.2	18.5
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	23.6	26.5	25.1

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On :: 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.







Ref. No.: 6004/01/2022-23 Date: 01/02/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address : Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626. Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 4	AAQMS No. 5	AAQMS No. 6
01.	Location of Sampling	****	Nr. Oxygen Plant	Nr. Admin Office	Nr. Stock House
02.	Date of sampling	-	30/01/2023	30/01/2023	30/01/2023
03.	Time of sampling	Hr.	09:30	10:45	11:30
04.	Dominant Wind Direction (From)	1000	NW	NE	NW
05.	Wind Speed	Km./Hr.	3 to 15	3 to 15	3 to 15
06.	Average flow rate during sampling	m³/minute	1.20	1.20	1.20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	28.5	26.2	27.7
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	46.3	45.5	47.9
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m ³	19.1	18.4	17.6
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	25.8	26.3	24.1

Instrument used : Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On . : 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.







Ref. No.: 6005/01/2022-23 Date: 01/02/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist : Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 7	AAQMS No. 8	AAQMS No. 9
01.	Location of Sampling		Nr. Coal/ Coke Yard	Nr. Canteen (Bramhasthan)	Nr. Health Cente
02.	Date of sampling		31/01/2023	31/01/2023	31/01/2023
03.	Time of sampling	Hr.	10:00	10:30	11:10
04.	Dominant Wind Direction (From)	[-0.000]	NE	NW	NW
05.	Wind Speed	Km./Hr.	1 to 12	1 to 12	1 to 12
06.	Average flow rate during sampling	m³/minute	1.20	1.10	1,20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	µg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	29.5	26.8	28.4
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	46.2	48.6	47.2
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	16.3	15.8	17.4
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	25.3	24.7	23.2

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On : 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.







Ref. No.: 6006/01/2022-23

Date: 01/02/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

ate of S	ampling : 29/01/2023	S	ample Collected by : Royal Envi
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)
	Time of Sampling	Day Time 6:00 AM - 10:00 PM	Night Time 10:00 PM - 6:00 AM
	Permissible Limits	75.0	70.0
	Monitoring is carried out during	01:30 - 02:30 PM	01:00 - 02:00 AM
01.	Nr. BF Area	70.2	57.4
02.	Nr. Sinter Plant	73.6	58.1
03.	Nr. Coke Oven Unit	68.5	58.8
04.	Nr. Oxygen Plant	69.3	59.6
05.	Nr. Admin Office	66.4	55.2

		CPCB Standards	
Area Code	Category of Area / Zone	Limit in	dB(A) Leq.
		Day Time	Night Time
Α	Industrial Area	75.0	70.0
В	Commercial Area	65.0	55.0
С	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Instruments used Sound level meter, Model : SL-4030 (Lutron), Calibration Done on : 04/03/2022







Ref. No.: 7001/02/2022-23

Date: 01/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No	. Particulars	Unit	Stack No. 1
01	Stack Attached to	- TEE.	Blast Furnace (Stove Stack)
02	Date of Sampling	***	27/02/2023
03	Time of Sampling		09:20
04	Air Pollution Control Measures		
05	Stack Height	Meter	60
06	Stack Temperature	° C	122
07	Ambient Temperature	° C	26
80	Average Velocity of Flue Gases	M/Sec.	7,0
09	Isokinetic flow rate for P.M. Sampling	LPM	20
10	Gaseous Sampling Flow Rate	LPM	2.0
11	Permissible Limit for P.M.*	mg/Nm³	30
12	Measured Concentration of P.M.	mg/Nm³	27
13	Permissible Limit for SO ₂ *	mg/Nm³	200
14	Measured Concentration of SO ₂	mg/Nm³	26.2
15	Permissible Limit for NO _x *	mg/Nm³	150
16	Measured Concentration of NO _x	mg/Nm ³	31.8

Instruments Used | Ecotech stack monitoring kit ESS - 100,

Calibration Done On. 26/12/2022

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* Permissible limits as per GPCB CC&A







Ref. No.: 7002/02/2022-23

Date: 01/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 2	Stack No. 3
01	Stack Attached to		Common Stack (Sinter & BF) Plant	Sinter (De-dusting system)
02	Date of Sampling		27/02/2023	27/02/2023
03	Time of Sampling		10:00	10:45
04	Air Pollution Control Measures		Common ESP	Bag Filter
05	Stack Height	Meter	70	50
06	Stack Temperature	° C	128	125
07	Ambient Temperature	°C	26	26
80	Average Velocity of Flue Gases	M/Sec.	6.9	7.1
09	Isokinetic flow rate for P.M. Sampling	LPM	20	19
10	Permissible Limit for P.M.*	mg/Nm³	30	30
11	Measured Concentration of P.M.	mg/Nm ³	28.7	26.8

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

* Permissible limits as per GPCB CC&A







Ref. No.: 7003/02/2022-23

Date: 01/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 1	AAQMS No. 2	AAQMS No. 3
01.	Location of Sampling		Nr. BF Area	Nr. Sinter Plant	Nr. Coke Oven Unit
02.	Date of sampling		27/02/2023	27/02/2023	27/02/2023
03.	Time of sampling	Hr.	09:00	10:25	09:40
04.	Dominant Wind Direction (From)	-	NE	NW	NW
05.	Wind Speed	Km./Hr.	1 to 16	1 to 16	1 to 16
06.	Average flow rate during sampling	m³/minute	1.10	1.10	1.10
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	25.9	27.4	28.2
10.	Permissible Limits of PM 10 *	µg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	51.9	50.6	49.2
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	16.5	18.4	19.7
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	25.7	28.4	26.1

Instrument used : Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On :: 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.





Ref. No.: 7004/02/2022-23

Date: 01/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 4	AAQMS No. 5	AAQMS No. 6
01.	Location of Sampling		Nr. Oxygen Plant	Nr. Admin Office	Nr. Stock House
02.	Date of sampling	()	28/02/2023	28/02/2023	28/02/2023
03.	Time of sampling	Hr.	09:30	10:45	10:00
04.	Dominant Wind Direction (From)	1202	NW	NE	NW
05.	Wind Speed	Km./Hr.	2 to 16	2 to 16	2 to 16
06.	Average flow rate during sampling	m³/minute	1.20	1.10	1.20
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
.80	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	μg/m³	27.6	25.5	28.9
10.	Permissible Limits of PM 10 °	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m ³	48.5	47.2	49.3
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	21.3	20.5	19.6
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	26.3	27.4	25.8

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Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On . : 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.





Ref. No.: 7005/02/2022-23

Date: 01/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	AAQMS No. 7	AAQMS No. 8	AAQMS No. 9
01.	Location of Sampling	****	Nr. Coal/ Coke Yard	Nr. Canteen (Bramhasthan)	Nr. Health Center
02.	Date of sampling	-	27/02/2023	27/02/2023	28/02/2023
03.	Time of sampling	Hr.	12:00	11:20	11:15
04.	Dominant Wind Direction (From)		NE	NW	NW
05.	Wind Speed	Km./Hr.	3 to 14	3 to 14	3 to 14
06.	Average flow rate during sampling	m³/minute	1.20	1.10	1.10
07.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
08.	Permissible Limits of PM 2.5 *	μg/m³	60	60	60
09.	Measured Concentration of PM 2.5	µg/m³	28.6	27.4	26.5
10.	Permissible Limits of PM 10 *	μg/m³	100	100	100
11.	Measured Concentration of PM 10	μg/m³	48.7	46.3	47.1
12.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
13.	Measured Concentration of SO ₂	μg/m³	18.4	16.3	17.9
14.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
15.	Measured Concentration of NO ₂	μg/m³	26.6	25.4	27.2

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On : 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service





Ref. No.: 7006/02/2022-23

Date: 01/03/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

	ampling : 27/02/2023		ample Collected by Royal Enviror
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)
	Time of Sampling	Day Time 6:00 AM - 10:00 PM	Night Time 10:00 PM - 6:00 AM
	Permissible Limits	75.0	70.0
	Monitoring is carried out during	01:00 - 02:00 PM	01:00 - 02:00 AM
01.	Nr. BF Area	69.8	55.4
02.	Nr. Sinter Plant	71.4	56.9
03.	Nr. Coke Oven Unit	70.5	59.2
04.	Nr. Oxygen Plant	68.2	60.3
05.	Nr. Admin Office	69.4	58.4

		CPCB Standards	
Area	Category of Area / Zone	Limit in	dB(A) Leq.
Code		Day Time	Night Time
Α	Industrial Area	75.0	70.0
В	Commercial Area	65.0	55 0
С	Residential Area	55,0	45.0
D	Silence Zone	50.0	40.0

Instruments used Sound level meter, Model SL-4030 (Lutron), Calibration Done on : 04/03/2022







Ref. No.: 7007/02/2022-23

Date: 01/03/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Mettalics Limited,(ID-59424)

Address : Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626. Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 27/02/2023

Readings Taken by : Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	lmits for 8:00 Hrs.	90.0
Monitoring is	carried out during	02:00 to 3:00 PM
	BF Plant	
01	Cast House	81.4
02	PCM	79.3
03	Stock House	82.4
04	GCP	78.3
05	Stoves	81.9
06	Blower	80.3
07	PCI	79.8
	Sinter Plant	
08	Proportionate Building	78.6
09	Waste Gas Fan	79.1
10	Sinter Machine	81.4
11	Screen House	76.3
12	Crushing House	81.2

Instruments used: Lutron Make Sound level meter, Model No. IL- 006719

Calibration done on: 04/03/2022





Ref. No.: 7008/02/2022-23

Date: 01/03/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 28/02/2023

Sample Collected by : Royal Environment

Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permis	sible Limit**		3000
Monito	ring is carried out during		11:20 to 11:50 AM
01	BF - Plant	Cast House	2215
02	BF - Plant	Stock House	2678
03	Sinter Plant	Sinter Plant Area	2132

Instruments Used: HVS APM 430, RDS-AAS 217, Calibration done on.: 28/12/2021

** Permissible Limits are as per MoEF Notification 31st March 2012.

Royal Environment Auditing & Consultancy Service



Ref. No.: 7009/02/2022-23

Date: 01/03/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626. Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 27/02/2023

Readings Collected by : Royal Environment

Sr.	No	. Location of Sampling	Illumination Lux (As per standards IS - 3646 Part - II : 1966)	Illumination Day Time	Illumination Night Time
			Monitoring is carried out during	03:00 to 04:00 PM	11:30 to 12:30 PM
(01	Sinter-Crusher house	200	440	320
(02	Sinter-Prop. Building	200	450	310
(03	Sinter-Waste Gas Fan	300	465	315
(04	Sinter Machine	300	480	320
(05	Sinter-Circuler Cooler	300	470	305
()6	Sinter-Fabrication Yard	300	475	325
C	07	Sinter-Screen House	200	450	340
C	8	BF - Plant, Casting Floor	300	460	330
C	9	BF - Plant, Stock House	200	455	315

Instruments used: Lutron Make Lux Meter, Model No. LX-101A

Royal Environment(Auditing & Consultancy Service

Calibration done on: 02/09/2021







Ref. No.: 7011/02/2022-23

Date: 01/03/2023

WATER SAMPLE ANALYSIS REPORT

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 27/02/2023 Source of Sample: Admin Office

Sample Collected by : Royal Environment

Sr. No.	Parameters	Unit	Acceptable Limit	Permissible Limits(*)	Result
01.	Color	Pt.Co.Scale	5	15	Colorless
02.	Odour	-	Agreeable	Agreeable	Odorless
03.	Temperature	°C	5200	Name on	27
04.	Turbidity	NTU	1	5	NIL
05.	рH	pH Unit	6.5 to 8.5	No Relaxation	7.31
06.	T.D.S.	Mg/L	500	2000	151
07.	Total Hardness	Mg/L	200	600	45
08.	Ca as Ca	Mg/L	75	200	7.7
09.	Mg as Mg	Mg/L	30	100	6.3
10.	Copper	Mg/L	0.05	1.5	< 0.01
11.	Iron	Mg/L	0.3	No Relaxation	< 0.01
12.	Lead	Mg/L	0.01	No Relaxation	< 0.01
13.	Manganese	Mg/L	0.1	0.3	< 0.01
14.	Chloride	Mg/L	250	1000	39.5
15.	Sulphate	Mg/L	200	400	8.1
16.	Nitrate	Mg/L	45	No Relaxation	2.6
17.	Fluoride	Mg/L	1.0	1.5	0.04
18.	Phenolic Compound	Mg/L	0.001	0.002	NIL
19.	Free Residual Chlorine	Mg/L	0.2	1	< 0.01
20.	Total Alkalinity as Calcium Carbonate	Mg/L	200	600	40.0
21.	E - Coli	Coli			Absent

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification Note: The water is safe to drink with respect of parameters checked above as per IS 10500 2012 standard

Royal Environment Auditing & Consultancy Service

Anatyst

Form No. 37 WORK PLACE MONITORING REPORT

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

1 Name of the Department/Plant.: BF-Plant & Sinter Plant of M/s. Welspun Mettalics Ltd., Anjar, Kutch.

2 Raw materials, by products and finished products involved in the process. TOTAL DUST

3 Particulars of sampling

S. S	Location Operation monitored	Identified Contaminate	Time of Sampling	Sampling Instrument	Airbon	Airborne Contamination	ination	TWA** concertration (As given in Second Schedule)	Refrance	Number of Workers exposed at the location	Remarks	Signature person taking	Name (in block
					Number of sample	Range	Average	Mg/m³		being monitored		samples	letters)
-	Sinter-Crusher house	Total Dust		Personal Respirable	2	3,8-4.5	4.15	10		ю	1		
2	Sinter-Prop. Building	Total Dust			2	2.8-3.1	2.95	10		w	E		
6	Sinter-Waste Gas Fan	Total Dust			2	1.4-1.8	1.60	10		4	1		
4	Sinter Machine	Total Dust			2	3,5-4.0	3.75	10		2	ļ	(
လ	Sinter-Circuler Cooler	Total Dust	09:00 to 10:00 AM	350	2	2.9-3.3	3.10	10	Gravimetric	6	I	3	Mr. PATAT ASHISH
9	Sinter-Fabrication Yard	Total Dust			73	3.0-3.5	3.25	10		4	ı		
7	Sinter-Screen House	Total Dust			2	4.0-4.5	4.25	10		2	1		
80	BF - Plant, Casting Floor	Total Dust			2	3.9-4.5	4.20	10		5	ı		
0	BF - Plant, Stock House	Total Dust			2	2.4-2.8	2.60	10	04.	4	ı		

Calibration Done On.: 04/03/2022

Royal Environment Auditing & Consultancy Service





Ref. No.: 8001/03/2022-23

Date: 01/04/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 1
01	Stack Attached to		mental sta	Blast Furnace (Stove Stack)
02	Date of Sampling		10 66 66	22/03/2023
03	Time of Sampling			09:00
04	Air Pollution Control Measures	*****	107 48 km	-
05	Stack Height	Meter	To be the	60
06	Stack Temperature	°C	79000	125
07	Ambient Temperature	°C	38464.015	27
80	Average Velocity of Flue Gases	M/Sec.		7.2
09	Isokinetic flow rate for P.M. Sampling	LPM	***	19
10	P.M.	mg/Nm ³	30	14
11	SO2	mg/Nm ³	100	28.5
12	NOx	mg/Nm ³	50	32.6

Instruments Used : Ecotech stack monitoring kit ESS - 100,

* Permissible limits as per GPCB CC&A

Calibration Done On.: 26/12/2022

Royal Environment Auditing & Consultancy Service



Ref. No.: 8002/03/2022-23

Date: 01/04/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 2	Stack No. 3
01	Stack Attached to			Common Stack (Sinter & BF) Plant	Sinter (De-dusting system
02	Date of Sampling			22/03/2023	22/03/2023
03	Time of Sampling	none.	2000	09:35	10:15
04	Air Pollution Control Measures	терија		Common ESP	Bag Filter
05	Stack Height	Meter		70	50
06	Stack Temperature	° C		126	123
07	Ambient Temperature	°C	700 500 000	27	27
08	Average Velocity of Flue Gases	M/Sec.		6.9	7.1
09	Isokinetic flow rate for P.M. Sampling	LPM	49 00000	18	21
10	P.M.	mg/Nm³	30	25.4	27.8

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

" Permissible limits as per GPCB CC&A

Royal Environment Auditing & Consultancy Service



Ref. No.: 8003/03/2022-23

Date: 01/04/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limits	Location No. 1	Location No. 2	Location No. 3
01.	Location of Sampling	or to being	and the	Nr. BF Area	Nr. Sinter Plant	Nr. Coke Oven Unit
02.	Date of sampling	7,000	and .	22/03/2023	22/03/2023	22/03/2023
03.	Time of sampling	Hr.		10:00	09:30	10:30
04.	Dominant Wind Direction (From)	- market	1945	NE	NW	NVV
05.	Wind Speed	Km./Hr.	2645	3 to 18	3 to 18	3 to 18
06.	Average flow rate during sampling	m ³ /minute	***	1.20	1.20	1.10
07.	Average flow rate for Gas sampling	LPM	***	0.2	0.2	0.2
08	PM 2.5	μg/m³	60	26.7	30.5	28.7
09	PM 10	μg/m³	100	48.7	51.4	49.6
10	Measured Concentration of SO ₂	μg/m³	80	19.6	20.4	18.5
11	Measured Concentration of NO ₂	μg/m³	80	28.5	27.3	29.2

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On .: 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service



Ref. No.: 8004/03/2022-23

Date: 01/04/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limits	Location No. 4	Location No. 5	Location No. 6
01.	Location of Sampling	50 April 20	See 450	Nr. Oxygen Plant	Nr. Admin Office	Nr. Stock House
02.	Date of sampling		9576	23/03/2023	23/03/2023	23/03/2023
03.	Time of sampling	Hr.	-	10:35	10:00	09:20
04.	Dominant Wind Direction (From)	-00 (doi: -00) 2 P		NW	NE	NW
05.	Wind Speed	Km./Hr.		1 to 12	1 to 12	1 to 12
06.	Average flow rate during sampling	m³/minute	ana	1.10	1.10	1.10
07.	Average flow rate for Gas sampling	LPM	out tree	0.2	0.2	0.2
80	PM 2.5	μg/m³	60	30.6	31.4	29.7
09	PM 10	μg/m³	100	50.2	53.6	51.4
10	Measured Concentration of SO ₂	µg/m³	80	23.6	21.5	22.8
11	Measured Concentration of NO ₂	µg/m³	80	28.5	29.6	31.2

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On .: 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service



Ref. No.: 8005/03/2022-23

Date: 01/04/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limits	Location No. 7	Location No. 8	Location No. 9
01.	Location of Sampling	200 80 90 30.	NEW	Nr. Coal/ Coke Yard	Nr. Canteen (Bramhasthan)	Nr. Health Center
02.	Date of sampling	AND 200 (M)	9440	24/03/2023	24/03/2023	24/03/2023
03.	Time of sampling	Hr.	dest	11:00	12:00	11:25
04.	Dominant Wind Direction (From)		2010	NE	NW	NW
05.	Wind Speed	Km./Hr.	Mayor.	2 to 16	2 to 16	2 to 16
06.	Average flow rate during sampling	m³/minute		1.20	1.10	1.20
07.	Average flow rate for Gas sampling	LPM	ari co.	0.2	0.2	0.2
08	PM 2.5	μg/m³	60	30.2	28.5	27.4
09	PM 10	μg/m³	100	52.6	55.8	53.7
10	Measured Concentration of SO ₂	µg/m³	80	17.6	15.2	16.3
11	Measured Concentration of NO ₂	µg/m³	80	30.2	28.5	29.1

Instrument used: Ecotech RDS (APM - 217 BL), Gaseous Sampling Kit AAS109 & PM 2.5 Sampler

Calibration Done On .: 26/12/2022

*Permissible Limits are as per NAAQ Standard 16th November 2009.

Royal Environment Auditing & Consultancy Service



Ref. No.: 8006/03/2022-23

Date: 01/04/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun Mettalics Limited,(ID-59424)

Address

: Survey No. 644/1, 641, 611/2, 617/1, 617/2, 618, 629/1, 629/2,

614, 615/1, 615/2, 615/3, 606/1, 558, 606, 609, 626.

Village: Varsamedi, Welspun City, Tal.: Anjar.

Dist.: Kutch - 370 110.

Date of Sampling: 22/03/2023

Sample Collected by : Royal Environment

Sr. No.	Location of Sampling	Permissible Limits dB(A) Day Time	Results in dB(A) (Day Time) 6:00 AM - 10:00 PM	Permissible Limits dB(A) Night Time	Results in dB(A) (Night Time) 10:00 PM - 6:00 AM
Monito	ring is carried out during	and the same	01:00 - 02:00 PM	- Night Time	01:00 - 02:00 AM
01.	Nr. BF Area	75	70.4	70	53.1
02.	Nr. Sinter Plant	75	72.1	70	54.8
03.	Nr. Coke Oven Unit	75	69.3	70	60.3
04.	Nr. Oxygen Plant	75	67.4	70	58.7
05.	Nr. Admin Office	75	70.2	70	56.9

Area Code	Category of Area / Zone	Limit in dB(A) Leq.		
		Day Time	Night Time	
А	Industrial Area	75.0	70.0	
В	Commercial Area	65.0	55.0	
С	Residential Area	55.0	45.0	
D	Silence Zone	50.0	40.0	

Instruments used : Sound level meter, Model : SL-4030 (Lutron), Calibration Done on : 04/03/2023

Royal Environment Auditing & Consultancy Service

Aglis Analyst