

Date: 24 /11/2023

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 DI Pipes 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 DI Pipes Ltd. Anjar, Kutch, Gujarat for the period of April 2023 to September 2023.

Welspun DI Pipes Ltd. has been commissioned, operational readiness and commencement of regular dispatches from its state of the art Ductile Iron (DI) pipe making plant from October 19, 2022.

Thanking You.

Yours faithfully,

For Welspun Pl Pip

AGM (Environ

Encl: As above

CC:

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

Welspun DI Pipes Limited

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

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

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

Registered Address: "Welspun City", Survey No.615/1,616,617/1,617/2,618/P,619/P,631/P,632/P,633,634/1,634/2,634/3 and 634/4

Village-Versamedi, Taluka- Anjar- 370 110 T: 02826662222 Corporate Identity Number: U27320GJ2020PLC115329

District: Kutch, Gujrat. Half Yearly Environment Clearance Compliance Report for M/s. Welspun Di Pipes Limited located Village: Versamedi, Tehsil: Anjar,

(EC F No. J-11011/136/2015-IA-II(I) dated 22nd March 2021)

Specific Condition Sr. Name of facility No. Coke Oven & By products 2 x 58 No. Recovery Plant (COBP) Ovens														
	Blast Furnace with matching pig casting facility (Along with Pig casting Machine of Capacity)	Coke Oven & By products Recovery Plant (COBP) Sinter plant	Name of facility	ondition										
	1x 4300 m ³	2 x 58 No. Ovens 1x496 m ²	Existing Units configuration Proc											
	3.34	5.28	Units Production MTPA	Conditions										
	ı	1 1	Proposed units configuration Production M7	ions										
	1	1 1	Production MTPA											
	1x 4300 m ³	2 x 58 No. Ovens 1x496 m ²	Total Units (Existing +Proposed) configuration Production MTI											
	3.34	5.28	nits roposed) Production MTPA											
	F a			Compliance										

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Revi EC c	"Un	ON,	meet	The				12					=	-	10		9	8	
Revised Plant layout with area and green belt detailed by WML and WDIPL EC compliance responsibility matrix between WML and WDIPL	"Undertaking "from M/s. Welspun DI Pipe Limited (WDIPL)	"NOC" form M/s. Welspun Metallics Limited	meeting of the Re-constituted Expert Appraisal Committee (Industry-I) held on 18-19th January, 2021 wherein the committee formed sub-committee. The Sub-committee their report after examination of the following:	The proposal for part transfer of 0.5 MTPA DI pine unit in the name of M/s. Welspun DI Pines Limited Was considered during 28th	Furnace (Induction Furnace)	using Heating and Melting	Fitting and other casting	Foundry Shop for Metal	Furnace, Finishing Line.)	Casting Machine, Annealing	Convertor, Centrifugal	Induction Furnaces,	DI Pipe Plant (Including	Cement Stilland Light	Compart arrinding Dlant		Lime/dolo Plant	Captive Power Plant	Mill
een belt detailed between WML an	I Pipe Limited (Limited	Appraisal Comm	TPA DI nine uni				1		-			ı	I WIII	1 unit		2 x 600 TPD	Gas based	
by WML and W	WDIPL)		ittee (Industry - ination of the fo	t in the name of				Û					î.	į	1 5		0.34	200 MW	
DIPL			I) held on 18-19th sllowing;	M/s Welsmin D				1 Unit					2 unit	T WITH	1 unit	proposed) 1 x 600 TPD	(Un	1	
			January, 2021	I Pines I imited				0.1 MTPA			1	$-(2 \times 0.25)$	0.5	1.1	15		(-) 0.17	1	
			wherein the commit	Was considered dur				1 Unit		`			2 unit	I think	1 pnit		1 x 600 TPD	Gas based	
			ttee formed sub-	ing 28th			MTPA	0.1					0.5	1	1,5		0.17	200 MW	
				Noted															

A Title of the Project Installation of including 1.5 by M/s Welsty Versamedi, T	Sr Item Total Cap
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	Total Capacity as per EC recommended upper para 7 (ii)
Transfer of 0.5 MTPA DI Pipe Plant from EC for 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	Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) New Company (WDI)
Noted.	Comphance status

We are using Hot Metal from	Production of DI Pipes using Blast furnace Hot metal	 Production of coke in Coke Ovens 	Process Description	D
		1.5 MTPA	Cement Grinding unit	10.
#	1	2 X 100 MW (Gas based) 165 MW BF-TRT, CDQ & Sinter Cooler 35 MW	Power Plant	9.
PU	,	0.17 MTPA	Plant 1 x 600 TPD	,o
	•		Moulding Facility	
			Furnace) and Sand	=
	223		Furnace (Induction	
	lac.		Heating and Melting	
			other casting using	
		0.1 MTPA	Foundry Shop for Metal Fitting and	7.
			Line.)	
			Furnace, Finishing	
			Machine, Annealing	
			Centrifugal Casting	
			Furnaces, Convertor,	
- 50			(Including Induction	
	2 X 0.25 MTPA-0.5 MTPA	2 X 0.25 MTPA-0.5 MTPA	DI Pipe Plant	6.
-		Slab caster -1 x 1 Strand 1.6 MTPA	Continuous Casting	5.
		1.55 MTPA		
	54	VD-1x165T		
Noted.		LF - 2 x 165 T		100
)1	BOF - 2 x 165 T	Steel Melt Shop	4.
		1 x 4300 m3- 3.34 MTPA Hot Metal	Blast Furnace	.3
	I.	1 x 496 sq m -5.28 MTPA	Sinter Plant	2.
			Plant (COBP)	
		-1.37 MTPA Gross Coke	products Recovery	:
			Units/Facilities	0
	Langitude- 70° 5'22.6"E to 70° 5'34"E	Latitude- 23° 6'23"N to 23° 7'53"N Longitude-70° 4'3"E to 70° 5'56"E		
Noted.	medi, Tehsil Anjar, District Kutch, Gujarat	Village Versamedi, Tehsil Anjar, District Kutch,	Location	В
	Kutch, Gujarat to WDI			
	New Company (WDI)	para / (II)		No.
Computance status	subsequent partial transfer of DI Pipe Plant from EC	Total Capacity as per EC recommended upper	Item	Sr
Compliance status	-			

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Water Requirement	Raw Material	Land Requirement		Item
47232 m³/day (1755 m3/hr)	 Iron Ore (Fines) – 4.08 M I PA Iron ore (Lump) – 1.91 MTPA Coking Coal – 2.01 MTPA Non Coking Coal – 0.09 MTPA PCI Coal – 0.64 MTPA Limestone – 1.22 MTPA Dolomite – 0.51 MTPA Steel scrap-0.08 MTPA Zinc wire-2600 TPA Fe-si-16800 TPA Calcined Lime-600 TPA 	231.58 ha (77.2 ha -33.3% Greenbelt)	 Production of Sinter in Sinter plant 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)
4896 m ³ /day	 Hot Metal - 0.4 M I PA from WML Steel Scrap - 0.08 MTPA Zinc Wire - 2600 TPA Fe-Si - 16,800 TPA Mg - 6600 TPA 	24.5 ha (8.97 ha -33.3% Greenbelt)	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	of Parent Company (WML) to New Company (WDI) New Company (WDI)
Noted.	Noted.	Noted.	Blast furnace for production of DI Pipes through Induction Furnace, Magnesium Treatment, CCM, Annealing Furnace, Cement Lining, Zinc & Bitumen Coating routes.	сопричис эмиз

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Noise Pollution Control	Air Pollution Control	Pollutants PM -2: SO2 -5 NOx -8 Pollution Mitigation Measures Nox -8	Fuel Requirement	Power Requirement	Item
 Plugging leakages in high-pressure gas/air pipelines. Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps. Design of absorber system for the shift office and pulpit operator's cabin. Noise absorber systems in pump houses. Noise level at 1m from equipment will be limited to 85 dB (A). The fans and ductwork will be designed for minimum vibration. All the equipment in different units will be 	 Dry fogging and bag filter based DE system in material handling Charging and pushing Emission control in coke ovens Electrostatic Precipitator (ESP) based process gas cleaning in Sinter plant and CPP ESP based DE systems in BF Cast house, stock house and SMS Bag filter based DE system low NOx oxy-fuel burners in Annealing furnaces 	PM –273.1Kg/hr SO2 –551.8 Kg/hr NOx –869.3 Kg/hr	 Coke Oven gas (COG) – 48127 Nm³/hr BF Gas (BFG) – 587155 Nm³/hr BOF Gas (BOFG) – 28310 Nm³/hr Propane – 20 TPD Fuel Oil – 600 TPD 	211 MW	Total Capacity as per EC recommended upper para 7 (ii)
 Plugging leakages in high-pressure gas/air pipelines. Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps. Design of absorber system for the shift office and pulpit operator's cabin. Noise absorber systems in pump houses. Noise level at 1m from equipment will be limited to 85 dB (A). The fans and ductwork will be designed for minimum vibration. All the equipment in different units will be 	 Bag Filter based DE systems Low NOx oxy-fuel burners in Annealing furnaces 	PM – 14.2 Kg/hr SO2 – 4.8 Kg/hr NOx – 7.3 Kg/hr	• BF Gas – 45091 Nm3/hr	~16 MW	subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) New Company (WDI)
Point noted and being complied	 We have installed 5 numbers of Bag Filter based DE systems in Ductile Iron Pipe Plant for controlling Dust emissions. Complied. 	Noted.	Noted.	Noted.	

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																		(L)																								70.	Sr	
																	And Management	Effluents Generation																									Item	
	ETP shall be provided for DI plant	• level.	and reduction of BOD	treatment plant for separation of floating off	including canteen effluent in a sewage	• treatment of plant sanitary waste water			and reuse as make-up	be taken to the CETP for further treatment	effluent from BOD plant of coke ovens would	Cooling tower blow downs and treated	comovar or pricione compounds and cyamac	removal of phenolic compounds and evanide	Dephenolization (BOD) treatment unit for	separately treated in Biological Oxidation and	 Effluent generated from coke ovens would be 	 Zero Liquid Discharge outside plant boundary 	with alternative duty.	problem and it detected, tiley will be provided	model of detected they will be provided		 All workers will be regularly checked 	provided with rotational duties.	 Workers exposed to noisy work place shall be 	regularly, while at work.	callitatis and with the advised to use them	provided will be advised to use them		 Workers exposed to noise level will be 	to operate the system.	 provide operators with sound-proof enclosure 	attempts shall be made to	 In shops where measures are not feasible, 	 marked as "High Noise Zone". 	 Un-manned high noise zone will be 	outside plant premises.	Periodical monitoring of work zone noise and	וכייבו זויין זייי היייה היייה (יד).	designed/operated in such a way that the noise		para / (u)	Total Capacity as per EC recommended upper	
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10 A CO.	The state of the s	F	U		186	5				waste generated in DI plant.	with the provision of safe handling of hazardous	ELF shall be provided for Di plant exclusively		of ROD level	plant for separation of floating oil and reduction	including canteen effluent in a sewage treatment	Treatment of plant sanitary waste water	Zero Liquid Discharge outside plant boundary				provided with alternative duty	detected, they will be	for any noise related health problem and if	All workers will be regularly checked medically	provided with rotational duties.	Workers exposed to noisy work place sman or	Workers exposed to poissy work place shall be	be advised to use them regularly, while at work.	with protection devices like earmuffs and will	Workers exposed to noise level will be provided	sound-proof enclosure to operate the system.	attempts shall be made to provide operators with	In shops where measures are not feasible,	marked as "High Noise Zone".	Un-manned high noise zone will be	outside plant premises.	Periodical monitoring of work zone noise and		designed/operated in such a way mat me noise level shall not exceed 85 dB (A)	New Company (WDI)	Com		Facilities/ Utilities after amendment in EC and
25 A	100	11	16	1											•		•																											
5	plant & neared water is	water generated water is	water generated from DI	for Treatment of Effluent	We have provided ETP	recycler.	GPCB authorized	collected and disposed at	generated are being	Hazardous waste	6	Common CETT of WIE.	Camon CETP of WII	wastewater in our	We will treat the	Discharge Plant.	W DIFL is a Zero Liquid	WINITE TO TOWN									900													77				Compliance status

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Solid and Hazardous Wastes		Item
 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. Coal tar sludge and BOD sludge would be recycled for coke making by mixing with the coal charge. All other hazardous wastes shall be disposed in secured landfill/ handed over to authorized dealers for disposal as per statutory norms 100% use/recycle of solid waste generated in DI plant shall be ensured. 	exclusively with the provision of safe handling of hazardous waste generated in DI plant.	Total Capacity as per EC recommended upper para 7 (ii)
 All non-hazardous solid wastes including Mg dust and Bag filter dust shall be utilized in Sinter Plant of WML. All other hazardous wastes shall be disposed in secured landfill/ handed over to authorized dealers for disposal as per statutory norms 100% use/recycle of solid waste generated in DI plant shall be ensured. 		Facilities/ Utilities after amendment in EC and subsequent partial transfer of DI Pipe Plant from EC of Parent Company (WML) to New Company (WDI) New Company (WDI)
Point noted and being complied.	being reused in the Plant.	Compliance status

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100 % use / recycle of solid waste generated in DI plant shall be ensured.	PM level from the stacks shall be less than 30 mg/Nm3		of hazardous waste generated in DI Plant.	ETB shall be provided for DI plant exclusively with the provision of safe handling	Zn dust monitoring in AAQ in DI plant shall be 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	Specific Condition		Conditions
Point noted and are being complied.	Point noted and are being complied.	Ol PILO		Not applicable	Zinc dust monitoring in AAQ in DI plant are being carried out by Third Party	Not applicable.	We have installed CEMS on all process stacks.			Compliance

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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.	continuous emission monitoring system at as well as Continuous Ambient Air Quality rameters with respect to standards prescribed amended from time to time. The CEMS and nd CPCB online servers and calibrate these quipment supplier specification through labs. Act, 1986 or NABL accredited laboratories.	Air quality monitoring and preservation	The Environment Clearance(EC) granted to the project/activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Statutory compliance	General condition	PP shall use ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system.	More efficient bags such as PTFE bags shall be used in the filter bag house and designed for 150% of normal design air flow	Validity of split ECs shall be from Feb 2017.	Both plants shall have their independent green belts		Tree density in Green belt shall be 2500 trees per ha. WDI Plant shall have 36.6% green belt as committed by PP.	Conditions
Not Applicable.	Point noted and are being complied.	24*7 Continuous Emission Monitoring System at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters have been installed. The CEMS connection to GPCB online server has been completed & CPCB online server connection is under progress.		Noted.			Noted.	Noted.	Noted.	Point noted and are being complied.	Greenbelt development is under progress.	We are following the Standards issuedby the Ministry vide G.S.R. No. 277(E) dated 31 st March, 2012 in integrated iron and steel plant.	Compliance

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Land-based APC system shall be installed to control coke pushing emissions.	Facilities for spillage collection shall be provided for coal and coke on whart of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	materials and cover them with tarpaulin	The project proponent use leak proof trucks/dumpers carrying coal and other raw	after briquette/ agglomeration.	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	plant roads, shop floors, roofs, regularly.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean	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.	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	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.	Conditions
Not Applicable.	Not Applicable.	The second second	Not Applicable.		Not Applicable.		Noted.	Not Applicable.	Noted.	5 numbers of Bag Filter based DE system has been installed for all the dust generating points.	Complied.	Сотриансе

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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	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	wing sheller lence and chemical spraying shall be provided on the raw material stock piles.	coal exceeds 1%.	The coke oven gas shall be subjected to desulphurization if the Sulphur content in the	In case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furnace. 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.	Monitor CO, HC and 0 ₂ in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	Conditions	
Welspun DI Pipes Ltd is Zero Liquid Discharge Plant and Effluent generation from the process is being treated in ETP. Treated water is being reused in the plant.		Not Applicable.	Not Applicable.	Point noted and are being complied.	THE Applicante.	Not Applicable	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Compliance	

Sr.	
и	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
w	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;
4	Adhere to 'Zero Liquid Discharge'
S	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
6	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.
7	Tyre washing facilities shall be provided at the entrance of the plant gates.
∞	CO ₂ 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.
9	project proponent shall practice rainwater harvesting to maximum possible
10	Treated water from ETP of COBP shall not be used for coke quenching.
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Restrict Gas flaring to $< 1\%$.	Explore feasibility to install WHRS at Waste Gases from BF stoves; Sinter Machine; Sinter Cooler, and all reheating furnaces and if feasible shall be installed.	process gas exceeds 300°C.	Waste heat recovery systems shall be provided in all units where the flue gas or	Use hot charging of slabs and billets/blooms as far as possible.	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	Waste heat shall be recovered from Sinter Plants coolers and Sinter Machines.	Coke Dry Quenching (CDQ) shall be provided for coke quenching for the coke oven plant.	The project proponent shall provide TRTs to recover energy from top gases of Blast Furnaces.	Energy Conservation measures	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.	Noise monitoring and prevention	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.	Conditions
Not Applicable.	Not Applicable.	The state of the s	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.		We have provided noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels monitoring report as per the prescribed Noise Pollution (Regulation & Control) Rules, 2000.		Not Applicable.	

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Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Public hearing and Human health issues	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.	Green Belt	Kitchen waste shall be composted or converted to biogas for further use.	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.	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.	SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.	Used refractories shall be recycled as far as possible.	Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.	Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.	Tar Sludge and waste oil shall be blended with coal charged in coke ovens	An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/1 shall be installed to use slag as river sand in construction industry.	Waste management	Ensure installation of regenerative type burners on all reheating furnaces.	Provide LED lights in their offices and residential areas.	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;	Conditions
Point noted and will be complied.		Point noted and will be complied.		Point noted & are being complied.	Noted.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.	Not Applicable.		Noted.	The company has provided LED lights in their offices and residential areas.	Point noted and will be complied.	Compliance

. 4	ပ	2	-	×	w	2	ш	IX.	w	2	No.
The project proponent shall monitor the criteria pollutants level namely; PM 10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	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	pany head quarter level, senior Executive, who	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental 'policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/ forest/wildlife norms/conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy Of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	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.	Corporate Environment Responsibility	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	Conditions
Point noted and monitoring report has been attached.	t The WDIPL has uploaded 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.	Com	Complied.		with Complied. willA separate Environment Management Cell has been set up, with qualified personnel under the control of senior Executive, who is directly reporting the head of the plant.	The company have a well laid Environment Policy & attached	Point noted and will be complied.		Point noted and are being complied.	We are regularly providing Personal Protection Equipment (PPE) for all Employees as per the norms of the Factory Act.	Соприансе

Com	10 Conc of th (Prot 11 The abov	8 The in the their 9 No fappro	6 The in F press and 1 7 The com		Sr.
Company in a time bound manner shall implement these conditions. 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.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory. The Ministry reserves the right to stipulate additional conditions if found necessary. The	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 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).	financial year trol Board as I subsequently nistry, the date ed authorities, by the project	The project proponent shall submit six- monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Conditions
Noted.	Noted. Noted.	Noted. Noted.	The company will submit the environmental statement for each financial year ending 31st March in Form-V to the concerned State Pollution Control Board on or before prescribed time line. Welspun DI Pipes Ltd has operational readiness and commencement of regular dispatches from its state-of-the-art Ductile Iron (DI) pipe making from October 19, 2022.	Are being complied	Compliance

W A CO



Date: 01/05/2023

Ref. No.: 901/04/2023-24

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

	Collected by : Royal Environment	Unit	Permissible Limit	Stack No. 1	Stack No. 2
01	Stack Attached to			DN80-400-01, DN80-400-02, DN200-600, DN450-1200 Double station barrel/socket groove/scoket bell grinding + socket Zn coating	DI Core Shop
				29/04/2023	26/04/2023
02	Date of Sampling		-2453	14:10	14:50
03	Time of Sampling	200		Bag Filter	Bag Filter
04	Air Pollution Control Measures	100			20
17400	Stack Height	Meter		30	
05		° C		56	53
06	Stack Temperature			29	30
07	Ambient Temperature	° C			7.1
08	Average Velocity of Flue Gases	M/Sec.		7.5	A CONTRACT
		LPM		20	21
0	9 Isokinetic flow rate for P.M. Sampling	a. 3	30	28	26
1	0 P.M.	mg/Nm ³		1.5	3.5
1	1 SO2	ppm	100		14.1
-	2 NOx	ppm	50	13.4	ssible limits as per GPCB

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022







Date: 01/05/2023

Ref. No.: 902/04/2023-24

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

mple Collected by : Royal Environment

Sr. No.	Collected by : Royal Environment Particulars	Unit	Permissible Limit	Stack No. 3	Stack No. 4	Stack No. 5
01	Stack Attached to		-	Mg Powder injection system + Induction furnace (3 nos. with two crucibles each, cap:15 Ton each)	DN80-400, DN200-600 Double Stations Barrel Zinc coating system	DN80-400, DN450- 1200 Double Stations Barrel Zinc coating system
02	Date of Sampling		2017	26/04/2023	26/04/2023	26/04/2023
03	Time of Sampling			12:00	14:30	15:15
04	Air Pollution Control Measures		-	Bag Filter (Common Stack)	Bag Filter	Bag Filter
05	Stack Height	Meter	1	30	30	30
06	Stack Temperature	° C	nate:	40	45	39
07	Ambient Temperature	° C	-	29	31	32
08	Average Velocity of Flue Gases	M/Sec.		7.1	6.9	7.6
09	D.M. Compling	LPM		20	21	18
10		mg/Nm ³	30	26	28	27

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022



* Permissible limits as per GPCB CC&A





Ref. No.: 904/04/2023-24

Date: 01/05/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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			Nr. Finishing Line	Near Canteen	2nd Entry Gate
02.	Date of sampling	at as many	_	28/04/2023	28/04/2023	28/04/2023
03.	Time of sampling	Hr.		10:00	10:20	09:40
04.	Dominant Wind Direction (From)			sw	SW	SE
05.	Wind Speed	Km./Hr.		3 to 19	3 to 19	3 to 19
06.	Average flow rate during sampling	m3/minute	-	1.10	1.20	1.20
07.	Average flow rate for Gas sampling	LPM		0.2	0.2	0.2
09.	PM 2.5	μg/m³	60	30.1	24.5	29.4
11.	PM 10	μg/m³	100	53.1	54.1	56.4
13.	Measured Concentration of SO ₂	μg/m³	80	17.8	19.5	20.6
15.	Measured Concentration of NO ₂	µg/m³	80	29.4	24.6	28.4

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.: 904/04/2023-24

Date: 01/05/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

M	Sr. No.	Particulars	Unit	Permissible Limits	Location No. 4	Location No. 5	Location No. 6
0)1.	Location of Sampling			Nr. Finishing Line	Near Canteen	2nd Entry Gate
0)2.	Date of sampling		-	28/04/2023	28/04/2023	28/04/2023
0	3.	Time of sampling	Hr.		10:00	10:20	09:40
0-	4.	Dominant Wind Direction (From)			sw	SW	SE
0:	5.	Wind Speed	Km./Hr.		3 to 19	3 to 19	3 to 19
06	6.	Average flow rate during sampling	m3/minute		1.10	1.20	1.20
07	7.	Average flow rate for Gas sampling	LPM		0.2	0.2	0.2
09	9.	PM 2.5	μg/m³	60	30.1	24.5	29.4
11	١.	PM 10	µg/m³	100	53.1	54.1	56.4
13	8.	Measured Concentration of SO ₂	µg/m³	80	17.8	19.5	20.6
15		Measured Concentration of NO ₂	µg/m³	80	29.4	24.6	28.4

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.: 905/04/2023-24

Date: 01/05/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/04/2023

Sample Collected by : Royal Environment

40.0

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
M	onitoring is carried out during	Day Time	01:00 - 02:00 PM	- Night time	01:30 - 02:30 AM
01.	Sec. Main Gate	75	68.4	70	50.1
02.	Pipe Storage Yard	75	66.5	70	48.9
03.	Nr. Admin Office	75	60.1	70	53.1
04.	Nr. Canteen	75	63.4	70	59.4
05.	Nr. Utility Area	75	69.4	70	54.4
		CPCB S	tandards		
Area	Category of Area / Zone		Limit in c	IB(A) Leq.	
Code	outegory of Alea / Zolle	1	Day Time	N	ight Time
Α	Industrial Area		75.0		70.0
В	Commercial Area		65.0		55.0
С	Residential Area		55.0		45.0

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



Silence Zone



50.0





Date: 01/06/2023

Ref. No.: 1001/05/2023-24

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 1	Stack No. 2
01	Stack Attached to			DN80-400-01, DN80-400-02, DN200-600, DN450-1200 Double station barrel/socket groove/scoket bell grinding + socket Zn coating	DI Core Shop
02	Date of Sampling			30/05/2023	30/05/2023
03	Time of Sampling		(14:30	15:20
04	Air Pollution Control Measures		222	Bag Filter	Bag Filter
05	Stack Height	Meter		30	20
06	Stack Temperature	° C	_	58	56
07	Ambient Temperature	° C		31	31
08	Average Velocity of Flue Gases	M/Sec.		7.1	7.4
09	Isokinetic flow rate for P.M. Sampling	LPM		21	20
10	P.M.	mg/Nm ³	30	18	17
11	SO2	ppm	100	2.1	4.1
12	NOx	ppm	50	12.4	15.4

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022



* Permissible limits as per GPCB CC&A





Ref. No.: 1002/05/2023-24

Date: 01/06/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 3	Stack No. 4	Stack No. 5
01	Stack Attached to			Mg Powder injection system + Induction furnace (3 nos. with two crucibles each, cap:15 Ton each)	DN80-400, DN200-600 Double Stations Barrel Zinc coating system	DN80-400, DN450- 1200 Double Stations Barrel Zinc coating system
02	Date of Sampling			29/05/2023	29/05/2023	29/05/2023
03	Time of Sampling			12:00	14:15	15:15
04	Air Pollution Control Measures	223)		Bag Filter (Common Stack)	Bag Filter	Bag Filter
05	Stack Height	Meter		30	30	30
06	Stack Temperature	°C		45	48	41
07	Ambient Temperature	°C		28	30	31
08	Average Velocity of Flue Gases	M/Sec.		7.6	7.1	7.4
09	Isokinetic flow rate for P.M. Sampling	LPM		21	22	19
10	P.M.	mg/Nm³	30	28	29	26

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

* Permissible limits as per GPCB CC&A







Date: 01/06/2023

Ref. No.: 1003/05/2023-24

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	****		Nr. Core Shop	Nr. WDI Pipe Yard	Main Entry Gate
02.	Date of sampling		-	29/05/2023	29/05/2023	29/05/2023
03.	Time of sampling	Hr.		09:45	10:00	10:15
04.	Dominant Wind Direction (From)	1. *******		sw	SW	SE
05.	Wind Speed	Km./Hr.		1 to 18	1 to 18	1 to 18
06.	Average flow rate during sampling	m3/minute		1.20	1.20	1.10
07.	Average flow rate for Gas sampling	LPM	7.7	0.2	0.2	0.2
08	PM 2.5	µg/m³	60	32.5	35.4	29.4
09	PM 10	μg/m³	100	57.4	50.1	53.4
10	Measured Concentration of SO ₂	µg/m³	80	23.1	21.4	22.5
11	Measured Concentration of NO ₂	µg/m³	80	26.4	27.1	28.4

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.



(H)



Ref. No.: 1004/05/2023-24

Date: 01/06/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	**************************************		Nr. Finishing Line	Near Canteen	2nd Entry Gate
02.	Date of sampling			30/05/2023	30/05/2023	30/05/2023
03.	Time of sampling	Hr.		10:00	10:20	09:40
04.	Dominant Wind Direction (From)			sw	SW	SE
05.	Wind Speed	Km./Hr.		3 to 20	3 to 20	3 to 20
06.	Average flow rate during sampling	m3/minute		1.10	1.20	1.20
07.	Average flow rate for Gas sampling	LPM	**	0.2	0.2	0.2
09.	PM 2.5	μg/m³	60	31.1	28.4	27.4
11.	PM 10	μg/m³	100	52.1	55.4	57.4
13.	Measured Concentration of SO ₂	μg/m³	80	18.4	19.4	21.4
15.	Measured Concentration of NO ₂	μg/m³	80	28.1	26.4	27.4

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.: 1005/05/2023-24

Date: 01/06/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/05/2023

Sample Collected by : Royal Environment

40.0

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
M	onitoring is carried out during	Day Time	01:00 - 02:00 PM	- Night Time	01:30 - 02:30 AM
01.	Sec. Main Gate	75	65.4	70	51.4
02.	Pipe Storage Yard	75	68.7	70	49.7
03.	Nr. Admin Office	75	61.0	70	51.4
04.	Nr. Canteen	75	64.5	70	58.7
05.	Nr. Utility Area	75	68.7	70	56.4
		CPCB S	tandards		
Area	Cotogony of Area / Zono		Limit in	dB(A) Leq.	
Code	Category of Area / Zone		Day Time		links Time

Area	Cotonomy of Area / Zono	Limit in	dB(A) Leq.
Code	Category of Area / Zone	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

50.0

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

Royal Environment Auditing & Consultancy Service

Silence Zone







Ref. No.: 906/05/2022-23

Date: 01/06/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/05/2023

Readings Taken by : Royal Environment

Sr.No.	Location of Sampling	Permissible Limits for 8:00 Hrs.	Results in dB(A)
	Monitoring is carried	d out during	02:00 to 3:00 PM
01	Zn Coating Area	85	81.2
02	Core Shop area	85	80.1
03	CCM area	85	78.4
04	CML area	85	81.1
05	Anneling Furnace area	85	83.1
06	Induction Furnace area	85	79.6
07	Bitumin Coating area	85	78.4

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







Ref. No.: 907/05/2022-23

Date: 01/06/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/05/2023

Sample Collected by : Royal Environment

Sr. No.	Area/Plant	Monitoring Location	Permissible Limit**	SPM Level (µg/Nm³)
		Monito	oring is carried out during	03:00 to 04:00 PM
01		Coreshop Area	3000	1510
02	DI Pipe Plant	CCM Area	3000	1742
03	-	CML Area	3000	1425

Instruments Used: HVS APM 430, Calibration done on.: 28/12/2021

** Permissible Limits are as perGPCB CC&A.







Ref. No.: 908/05/2022-23

Date: 01/06/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/05/2023

Readings Collected by: Royal Environment

				and a state of the
Sr. No.	Location of Sampling	Illumination Lux (As per standards IS - 3646 Part - II : 1966)	Illumination Day Time	Illumination Night Time
Monitorii	ng is carried out during		10:30 to 11:30 AM	11:30 to 12:30 PM
01	Zn Coating Area	300	335	315
02	Core Shop area	300	325	314
03	CCM area	300	415	348
04	CML area	300	375	360
05	Anneling Furnace area	300	380	370
06	Induction Furnace area	300	375	310
07	Bitumin Coating area	300	385	378

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

Calibration done on: 02/09/2021



Analys



Ref. No.: 810/05/2022-23

Date: 01/06/2023

WATER SAMPLE ANALYSIS REPORT

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/05/2023 Source of Sample: Canteen

Sample Collected by : Royal Environment

0	Sr. No.	Parameters	Unit	Acceptable Limit	Permissible Limits(*)	Result
_	01.	Color	Pt.Co.Scale	5	15	Colorless
	02.	Odour	1770	Agreeable	Agreeable	Odorless
	03.	Temperature	°C		<u> </u>	26
	04.	Turbidity	NTU	1	5	NIL
	05.	рН	pH Unit	6.5 to 8.5	No Relaxation	7.12
	06.	T.D.S.	Mg/L	500	2000	145
	07.	Total Hardness	Mg/L	200	600	38
	08.	Ca as Ca	Mg/L	75	200	6.4
	09.	Mg as Mg	Mg/L	30	100	5.3
	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	31.2
	15.	Sulphate	Mg/L	200	400	7.1
	16.	Nitrate	Mg/L	45	No Relaxation	3.4
	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	24.0
	21.	E - Coli	Coli	//	dition	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

Rajkot

Date: 01/06/2023

No.: 909/05/2022-23

WORK PLACE MONITORING REPORT Form No. 37

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

1 Name of the Department/Plant: Zn Coating, Coreshop, Anneling furnace area of Mis. Welspun DI Pipes Itd., Anjar, Kutch.

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

3 Particulars of sampling

of Sa

or sampling : soun inlay 2023	5707								Samp	le Collected by : h	sample Collected by : Royal Environment
Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborr	Airborne Contamination	ination	TWA*** concertration (As given in Second Schedule)	Refrance Method	Number of Workers exposed at the location being	Remarks	Signature person taking samples	Name (in block letters)
			Number of sample	Range	Average	Mg/m³		monitored	RELIGION (ALTO DECEMBER)		
Zn Coating area	Total Dust		2	1.1-2.1	1.60	10		S	-	ρ.	
CCM area	Total Dust	Personal Respirable	2	2.5-3.2	2.75	10	Gravimetric	4		(Z)	Mr. HARSHIL
CML area	Total Dust	Dust sampler VPDS 203	2	1.2-2.0	2.20	10		n	ŧ)	PATEL
Anneling Furnace area	Total Dust		2	1.4-2.9	1.75	10		5	1	i	
missible limits (TMA) are as par ACGIH Standards	Par ACGIH	Standards				1				And in contrast of the last of	

rmissible limits (TWA) are as per ACGIH Standards.

ration Done On.: 16/01/2023

al Environment Auditing & Consultancy Service



For. Royal Environment Auditing & Consultancy Service

Authorized Sign



Ref. No.: 1101/06/2023-24

Date: 01/07/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 1	Stack No. 2
01	Stack Attached to			DN80-400-01, DN80-400-02, DN200-600, DN450-1200 Double station barrel/socket groove/scoket bell grinding + socket Zn coating	DI Core Shop
02	Date of Sampling			21/06/2023	21/06/2024
03	Time of Sampling			12.30	14.50
04	Air Pollution Control Measures			Bag Filter	Bag Filter
05	Stack Height	Meter	00-in-16	30	20
06	Stack Temperature	° C		62	57
07	Ambient Temperature	° C	****	31	31
08	Average Velocity of Flue Gases	M/Sec.	-	6.9	7.5
09	Isokinetic flow rate for P.M. Sampling	LPM	(Saringer)	18	21
10	P.M.	mg/Nm ³	30	16.62	18.32
11	SO2	ppm	100	3.6	4.5
12	NOx	ppm	50	11.6	14.2

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

* Permissible limits as per GPCB CC&A







Ref. No.: 1102/06/2023-24

Date: 01/07/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 3	Stack No. 4	Stack No. 5
01	Stack Attached to			Mg Powder injection system + Induction furnace (3 nos. with two crucibles each, cap:15 Ton each)	DN80-400, DN200-600 Double Stations Barrel Zinc coating system	DN80-400, DN450- 1200 Double Stations Barrel Zinc coating system
02	Date of Sampling			22/06/2023	22/06/2023	22/06/2024
03	Time of Sampling			11.30	14.05	16.15
04	Air Pollution Control Measures	700	Charles	Bag Filter (Common Stack)	Bag Filter	Bag Filter
05	Stack Height	Meter		30	30	30
06	Stack Temperature	°C		46	51	39
07	Ambient Temperature	°C		35	33	32
08	Average Velocity of Flue Gases	M/Sec.	-	6.5	7.2	7.1
09	Isokinetic flow rate for P.M. Sampling	LPM	-	20	22	21
10	P.M.	mg/Nm ³	30	27.2	24.6	25.4

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

* Permissible limits as per GPCB CC&A



Rajkot





Ref. No.: 1103/06/2023-24

Date: 01/07/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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		OME	Nr. Core Shop	Nr. WDI Pipe Yard	Main Entry Gate
02.	Date of sampling			21/06/2023	21/06/2023	21/06/2023
03.	Time of sampling	Hr.		9.30	10:00	10.10
04.	Dominant Wind Direction (From)		98.	SE	SE	SE
05.	Wind Speed	Km./Hr.		3 to 12	3 to 12	3 to 12
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	PM 2.5	µg/m³	60	31.6	33.2	29.6
09	PM 10	µg/m³	100	51.6	52.7	49.6
10	Measured Concentration of SO ₂	μg/m³	80	18.3	14.2	12.1
11	Measured Concentration of NO ₂	µg/m³	80	18.4	19.6	21.8

Rajkot

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.: 1104/06/2023-24

Date: 01/07/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	80 G 64 G	-	Nr. Finishing Line	Near Canteen	2nd Entry Gate		
02.	Date of sampling		-	22/06/2023	22/06/2023	22/06/2023		
03.	Time of sampling	Hr.	-	10.30	10.45	11.00		
04.	Dominant Wind Direction (From)			SE	SE	SE		
05.	Wind Speed	Km./Hr.		3 to 12	3 to 12	3 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		
09.	PM 2.5	µg/m³	60	32.7	29.6	28.5		
11.	PM 10	μg/m³	100	51.6	52.3	54.2		
13.	Measured Concentration of SO ₂	µg/m³	80	16.2	14.2	13.8		
15.	Measured Concentration of NO ₂	μg/m³	80	18.9	20.6	22.8		

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.: 1105/06/2023-24

Date: 01/07/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 22/06/2023

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	
Monitoring is carried out during		Day Time	01:00 - 02:00 PM	Talgite Time	01:30 - 02:30 AM	
01.	Sec. Main Gate	75	66.3	70	52.3	
02.	Pipe Storage Yard	75	67.9	70	50.9	
03.	Nr. Admin Office	75	62.0	70	52.3	
04.	Nr. Canteen	75	64.6	70	54.6	
05.	Nr. Utility Area	75	69.3	70	57.3	
		CPCB S	tandards			
Aroa		Limit in dB(A) Leq.				

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: 04/03/2023







Ref. No.: 2101/07/2023-24

Date: 01/08/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill .: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 1	Stack No. 2
01	Stack Attached to	:	***	DN80-400-01, DN80-400-02, DN200-600, DN450-1200 Double station barrel/socket groove/scoket bell grinding + socket Zn coating	DI Core Shop
02	Date of Sampling			31/07/2023	31/07/2023
03	Time of Sampling	No. Com.		11.30	15.30
04	Air Pollution Control Measures	interner	dame.co	Bag Filter	Bag Filter
05	Stack Height	Meter	222	30	20
06	Stack Temperature	°C		64	59
07	Ambient Temperature	° C		29	29
08	Average Velocity of Flue Gases	M/Sec.		7.3	7.7
09	Isokinetic flow rate for P.M. Sampling	LPM		19	20
10	P.M.	mg/Nm ³	30	17.07	19.21
11	SO2	ppm	100	4.2	4.8
12	NOx	ppm	50	12.7	15.8

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

Rajkot Rajkot

* Permissible limits as per GPCB CC&A



Ref. No.: 2102/07/2023-24

Date: 01/08/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 3	Stack No. 4	Stack No. 5
01	Stack Attached to	200		Mg Powder injection system + Induction furnace (3 nos. with two crucibles each, cap:15 Ton each)	DN80-400, DN200-600 Double Stations Barrel Zinc coating system	DN80-400, DN450- 1200 Double Stations Barrel Zinc coating system
02	Date of Sampling		-	29/07/2023	29/07/2023	29/07/2023
03	Time of Sampling	-	(Meth.)	11.00	14.00	15.50
04	Air Pollution Control Measures			Bag Filter (Common Stack)	Bag Filter	Bag Filter
05	Stack Height	Meter		30	30	30
06	Stack Temperature	°C	Cash	48	57	44
07	Ambient Temperature	°C	- Constant	33	32	32
08	Average Velocity of Flue Gases	M/Sec.		6.8	7.8	7.4
09	Isokinetic flow rate for P.M. Sampling	LPM		21	20	20
10	P.M.	mg/Nm³	30	26.4	25.7	27.4

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

Rajkot Rajkot Rajkot

* Permissible limits as per GPCB CC&A



Ref. No.: 2103/07/2023-24

Date: 01/08/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	0000		Nr. Core Shop	Nr. WDI Pipe Yard	Main Entry Gate
02.	Date of sampling			29/07/2023	29/07/2023	29/07/2023
03.	Time of sampling	Hr.		9.15	9.45	10.0
04.	Dominant Wind Direction (From)	CONTROL SERVICE	80	SE	SE	SE
05.	Wind Speed	Km./Hr.	an ca	3 to 14	3 to 14	3 to 14
06.	Average flow rate during sampling	m3/minute	auca.	1.15	1.25	1.20
07.	Average flow rate for Gas sampling	LPM	2018	0.2	0.2	0.2
08	PM 2.5	μg/m³	60	30.4	32.5	31.4
09	PM 10	µg/m³	100	50.4	53.7	47.6
10	Measured Concentration of SO ₂	µg/m³	80	20.4	15.3	14.7
11	Measured Concentration of NO ₂	μg/m³	80	2.1	17.6	20.1

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.



Jan San



Ref. No.: 1104/06/2023-24

Date: 01/08/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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			Nr. Finishing Line	Near Canteen	2nd Entry Gate
02.	Date of sampling		u o	31/07/2023	31/07/2023	31/07/2023
03.	Time of sampling	Hr.		9.30	10.0	10.15
04.	Dominant Wind Direction (From)	****		SE	SE	SE
05.	Wind Speed	Km./Hr.	28	4 to 15	4 to 15	4 to 15
06.	Average flow rate during sampling	m3/minute	Case	1.10	1.25	1.15
07.	Average flow rate for Gas sampling	LPM	ón.	0.2	0.2	0.2
09.	PM 2.5	µg/m³	60	33.9	30.4	26.4
11.	PM 10	μg/m³	100	54.5	51.4	53.4
13.	Measured Concentration of SO ₂	μg/m ³	80	14.5	17.4	15.9
15.	Measured Concentration of NO ₂	μg/m ³	80	17.1	22.4	20.7

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.



Analyst



Ref. No.: 2105/07/2023-24

Date: 01/08/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

В

C

Commercial Area

Residential Area

Silence Zone

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 29/07/2023

Sample Collected by : Royal Environment

55.0

45.0

40.0

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
Me	onitoring is carried out during	Day Time	01:00 - 02:00 PM		01:30 - 02:30 AM
01.	Sec. Main Gate	75	67.4	70	56.4
02.	Pipe Storage Yard	75	68.1	70	54.3
03.	Nr. Admin Office	75	63.9	70	54.5
04.	Nr. Canteen	75	65.7	70	57.3
05.	Nr. Utility Area	75	70.1	70	58.4
		CPCB:	Standards		
Area			Limit in	dB(A) Leq.	
Code	Category of Area / Zone		Day Time	Night Time	
A	Industrial Area		75.0		70.0
				The second secon	

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

Royal Environment Auditing & Consultancy Service



65.0

55.0

50.0



Ref. No.: 3101/08/2023-24

Date: 01/09/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 1	Stack No. 2
01	Stack Attached to			DN80-400-01, DN80-400-02, DN200-600, DN450-1200 Double station barrel/socket groove/scoket bell grinding + socket Zn coating	DI Core Shop
02	Date of Sampling	and the		18/08/2023	18/08/2023
03	Time of Sampling			11.15	12.15
04	Air Pollution Control Measures	secone		Bag Filter	Bag Filter
05	Stack Height	Meter		30	20
06	Stack Temperature	°C		63	51
07	Ambient Temperature	° C	Para del	30	30
08	Average Velocity of Flue Gases	M/Sec.	50 TO 50	7.4	7.2
09	Isokinetic flow rate for P.M. Sampling	LPM		20	21
10	P.M.	mg/Nm³	30	18.7	20.6
11	SO2	ppm	100	4.9	6.5
12	NOx	ppm	50	13.8	16.7

Instruments Used: Ecotech stack monitoring kit ESS - 100,

* Permissible limits as per GPCB CC&A

Calibration Done On.: 26/12/2022



Analyst



Ref. No.: 3102/08/2023-24

Date: 01/09/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 3	Stack No. 4	Stack No. 5
01	Stack Attached to			Mg Powder injection system + Induction furnace (3 nos. with two crucibles each, cap:15 Ton each)	DN80-400, DN200-600 Double Stations Barrel Zinc coating system	DN80-400, DN450- 1200 Double Stations Barrel Zinc coating system
02	Date of Sampling		-	19/08/2023	19/08/2023	19/08/2023
03	Time of Sampling		-	11.30	13.45	15.00
04	Air Pollution Control Measures			Bag Filter (Common Stack)	Bag Filter	Bag Filter
05	Stack Height	Meter	**	30	30	30
06	Stack Temperature	°C		50	55	47
07	Ambient Temperature	°C		31	31	31
08	Average Velocity of Flue Gases	M/Sec.	-	6.4	7.9	8.4
09	Isokinetic flow rate for P.M. Sampling	LPM	-	20	21	21
10	P.M.	mg/Nm ³	30	27.3	26.3	28.2

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

Rajkot Rajkot

* Permissible limits as per GPCB CC&A

Analyst



Ref. No.: 3103/08/2023-24

Date: 01/09/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	COLUMN TO	***	Nr. Core Shop	Nr. WDI Pipe Yard	Main Entry Gate
02.	Date of sampling		101.CS	18/08/2023	18/08/2023	18/08/2023
03.	Time of sampling	Hr.	2045	9.10	9.30	9.50
04.	Dominant Wind Direction (From)		***	NE	NE	NE
05.	Wind Speed	Km./Hr.	***	2 to 15	2 to 15	2 to 15
06.	Average flow rate during sampling	m3/minute	non .	1.20	1.10	1.15
07.	Average flow rate for Gas sampling	LPM		0.2	0.2	0.2
08	PM 2.5	μg/m³	60	31.5	33.1	32.7
09	PM 10	µg/m³	100	53.4	55.8	48.7
10	Measured Concentration of SO ₂	µg/m³	80	22.1	16.4	17.6
11	Measured Concentration of NO ₂	μg/m³	80	22.3	19.5	22.1

Rajkot

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.



J. 01



Ref. No.: 3104/08/2023-24

Date: 01/09/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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		w 10	Nr. Finishing Line	Near Canteen	2nd Entry Gate
02.	Date of sampling	AT 10 10	-	19/08/2023	19/08/2023	19/08/2023
03.	Time of sampling	Hr.		9.20	09.50	10.15
04.	Dominant Wind Direction (From)		-	SE	SE	SE
05.	Wind Speed	Km./Hr.		3 to14	3 to14	3 to14
06.	Average flow rate during sampling	m3/minute		1.15	1.20	1.20
07.	Average flow rate for Gas sampling	LPM	ba	0.2	0.2	0.2
09.	PM 2.5	μg/m³	60	32.1	28.7	29.7
11.	PM 10	μg/m³	100	55.6	52.9	53.2
13.	Measured Concentration of SO ₂	μg/m³	80	18.7	19.6	16.8
15.	Measured Concentration of NO ₂	μg/m³	80	16.8	21.4	18.9

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



Arralyst



Ref. No.: 3105/08/2023-24

Date: 01/09/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill .: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 19/08/2023

Sample Collected by : Royal Environment

Location of Sampling	Permissible Limits dB(A)	Results in dB(A) (Day Time) 6:00 AM - 10:00 PM	Permissible Limits dB(A)	Results in dB(A) (Night Time) 10:00 PM - 6:00 AM	
onitoring is carried out during	Day Time	01:00 - 02:00 PM	- Night time	01:00 - 02:00 AM	
Sec. Main Gate	75	65.8	70	55.8	
Pipe Storage Yard	75	69.6	70	53.2	
Nr. Admin Office	75	64.5	70	57.6	
Nr. Canteen	75	66.8	70	52.1	
Nr. Utility Area	75	71.1	70	59.8	
	СРСВ 5	Standards			
	Sec. Main Gate Pipe Storage Yard Nr. Admin Office Nr. Canteen	Sec. Main Gate Pipe Storage Yard Nr. Admin Office Nr. Canteen 75 Limits dB(A) Day Time 75 75 75 75 75 Nr. Canteen 75 Nr. Utility Area 75	Location of Sampling	Location of Sampling	

Area	Area C. A	Limit in dB(A) Leq.				
Area Code	Category of Area / Zone	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: 04/03/2023

Royal Environment Auditing & Consultancy Service



Analysi



Ref. No.: 2006/08/2023-24

Date: 01/09/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill .: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 19/08/2023

Readings Taken by : Royal Environment

ampling . 19/00/2023	, rodanigo	Readings Taken by . Royal Environme		
Location of Sampling	Permissible Limits for 8:00 Hrs.	Results in dB(A)		
Monitoring is carried out	during	02:00 to 3:00 PM		
Zn Coating Area	85	80.3		
Core Shop area	85	82.6		
CCM area	85	79.5		
CML area	85	76.8		
Anneling Furnace area	85	82.8		
Induction Furnace area	85	80.9		
Bitumin Coating area	85	76.9		
	Monitoring is carried out Zn Coating Area Core Shop area CCM area CML area Anneling Furnace area Induction Furnace area	Location of Sampling Monitoring is carried out during Zn Coating Area Society Shop area Come Shop area Society Shop area Come Shop area Society Shop area Soc		

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

Royal Environment Auditing & Consultancy Service





Ref. No.: 2007/08/2023-24

Date: 01/09/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 19/08/2023

Sample Collected by: Royal Environment

Sr. No.	Area/Plant	Monitoring Location	Permissible Limit**	SPM Level (µg/Nm³)
		Monit	oring is carried out during	03:00 to 04:00 PM
01		Coreshop Area	3000	1680
02	DI Pipe Plant	CCM Area	3000	1863
03		CML Area	3000	1571

Rajkot

Instruments Used: HVS APM 430, Calibration done on.: 26/12/2022

** Permissible Limits are as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service



Ref. No.: 2008/08/2023-24

Date: 01/09/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 19/08/2023

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			
Monitorii	ng is carried out during		10:00 to 11:00 AM	11:00 to 12:00 PM			
01	Zn Coating Area	300	325	320			
02	Core Shop area	300	310	318			
03	CCM area	300	430	340			
04	CML area	300	400	360			
05	Anneling Furnace area	300	340	375			
06	Induction Furnace area	300	360	330			
07	Bitumin Coating area	300	410	350			

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Rajkot

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

Calibration done on: 04/03/2023

Royal Environment Auditing & Consultancy Service



Ref. No.: 1010/08/2023-24

Date: 01/09/2023

WATER SAMPLE ANALYSIS REPORT

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 19/08/2023

Source of Sample: Canteen

Sample Collected by : Royal Environment

3						ay : regar =::::::::::::::::::::::::::::::::::::
	Sr. No.	Parameters	Unit	Acceptable Limit	Permissible Limits(*)	Result
200	01.	Color	Pt.Co.Scale	5	15	Colorless
	02.	Odour	*	Agreeable	Agreeable	Odorless
	03.	Temperature	°C			29
	04.	Turbidity	NTU	1	5	NIL
	05.	рН	pH Unit	6.5 to 8.5	No Relaxation	7.15
	06.	T.D.S.	Mg/L	500	2000	140
	07.	Total Hardness	Mg/L	200	600	35
	08.	Ca as Ca	Mg/L	75	200	6.4
	09.	Mg as Mg	Mg/L	30	100	4.6
	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	29.8
	15.	Sulphate	Mg/L	200	400	7.6
	16.	Nitrate	Mg/L	45	No Relaxation	4
	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	24.0
	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



Rajkot

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Date: 01/09/2023

No.: 2009/08/2023-24

WORK PLACE MONITORING REPORT Form No. 37

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

1 Name of the Department/Plant: Zn Coating, Coreshop, Anneling furnace area of M/s. Welspun DI Pipes Itd., Anjar, Kutch.

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

3 Particulars of sampling

of Sampling

Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborr	Airborne Contamination	ination	TWA** concertration (As given in Second Schedule)	Refrance Method	Number of Workers exposed at the location	Remarks	Signature person taking	Name (in block letters)
			Number of sample	Range	Average	Mg/m³		monitored		samples	
Zn Coating area	Total Dust		2	1.3-2.4	1.85	10		е			
CCM area	Total Dust	Personal Respirable	2	1.3-2.2	1.75	10	Gravimetric	5	1	Fin	Mr.Prashant
CML area	Total Dust	Dust sampler VPDS 203	2	1.6-2.9	2.25	10		4	-	7Sin	Chavda
Anneling Furnace area	Total Dust		2	1.5-3.1	2.30	10		4	1		
ole limits (TWA) a	missible limits (TWA) are as per ACGIH Standards.	tandards.		1	& adling &	1000					

ration Done On.: 16/01/2023

Il Environment Auditing & Consultancy Service



For. Royal Environment Auditing & Consultancy/Service

Authorized Sign



Ref. No.: 4101/09/2023-24

Date: 03/10/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 1	Stack No. 2
01	Stack Attached to		Shi ma dini	DN80-400-01, DN80-400-02, DN200-600, DN450-1200 Double station barrel/socket groove/scoket bell grinding + socket Zn coating	DI Core Shop
02	Date of Sampling		AGN	23/09/2023	23/09/2023
03	Time of Sampling	and the same of th	-	11.00	12.00
04	Air Pollution Control Measures	Ware:		Bag Filter	Bag Filter
05	Stack Height	Meter		30	20
06	Stack Temperature	° C		62	53
07	Ambient Temperature	° C		29	29
08	Average Velocity of Flue Gases	M/Sec.	-	7.8	7.9
09	Isokinetic flow rate for P.M. Sampling	LPM		21	22
10	P.M.	mg/Nm ³	30	19.7	21.9
11	SO2	ppm	100	5.3	6.4
12	NOx	ppm	50	14.3	15.4

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

Rajkot Rajkot

* Permissible limits as per GPCB CC&A



Ref. No.: 4102/09/2023-24

Date: 03/10/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Permissible Limit	Stack No. 3	Stack No. 4	Stack No. 5
01	Stack Attached to		-	Mg Powder injection system + Induction furnace (3 nos. with two crucibles each, cap:15 Ton each)	DN80-400, DN200-600 Double Stations Barrel Zinc coating system	DN80-400, DN450- 1200 Double Stations Barrel Zinc coating system
02	Date of Sampling			24/09/2023	24/09/2023	24/09/2023
03	Time of Sampling		**	11.15	13.30	14.30
04	Air Pollution Control Measures			Bag Filter (Common Stack)	Bag Filter	Bag Filter
05	Stack Height	Meter	W-07	30	30	30
06	Stack Temperature	°C	-	52	54	50
07	Ambient Temperature	° C		29	29	29
08	Average Velocity of Flue Gases	M/Sec.	***	6.9	8.2	7.8
09	Isokinetic flow rate for P.M. Sampling	LPM		23	22	20
10	P.M.	mg/Nm ³	30	26.5	25.9	27.8

Instruments Used: Ecotech stack monitoring kit ESS - 100,

Calibration Done On.: 26/12/2022

Rajkot Rajkot

* Permissible limits as per GPCB CC&A

Analyst



Ref. No.: 4103/09/2023-24

Date: 03/10/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	Sign pri column		Nr. Core Shop	Nr. WDI Pipe Yard	Main Entry Gate
02.	Date of sampling		6066	23/09/2023	23/09/2023	23/09/2023
03.	Time of sampling	Hr.		10.15	10.30	10.45
04.	Dominant Wind Direction (From)			sw	sw	sw
05.	Wind Speed	Km./Hr.		3 to 16	3 to 16	3 to 16
06.	Average flow rate during sampling	m3/minute		1.10	1.15	1.20
07.	Average flow rate for Gas sampling	LPM		0.2	0.2	0.2
08	PM 2.5	µg/m³	60	30.9	33.3	31.8
09	PM 10	µg/m³	100	52.3	52.4	50.3
10	Measured Concentration of SO ₂	μg/m³	80	20.4	18.3	15.7
11	Measured Concentration of NO ₂	μg/m³	80	21.7	20.6	22.1
12	Measured Concentration of Zn	μg/m³	ione	5.4	2.20	<0.1

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.: 4104/09/2023-24

Date: 03/10/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: 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	F8 M 43 W	23 05	Nr. Finishing Line	Near Canteen	2nd Entry Gate
02.	Date of sampling		me.	24/09/2023	24/09/2023	24/09/2023
03.	Time of sampling	Hr.		9.15	09.40	10.00
04.	Dominant Wind Direction (From)			SE	SE	SE
05.	Wind Speed	Km./Hr.		4 to 15	4 to 15	4 to 15
06.	Average flow rate during sampling	m3/minute		1.20	1.10	1.15
07.	Average flow rate for Gas sampling	LPM		0.2	0.2	0.2
08	PM 2.5	μg/m³	60	28.4	27.6	30.4
09	PM 10	μg/m³	100	52.6	50.7	51.3
10	Measured Concentration of SO ₂	μg/m³	80	16.4	18.7	17.6
11	Measured Concentration of NO ₂	μg/m³	80	17.3	19.4	20.6
12	Measured Concentration of Zn	μg/m³		1.6	<0.1	<0.1

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.

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Environment Auditing & Consultancy Service

Plot No. 19 & 20, B/s. The North Star Nest School, Masoom School Road, Mota Mava, RAJKOT - 360 005. Ph.: +91 9099919954 ■ E-mail: royalenvironment@live.com ■ admin@royalconsultancy.com

Ref. No.: 4105/09/2023-24

Date: 03/10/2023

AMBIENT NOISE LEVEL MONITORING REPORTS

Name of company: Welspun DI Pipes Limited, (ID:80431)

Address

: Survey No. 617, 618, 632, 633, Vill.: Varsamedi,

Welspun City, Taluka: Anjar, Dist. Kutch - 370 110.

Date of Sampling: 24/09/2023

Sample Collected by : Royal Environment

Sr. No.	Location of Sampling	Permissible Limits dB(A) Day Time	Limits dB(A) 6:00 AM - 10:00 PM		Results in dB(A) (Night Time) 10:00 PM - 6:00 AM	
M	onitoring is carried out during	Day i lille	12:30 - 01:30 PM	Night Time	12:30 - 01:30 AM	
01.	Sec. Main Gate	75	67.8	70	52.9	
02.	Pipe Storage Yard	75	65.9	70	53.4	
03.	Nr. Admin Office	75	64.8	70	55.6	
04.	Nr. Canteen	75	63.5	70	54.8	
05.	Nr. Utility Area	75	69.7	70	57.8	
		СРСВ 5	standards			
Area	Category of Area / Zone		Limit in	dB(A) Leq.		
Code	Category of Area / Zone		Day Time		light Time	

 Day Time
 Night Time

 A
 Industrial Area
 75.0
 70.0

 B
 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: 04/03/2023

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