

Date: 30.05.2023

To,

Member Secretary
State Level Environment Impact Assessment Authority
Gujarat Pollution Control Board
Paryavaran Bhavan, Sector-10 A
Gandhinagar – 382010.

Sub: - Half Yearly Environment Clearance Compliance Report.

Ref: Your letter No. WCL-EC, SEIAA/GUJ/EC/5(f)/2338/2022, date: 15.10.2022(Earlier WSL - EC, SEIAA/GUJ/EC/3(a) & 1(d)/83/2011, date: 30.05.2011)

Dear Sir,

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

Thanking You,

Yours faithfully,

For; M/s. Welspun Corp Ltd.

Encl: As above

CC:

1. The Regional Officer,

Ministry of Environment, Forest & Climate Change,

Room No. 407, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhinagar, Gujarat-382010.

- 2. Gujarat Pollution Control Board, Parayan Bhavan, Sector-10-A, Gandhinagar-382020.
- 3. Regional Office, Central Pollution Control Board, Parivesh Bhawan, Aatmajyoti Ashram Road, Opp. VMC Ward office No. 10, Subhanpura, Vadodara, Gujarat-390023.

Welspun Corp Ltd (Steel Division)

Welspun House, 5th Floor, Kamala City, SenapatiBapat Marg, Lower Parel (West), Mumbai – 400013, India. Registered Office: Welspun City, Village Versamedi, TalukaAnjar, Dist. Kutch, Gujarat, Pin-370110 India Works Address: Welspun City, Survey No. 650, Village Versamedi, TalukaAnjar, Dist. Kutch, Gujarat, Pin-370110 Tel: +91 22 66136000 /24908000, Fax: +91 22 24908020

E-mail: companysecretary_wcl@welspun.com Website: www.welspuncorp.com Corporate identification No. L27100GJ1995PLC025609

Half Yearly Environment Clearance Compliance Report For M/s Welspun Corp Limited, Village: Versamedi, Taluka: Anjar, District: Kutch. WCL-EC, SEIAA/GUJ/EC/5(f)/2338/2022, date: 15.10.2022(Earlier WSL - EC, SEIAA/GUJ/EC/3(a) & 1(d)/83/2011, date: 30.05.2011) **Environment Clearance - Condition** Sr. Status No. SPECIFIC CONDITIONS: Total Production of Sponge Iron for captive consumption and for The production capacity is not increased for sale shall not increase for existing 12000 MT/Month, in any case. sponge iron i.e.-12000 MT/Month. A-1 WATER: Fresh water requirement shall not exceed 2869 KL/day after the The water supply is fulfilled by GWIL. No ground water is being tapped for the project requirement. proposed expansion and shall be met only through water supply from Gujarat Water Infrastructure Ltd. (GWIL). No ground water shall be tapped for the project requirements. Water meter shall be installed at the all water intake points and its records shall be maintained. The industrial effluent generation (from DM Plant Regeneration, The Industrial effluent generation of water is Boiler Blow-down & cooling tower blow down) shall not exceed within the prescribed limit. 179 KL/day after the proposed expansion. The industrial effluent after its pH correction shall be completely We are re-using wastewater for Cooling of reused in sponge iron kiln cooling, green belt development, Kiln's Cooler, Dust suppression, sprinkling, sprinkling on roads etc. There shall be no discharge of industrial gardening purpose. effluent outside the factory premises in any cases. Domestic Wastewater shall be disposed off through septic tank-The domestic wastewater is being disposed soak pit. through a septic tank. Rainwater harvesting of surface as well as rooftop runoff shall be We have made a pond for Rainwater undertaken, and the same water shall be used for the various harvesting. Rainwater is being collected in the activities of the project to conserve fresh water as well as to same for the utilization. recharge ground water. Before recharging the surface runoff, pretreatment must be done to remove suspended matter. A-2 AIR: Imported coal-125 MT/day & Coal-char 56 MT/day shall be used as Noted and are being complied. fuel in the proposed AFBC Boiler (30 TPH). FO-3.5 KL/Day & Gasifier Gas shall be used as a fuel in the Complied. Reheating Furnace. (03 Nos.) 9 The AFBC Boiler shall be operated only when existing sponge iron Complied. kiln is not in operation (i.e. WHRB plant non operation phase) and hence total power generation shall not increase from existing 12 MW level in any case. 10 Height of stack attached to induction Furnace (02 nos.) and Complied. Reheating Furnace (03 nos.) shall be at least 30 M and height of stack attached to AFBC Boiler shall be at least 47.24 M

11	Bag Filters shall be provided as air pollution control system for induction Furnace (02 nos.) and Reheating Furnace (03 nos.). These bag filter shall be operated efficiently to achieve the norms prescribed by the GPCB at stack outlets.	Bag Filters have been provided as air pollution control system for all Furnace.		
12	High efficiency Electrostatic Precipitators (ESP) with efficiency not less than 99.9% shall be provided as air pollution control system for the AFBC Boiler. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceed the specified standard utilization of boiler capacity shall be reduced so that flue gas emission from the stack meets with the specified norms of boiler shall shut down totally.			
13	There shall be one extra field in the ESP to ensure that even though one field goes out of order, the efficiency of the ESP is not affected. In case of failure of two or more fields of the ESP, the unit shall immediately shut down the power plant.	Noted & Complied.		
14	Online Monitoring System shall be installed on the boiler stack. This online monitoring system shall be interlocked with plant DCS system in such a manner that if concentration of particulate matter in flue gas emission exceeds the stipulated standard, utilization of boiler capacity shall reduce accordingly in order to bring down the particulate matter concentration below the stipulated standard. An arrangement shall also be done for reflecting the online monitoring results on the company's server which can be assessable by the GPCB on real time basis.	Complied.		
15	The Company shall prepare schedule carry regular preventive Maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.	Complied.		
16	The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.	Point noted and are being complied. Fugitive emissions are being monitored in the work zone environment on regular intervals.		
a.	Enclosure shall be provided at coal loading and unloading operation.	Complied.		
b.	Water shall be sprayed on coal stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.	Water Sprinkler System have been installed at Co- Storage area and water being sprayed on coal stock piles periodically to retain some moisture in top layer.		
c.	All transfer points shall be fully enclosed.	All transfer points are fully enclosed.		
d.	Accumulated dust on the ground and other surface shall be removed/swept regularly and water the area after sweeping,	Ground dust is swept on a regular basis and water is being sprinkled after sweeping.		
e.	Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.	WCL Plant periphery road are well constructed with solid Tar.		

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f.	Air born coal dust shall be controlled with water sprinklers at suitable locations in the plant.	Water Sprinkler System are installed at fugitiv dust area.	
g.	Coal shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.	Noted & are being complied.	
17	Third party performance Evaluation of the air pollution control system including ESP shall be carried out at least once in a year to check its performance and efficiency through a reputed institute like NPC, LD Collage of Engineering or such other institute of similar repute, and its records shall be maintained.	Third party performance evolution of the air pollution control system including ESP are being carried out once in a year by M/s Royal Environment Consultancy Services and its records are being maintained.	
18	Ambient air quality monitoring shall be carried out every month at three station at 180 degree and its records shall be maintained and furnished to the SEIAA & GPCB from time to time. If at any stage, any pollution is found to exceed the prescribe limit, necessary additional control measures shall be provided immediately.	Ambient air quality monitoring are being carried out every month & records are being maintained.	
A-3	HAZARDOUS / SOLID WASTE :	8	
19	The company shall strictly comply with the rules and regulations with regards to handling and disposal of hazardous waste in accordance with the hazardous waste rules 2008, as may be amended from time to time. Authorization from the GPCB shall be obtained for collection/treatment/storage/disposal of hazardous wastes.	We are following the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. We have obtained consolidated Consent & Authorization (CC&A) from Gujarat Pollution Control Board (GPCB) for collection /treatment / storage/disposal of hazardous wastes and Consent is valid up to 12.08.2025.	
20	Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.	Complied.	
21	The discarded containers/barrels/bags/liners/ shall be sold only to the register recycler after decontamination.	The discarded containers/barrels/bags/liners/ are being sold only to the register recycler of Gujarat Pollution Control Board.	
22	The used oil shall be sold to only to the registered recycler.	Used Oil are being sold to authorized registered recycler of Gujarat Pollution Control Board.	
23	Ash pond shall not be constructed for the storage of the fly ash and the fly ash shall be stored in closed RCC silos only. The unit shall strictly comply with Fly Ash Notification under EPA and it shall be ensured that there is 100 % utilization of ash to be generated from the unit.	Noted and are being Complied.	
24	Slag shall be utilized in brick manufacturing or road construction of sold as aggregate for construction activity.	Noted and are being Complied.	
25	Mill scale shall be completely reused in the process.	Noted and are being Complied.	
A-4	SAFETY:	-ta	
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26	Fire Protection system based on National Fire Protection Association (NFPA) approved guideline shall be provided. It shall consist of fire hydrant system all-round the plant area and storage yards, high velocity water spray system for transformers, automatic fire detection and alarm, manual fire alarm system, portable fire extinguisher etc.	We have installed Fire Extinguishers at the surrounding area in the plant. We have 04 No of Fire Tender and Emergency Teams at Welspun City.	
27	Personal Protective Equipment shall be provided to workers and its usage shall be ensured and supervised.	Personal Protective Equipment are being provided to workers and its uses are being insured & supervised. Safety Helmet & Safety shoes are mandatory for workers Other PPEs are being provided as per work place requirement.	
28	First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity at all the times.	One Paramedical staff is deployed at First Aid Center. First Aid Box is available at each designated plant area.	
29	Hazardous materials storage shall be at an isolated designed location. Storage and use of hazardous chemicals shall be minimized to extent possible and all necessary precaution shall be taken to mitigate the risk generated out of it.	Complied.	
30	Storage of hazardous chemicals shall be multiple small capacity tanks/containers instead of on single large capacity tank of safety purpose.	Noted and are being Complied.	
31	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dykes walls shall be provided for the storage tanks. Close handling system for chemicals shall be provided.	Noted.	
32	All transporting routes within the factory premises shall paved roads to minimize splashes and spillages.	All transporting routes within the factory premise have been paved roads to minimize splashes and spillages.	
33	All efforts shall be made for atomization of molten metal handling and human exposure to the molten metal shall be avoided as far as possible.	Noted and are being Complied.	
34	Training shall be imparted to all the workers on safety and health aspects of molten metal handling heat stress etc to avoid its impact on human being.	Regular training is being imparted to all the workers on safety and health aspects of molten metal handling heat stress etc to avoid its impact on human beings.	
35	Occupational health surveillance of the worker shall be carried out on regular basis and records shall be maintained as per factories Act and Rules. Pre-employment and periodical post-employment medical examination for all workers shall be undertaken as per the statutory requirements.	Noted and are being Complied.	
36	At all the times, necessary tie up with the nearby doctor qualified / hospital for occupation health shall be made to ensure that the medical treatment is given within the shortest time in case of any adverse condition.	Noted and are being Complied.	
37	Sufficient ventilation, exhausts shall be provided to maintain the temperature within the work area. Temperature indicators shall be provided at the vulnerable places in consultation with Directors of Safety and Health.	Noted and are being Complied.	

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38	The project management shall strictly comply with the provisions made in Manufacture Storage and Impact of Hazardous Chemical Rules, 1989 as amended 2000 for handling of hazardous chemical.	Noted.
39	All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act & Rules.	Noted and are being Complied.
40	The Project Management shall prepare a detailed Disaster Management Plan (DMP) for the project as per guideline from Directorate of Industrial Safety & Health.	Noted.
A-5	NOISE:	
41	To minimize the noise pollution the following noise control measures shall be implemented.	
a.	Selection of any new plant equipment shall be made with specification of the low noise levels.	Complied.
b.	Manufactures / suppliers of major noise generating machines/equipment like air compressor, feeder pumps, turbine generators, etc. shall be instructed to make required design modification wherever possible before supply and installation to mitigate the noise generation and to comply with national / international regulatory norm with respect to noise generation for individual units.	Noted.
C.	Regular maintenance of machinery and vehicle shall be undertaken to reduce the noise impact.	Noted and are being Complied.
d.	Noise Suppression measures such as enclosures, buffers and /or protective measures shall be provided.	Noted and are being Complied.
e.	Employees shall be provided with ear protection measures like earplug or earmuffs.	Noted and are being Complied.
f.	Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipment's to reduce noise generation.	Noted and are being Complied.
g.	Construction equipment generating minimum noise and vibration shall be closed.	Noted and are being Complied.
h.	Ear plugs and muffs shall be made compulsory for the construction worker working near the noise generating activities/machine/equipment.	Noted and are being Complied.
i.	Vehicle and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.	Noted and are being Complied.
j.	Construction equipment meeting the norms specified by EPA Act- 1986 shall only be used.	Noted and are being Complied.
k.	Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.	Noted and are being Complied.
1.	Noise level shall be reduced by the use of adequate mufflers on all motorized equipment.	Noted and are being Complied.

42	The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencer, enclosures, vibration dampers etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under the Environment Protection Act and Rules. Workplace noise levels for workers shall be as per the Factory Act & Rules.	Noted and are being Complied.	
A-6	CLEANER PRODUCTION AND WASTE		
	MINIMISATION:		
43	The unit shall undertake the cleaner production assessment study through a reputed institute/organization and shall form a CP team in the company. The recommendation thereof along with the compliance shall be furnished to the GPCB.	Noted.	
44	The Company shall undertake following waste minimization measures.		
a.	Metering and control of quantities of actives ingredients to minimize waste.	Noted & being Complied.	
b.	Reuse of by-products from the process as raw materials or raw materials substitutes in other process.	Noted & being Complied.	
С.	Use of automated and enclosed filling to minimize spillages.	Complied.	
d.	Use of close system.	Complied.	
e.	Dry cleaning / mopping of floor instead of floor washing.	Complied.	
f.	Use of high pressure hoses for equipment cleaning to reduce waste water generation.	Complied.	
g.	Regular preventive maintenance for avoiding leakage, spillage etc.	Noted & being Complied.	
A-7	GREEN BELT AND OTHER PLANTATION:		
45	The unit Shall develop green belt in at least 11.48 hectares area within premises as proposed. Green belt of average 15 M width comprising of rows of varying height tall trees with thick foliage shall be developed in the periphery of the factory premises.	We have developed Green Belt area of 36.33 acres till date.	
46	Drip irrigation system shall be used green belt development.	We have arranged the Water Tanker & Water Pipeline supply for green belt development.	
47	The unit shall also take up adequate plantation at suitable open land on road side and other open areas in nearby villages or schools in consultation with the Gram Panchayat / GPCB and submit an action plan for the same for next three years to the GPCB.	Complied.	
В.	GENERAL CONDITIONS :		
48	In the event of failures of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.		
49	The company shall vigorously follow the recommendation mentioned in the Charter on Corporate Responsibility for Environment Protection (CREP) published by the CPCB.	Noted.	
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50	All the issues raised in the public hearing shall be comprehensively addressed / complied with a time bound manner.	Complied.	
51	The project proponent shall adhere to their commitments made during the public hearing held on 17/09/2010 viz. to incur Rs.42 crores towards socio-economics development, preference to local employment etc.	Complied.	
52	A separate Environment Management Cell equipped with full- fledged laboratory facilities and qualified personal shall be set up to carry out the environment management and monitoring functions and a separates budget shall be allocated for this purpose.	Complied.	
53	The funds earmarked for environment protection measures shall be maintained in a separate account and there shall not be any diversion of these funds for any other purpose. A year wise expenditure on environment safeguards shall be reported.	Complied.	
54	Pucca flooring / impervious bottom shall be provided in the work areas, chemical storage areas and chemical handling area to minimize soil contamination.	Complied.	
55	Leakages from the pipes, pumps shall be minimal and if occurs shall be arrested promptly. During material transfer, spillages shall be avoided and garland drain be constructed.	Complied.	
56	The project management shall also comply with all the recommendation made in the EIA/EMP report of the project and the undertaking submitted by the project Management.	Complied.	
57	The applicant shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.	Noted & shall be Complied.	
58	No further expansion or modification in the plant shall be carried out without prior approval of the MoEF / SEIAA as the case may be. In case of deviations of alteration in the project proposal from those submitted to MOEF/SEIAA/SEAC for clearance, a fresh reference shall be made to the SEIAA/SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted & shall be Complied.	
59	The project authorities shall earmark adequate funds to implement the condition stipulated by SEIAA as well as GPCB along with the implementation schedule for all the condition stipulated herein. The funds so provided shall not be diverted for any other purpose.	Complied.	
60	The applicant shall inform the public that the project has been accorded environmental clearance by SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the website of SEIAA/SEAC/GPCB. This shall be advertised within seven days from the date of clearance letter in at least two local Newspapers that are widely circulated in the region , one of which shall be in the Guajarati language and other in English. A copy each of the same shall be forwarded to the concerned	Complied.	

61	It shall be mandatory for the project management to submit half- yearly compliance report in respect of the stipulated prior environment clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each Calendar year.	Noted & are being Complied.
62	The Project authority shall also adhere to the stipulations made by the GPCB.	Noted & shall be Complied.
63	The project authorities shall inform the GPCB, regional office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Complied.
64	The SEIAA may revoke or suspend the clearance, if implementation of any of the above condition is not found satisfactory.	Noted.
65	The above conditions shall be enforced Iner-alia under the provisions of the Water (Prevention & Control of Pollution) act-1974, Air (Prevention & Control of Pollution) act-1981. The Environment protection Act, 1986, Hazardous Waste Rules-2008 and the Public Liability Insurance Act-1991 along with their amendments and rules.	Noted & shall be Complied.
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Ref. No.: 50002/10/2022-23

Date: 31/10/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Stack Attached to	•	Iron Ore Crusher Screen House	Coal Crusher Screen House	Stock House- 1	Stock House-2
02	Date of Sampling	****	08/10/2022	08/10/2022	09/10/2022	09/10/2022
03	Time of Sampling		10:30	11:10	9:50	10:30
04	Air Pollution Control Measures		Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	17	17	17	17
06	Stack Temperature	°C	76	70	75	70
07	Ambient Temperature	°C	28	29	28	29
08	Average Velocity of Flue Gases	M/Sec.	6.9	7.1	7.5	6.8
09	Isokinetic flow rate for P.M. Sampling	LPM	19	20	21	21
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	45	48	40	46

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 27/12/2021

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service





Ref. No.: 50003/10/2022-23

Date: 31/10/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method : As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13	Stack No. 14
01	Stack Attached to	_	Coal Injector-1	Coal Injector-2	Intermediate Bin	Raw Material Junction House	Production Separation
02	Date of Sampling	_	08/10/2022	08/10/2022	09/10/2022	09/10/2022	08/10/2022
03	Time of Sampling	-	11:50	12:30	11:10	11:50	14:00
04	Air Pollution Control Measures	-	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	12	12	22	20	15
06	Stack Temperature	°C	65	62	66	58	68
07	Ambient Temperature	°C	30	31	30	31	30
80	Average Velocity of Flue Gases	M/Sec.	7.4	7.6	7.2	7	6.9
09	Isokinetic flow rate for P.M. Sampling	LPM	20	21	20	19	21
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm³	50	39	48	40	45

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 27/12/2021

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service





Ref. No.: 50001/10/2022-23

Test Method

Date: 31/10/2022

Sample Collected by : Royal Environment

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

: As per IS Standards - 11255_1/2/3/7

Dist,: Kutch- 370110.

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5
01	Stack Attached to	, ;	Kiln Exit 1 & 2	Kiln Exit 3 & 4	Boiler of CPP - 30 TPH	D. G. Set
02	Date of sampling	-	08/10/2022	08/10/2022		-
03	Time of Sampling		09:00	09:45	***	
04	Air Pollution Control Measures		Dust Settling Chamber, Bag Filter ESP	ESP with each Kiln	ESP & Wet Scrubber	
05	Stack Height	Meter	30	30	30	30
06	Stack Temperature	°C	110	115	Not	Not
07	Ambient Temperature	°C	27	28	Running	Running
08	Average Velocity of Flue Gases	M/Sec.	6.9	7.6	During	During
09	Isokinetic flow rate for P.M. Sampling	LPM	19	21	Visit	Visit
10	Gaseous Sampling Flow Rate	LPM	2.0	2.0		
11	Permissible Limit for P.M.*	mg/Nm³	100	100	100	150
12	Measured Concentration of P.M.	mg/Nm ³	36.6	38.2		

Measured Concentration of Nox Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Measured Concentration of SO2

Permissible Limit for SO2*

Permissible Limit for Nox*

Calibration Done On .: 27/12/2021

13

15

16

* Permissible limits as per GPCB CC&A

100

50



100

12.9

50

18.8

ppm

ppm

ppm

ppm

100

15.1

50

19.3

Royal Environment auditing & Consultancy Service

100

50



Ref. No.: 50004/10/2022-23

Date: 31/10/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 15	Stack No.16
01	Stack Attached to	****	ET Furnace - SMS	IT Furnace - SMS
02	Date of sampling	-	30/10/2022	30/10/2022
03	Time of Sampling	- manage	11:50	14:00
04	Air Pollution Control Measures	*******	Bag Filter	Bag Filter
05	Stack Height	Meter	-	
06	Stack Temperature	°C	111	114
07	Ambient Temperature	°C	31	32
08	Average Velocity of Flue Gases	M/Sec.	7.2	7.7
09	Isokinetic flow rate for P.M. Sampling	LPM	19	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100
11	Measured Concentration of P.M.	mg/Nm ³	45	54
12	Permissible Limit for Sox*	ppm	40	40
13	Measured Concentration of SOx	ppm	1.2	1.1
14	Permissible Limit for Nox*	ppm	25	25
15	Measured Concentration of Nox	ppm	10.2	11.4

* Permissible limits as per GPCB CC&A.

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Ref. No.: 50005/10/2022-23 Date: 31/10/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Test Method

: As per IS Standards - 5182_2/4/6

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Location No. 1
01.	Location of Sampling		Nr. Main Security Gate
02.	Date of sampling		08/10/2022
03.	Time of sampling	Hrs.	08:45
04	Duration of Sampling	Min.	1440.00
05	Dominant Wind Direction (From)		SE
06	Wind Speed	Km./Hrs.	2 to 15
07	Average flow rate during sampling	m3/minutes	1.20
80	Average flow rate for Gas sampling	LPM	0.2
09	Permissible Limits of PM 10 *	μg/m³	100
10	Measured Concentration of PM 10	μg/m³	40
11	Permissible Limits of PM 2.5*	μg/m³	60
12	Measured Concentration of PM 2.5	µg/m³	36
13	Permissible Limits of SO ₂ *	μg/m³	80
14	Measured Concentration of SO ₂	μg/m³	12.9
15	Permissible Limits of NO ₂ *	μg/m³	80
16	Measured Concentration of NO ₂	μg/m³	18.4

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

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^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 50006/10/2022-23

Date: 31/10/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Fest Method : As per IS Standards - 5182_2/4/6				Sample Collected by : Royal Environment			
Sr. No.	Particulars	Unit	Location No. 3	Location No. 4	Location No. 2		
01.	Location of Sampling		Nr. SMS, TRIANGLE GARDEN	Nr. WEST SECURITY GATE	Weight Bridge Security Point		
02.	Date of sampling		09/10/2022	08/10/2022	09/10/2022		
03.	Time of sampling	Hrs.	9:30	9:00	10:00		
04	Duration of Sampling	Min.	1440.00	1440.00	1440.00		
05.	Dominant Wind Direction (From)		SE	SF	SF		
06.	Wind Speed	Km./Hrs.	2 to 15	4 to 12	3 to 18		
07.	Average flow rate during sampling	m3/minutes	1.10	1.10	1.20		
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2		
09.	Permissible Limits of PM 10*	µg/m³	100	100	100		
10.	Measured Concentration of PM 10	μg/m³	38	40	35		
11.	Permissible Limits of PM 2.5*	μg/m³	60	60	60		
12.	Measured Concentration of PM 2.5	µg/m³	28	25	26		
13.	Permissible Limits of SO ₂ *	μg/m³	80	80	80		
14.	Measured Concentration of SO ₂	µg/m³	13.7	12.9	11.2		
15.	Permissible Limits of NO ₂ *	μg/m³	80	80	80		
16.	Measured Concentration of NO ₂	µg/m³	20.0	18.5	14.9		

Instrument used : Ecotech RDS AAS 217BL , Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

*Permissible limits are as per NAAQ Standard 16th November 2009

Royal Environment Auditing & Consultancy Service



Analyst Analyst



Ref. No.: 50008/10/2022-23

Date: 31/10/2022

AMBIENT NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 08th october 2022

Readings Taken by : Royal Environment

Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)
	Permissible Limits	75.0	70.0
01.	Nr. Main Security Gate	66.5	50.8
02.	Nr. DRI Workshop area	63.8	53.3
03.	Nr. Weigh Bridge - Security Point	62.0	55.3
04.	Nr. SMS Triangle Garden	64.6	52.2
05.	Nr. CPP Plant - Coal Shed Corner	72.3	56.7
06.	Nr. West Security Gate	64.2	52.5

CPCB Standards

Area Code	Category of Area / Zone	Limit in dB(A) Leq.			
Area Oode	Valegory 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 : Lutron Make Sound level meter, Model No. IL- 006719

Royal Environment Auditing & Consultancy Service

Calibration done on: 30/09/2021

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Ref. No.: 50009/10/2022-23

Date: 31/10/2022

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 08th october 2022

Readings Taken by: Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	imits for 8:00 Hrs.	90.0
	DRI Plant	
01	Nr. WorkShop	76.2
02	Between Kiln 1 & 2 (Platform)	80.6
03	Nr. Pump House - DRI	75.9
04	Nr. RMHS	72.0
	CPP Plant	
05	Nr. FBC Boiler (CPP)	87.6
06	Nr. TG Building	75.3
07	Nr. Work Shop	74.7
08	Inside Control Room	73.0
	SMS Plant	
09	Nr. Furnace Platform Area	72.2
10	Nr. CCM Area	73.0
11	Nr. MECH. Workshop	80.4
12	Nr. Pump House Area	77.9
	RM Plant**	
13	Nr. Roughing Section	75.1
14	Nr. Electrical Room	71.5
15	Nr. MECH. WORK	80.4
16	Nr. Cooling Bed Area	69.9

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

Calibration done on: 30/09/2021

Royal Environment Auditing & Consultancy Service

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Ref. No.: 50010/10/2022-23

Date: 31/10/2022

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 08th october 2022

Readings Collected by : Royal Environment

Sr. No.	Location of Sampling	ocation of Sampling (As per standards IS - 3646 Part - II : 1966)		Illumination Night Time
01	Inside Office Building-ADM	200	370	250
02	Inside Control Room - DRI	300	360	360
03	Inside the Canteen	200	375	355
04	QC Lab - DRI Plant	300	350	340
05	Inside Control Room - CPP	300	390	335
06	QC Lab - SMS Plant	300	385	300

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

Calibration done on: 02/09/2021

Royal Environment Auditing & Consultancy Service



Ref. No.: 50011/10/2022-23

Date: 31/10/2022

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 08th october 2022

Sample Collected by : Royal Environment

Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permiss	sible Limit**		2000
01	Dow Material Handling Assa	Screen Area	850
02	Raw Material Handling Area	Transfer Point	900
03	Crusher Area	Crushing Point	985
04	Crusher Area	Transfer Point	1440
05	Raw Material Feed Area	Feeder Area	930
06	Thaw inlaterial Feed Area	Mixing Area	810
07	Cooler discharge Area	Transfer Point	940
80		Product Sepration Area	1000
09	Product processing Area	Bagging Area	760
10	4	Intermediate Stock bin area	1320

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

Royal Environment Auditing & Consultancy Service

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



Ref. No.: 50012/10/2022-23

Date: 31/10/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 09/10/2022

Source of Sample: Canteen

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.42
02	Total Dissolved Solids	mg/l	500	2000	140
03	Total Hardness (As CaCO ₃)	mg/l	200	600	46.5
04	Calcium (as Ca)	mg/l	75	200	11.2
05	Magnesium (as Mg)	mg/l	30	100	4.5
06	Chlorides	mg/l	250	1000	33.4
07	Sulphates	mg/l	200	400	13.2
08	Total Alkalinity	mg/l	200	600	38
09	Nitrates	mg/l	45	No relaxation	2.4
10	Flouride	mg/l	1.0	1.5	0.05

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(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard

Royal Environment Auditing & Consultancy Service



Ref. No.: 50013/10/2022-23

Date: 31/10/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 09/10/2022

Source of Sample: Power Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рH	pH Units	6.5 to 8.5	No relaxation	7.50
02	Total Dissolved Solids	mg/l	500	2000	128
03	Total Hardness (As CaCO ₃)	mg/l	200	600	26
04	Calcium (as Ca)	mg/l	75	200	4.9
05	Magnesium (as Mg)	mg/l	30	100	3.3
06	Chlorides	mg/l	250	1000	19.2
07	Sulphates	mg/l	200	400	5.3
08	Total Alkalinity	mg/l	200	600	31.4
09	Nitrates	mg/l	45	No relaxation	2.7
10	Flouride	mg/l	1.0	1.5	0.05

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 50014/10/2022-23

Date: 31/10/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 09/10/2022

Source of Sample: DRI Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.30
02	Total Dissolved Solids	mg/l	500	2000	130
03	Total Hardness (As CaCO ₃)	mg/l	200	600	38
04	Calcium (as Ca)	mg/l	75	200	5.9
05	Magnesium (as Mg)	mg/l	30	100	5.7
06	Chlorides	mg/l	250	1000	29.4
07	Sulphates	mg/l	200	400	7.2
80	Total Alkalinity	mg/l	200	600	38
09	Nitrates	mg/l	45	No relaxation	4.6
10	Flouride	mg/l	1.0	1.5	0.04

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Statement of Conformity; The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500: 2012, Drinking Water Specification



Ref. No.: 50015/10/2022-23

Date: 31/10/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 09/10/2022

Source of Sample: SMS Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	pH	pH Units	6.5 to 8.5	No relaxation	7.60
02	Total Dissolved Solids	mg/l	500	2000	120
03	Total Hardness (As CaCO ₃)	mg/l	200	600	39
04	Calcium (as Ca)	mg/l	75	200	6.9
05	Magnesium (as Mg)	mg/l	30	100	5.3
06	Chlorides	mg/l	250	1000	28
07	Sulphates	mg/l	200	400	6.7
80	Total Alkalinity	mg/l	200	600	40
09	Nitrates	mg/l	45	No relaxation	3.2
10	Flouride	mg/l	1.0	1.5	0.05

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 50016/10/2022-23

Date: 31/10/2022

DETAILED RESULTS OF NATIONAL AMBIENT AIR QUALITY MONITORING OF THE MONTH OCTOBER - 2022

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sample Collected by : Royal Environment

Test Method : As per IS Standards - 5182_23/24/6/2

S. No.	Particulars	Unit		L	ocation No	1: Nr. Sec	urity Gate	(Welspun S	teel)	
01.	No. of Week		()1	02		03		04	
02.	Date & Time Starting of Monitoring	12-1	06/10/22 9.00	07/10/22 9.15	13/10/22 9.50	14/10/22 10.05	20/10/22 8.30	21/10/22 08:50	27/10/22 09.35	28/10/22 09.45
03.	Date & Time - Ending of Monitoring		07/10/22 9.00	08/10/22 9.15	14/10/22 9.50	15/10/22 10.05	21/10/22 08.30	22/10/22 08.50	28/10/22 09.35	29/10/22 09.45
04	Duration of Sampling	Min.	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	1944	NW	sw	NW	sw	sw	sw	sw	NW
06.	Wind Speed Velocity	Km/Hr.	1 to 18	2 to 15	3 to 16	4 to 12	2 to 18	1 to 15	3 to 15	1 to 15
07	Average Flow Rate For PM2 5	m3/Hr.	1.0	1.0	1,0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	m3/Min	1_10	1,20	1.10	1.20	1.10	1.20	1.20	1.10
09	Average Flow Rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	μg/m3	60	60	60	60	60	60	60	60
11,	Measured Concentration of PM2.5	µg/m3	19.2	25.4	18.7	21	17,2	20.1	26.3	18.2
12.	Permissible Limits of PM10 *	μg/m3	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m3	31	37	33	42	36	35	40	38
14.	Permissible Limits of SO2 *	μg/m3	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO2	µg/m3	12.4	11.8	10.9	11.3	13.7	12.6	11.7	15.2
16.	Permissible Limits of NO2 *	μg/m3	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO2	µg/m3	17.3	18.6 ^{lit}	10 19.7	16.4	20.0	17.9	15.6	19

Instrument Used: 1) Ecotech make RDS, Model No.: APM - 217BL & Gaseous Pollutants Sampler Model No. AAS-109, PM 2.5 Sampler AAS 12

Calibration Done On : 27/12/2021

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Analyst

Royal Environment Auditing & Consultancy Service, Rajkot



Ref. No.: 50017/10/2022-23

Date: 31/10/2022

REPORT OF WASTE WATER SAMPLES

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sample Collection : 09/10/2022

Source of Sample: ETP Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Permissible Limits(*)	ETP I/L	ETP O/L
01	рН	pH Units	6.5 to 8.5	6.4	7.30
02	Temperature	.c	40	36	25
03	Color	pt.co.	100	55	22
04	Total Dissolved Solids	mq/l	2100	1550	950
05	Suspended Solids	mg/l	100	50	18
06	Oll & Grease	mg/l	10	N.D.	N.D.
07	BOD (3 Days @ 27°C)	mg/l	30	160	14.9
80	COD	mg/l	100	380	35.0
09	Chlorides	mg/l	600	580	300
10	Sulphates	mg/l	1000	260	91
11	Phenolic Compound	mg/l	2.0	1.8	N.D.
12	Amonical Nitrogen	mg/l	50	26	5.2
13	Sodium Absorption Ratio	%	26	24	15.2
14	Total Chromium (As Cr)	mg/l	0.2	0.40	0.04
15	Hexavalent Chromium (As Cr ⁺⁶)	mg/l	0.1	0.08	0.05
16	Total Copper (As Cu)	mg/l	1.0	0.04	0.03
17	Total Iron (As Fe)	mg/l	1.0	0.8	0.05
18	Zinc (As Zn)	mg/l	1.0	0.40	0.02
19	Bio - assay test	Hours	90% Survical of fish after 96 hours in 100% effluent	N.A.	96%

(*) Permissible Limit as per GPCB CC&A, Limits are only applicable to ETP O/L

Royal Environment Auditing & Consultancy Service

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Ref. No.: 50007/10/2022-23

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∴ KILN AREA, MECH.WORKSHOP, AFBC BOILER AREA OF Welspun Corp Ltd.- Steel Divison
 - 2 Raw materials, by products and finished products involved in the process. TOTAL DUST
 - 3 Particulars of sampling

Date of Sampling: 08th october 2022

	NOT 100 100 100 100 100 100 100 100 100 10	7707 100								Sample	Collected by : R	Sample Collected by: Royal Environment
S. S.	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne		Contamination	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	
~	DRI Plant - Kiln Plat form Area	Total Dust		2	1.3-2.5	1.90	10		-	1		
7	DRI PLANT-Mech Work Shop	Total Dust	Personal	2	1.6-1.8	1.70	10		5	1	L	
က	Power Plant - AFBC Area	Total Dust	Respirable Dust sampler VPDS 203	2	1.7-2.0	1.85	10	Gravimetric	2	I.	1Sny	Mr. PATAT ASHISH
4	SMS - ET Furnace Platform	Total Dust		2	1.1-2.7	1.90	10		е	1	SA	
c)	SMS - IT Furnace Platform	Total Dust		2	1.9-2,1	2.00	10		4	1		

** Permissible limits (TWA) are as per ACGIH Standards. Calibration Done On.: 04/03/2022

CONTRIBUTION OF TO A CONTRIBUT

For. Royal Environment Auditing & Consultancy Service

Authorized Sign

Royal Environment Auditing & Consultancy Service



Ref. No.: 60001/11/2022-23

Date: 30/11/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

lest Method	: As per IS Standards - 1125	5_1/2/3/7		Sample C	Collected by : Ro	yal Environment
Sr. No. Partici	ulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5
01	Stack Attached to	(275)	Kiln Exit 1 & 2	Kiln Exit 3 & 4	Boiler of CPP - 30 TPH	D. G. Set
02	Date of sampling	(<u>-11</u>	23/11/2022	23/11/2022	-	
03	Time of Sampling	****	09:30	10:10		-
04	Air Pollution Control Measures	1000	Dust Settling Chamber, Bag Filter ESP	ESP with each Kiln	ESP & Wet Scrubber	
05	Stack Height	Meter	30	30	30	30
06	Stack Temperature	°C	108	120	Not	Not
07	Ambient Temperature	°C	27	28	Running	Running
08	Average Velocity of Flue Gases	M/Sec.	7.2	6.9	During	During
09	Isokinetic flow rate for P.M. Sampling	LPM	20	20	Visit	Visit
10	Gaseous Sampling Flow Rate	LPM	2.0	2.0	-	
11	Permissible Limit for P.M.*	mg/Nm³	100	100	100	150
12	Measured Concentration of P.M.	mg/Nm ³	38	40		
13	Permissible Limit for SO2*	ppm	100	100	100	100
14	Measured Concentration of SO2	ppm	13	16		-
15	Permissible Limit for Nox*	ppm	50	50	50	50
16	Measured Concentration of Nox	ppm	18	20		

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 27/12/2021

Rajkot Rajkot

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

ASWISH



Ref. No.: 60002/11/2022-23

Date: 30/11/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Stack Attached to		Iron Ore Crusher Screen House	Coal Crusher Screen House	Stock House- 1	Stock House-2
02	Date of Sampling	-	23/11/2022	24/11/2022	24/11/2022	24/11/2022
03	Time of Sampling	: marine	10:40	09:00	09:30	10:10
04	Air Pollution Control Measures	Tanana V	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	17	17	17	17
06	Stack Temperature	°C	74	68	72	74
07	Ambient Temperature	°C	29	28	28	29
08	Average Velocity of Flue Gases	M/Sec.	7.4	6.8	7.2	7
09	Isokinetic flow rate for P.M. Sampling	LPM	19	21	20	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	47	50	45	48

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Royal Environment Auditing & Consultancy Service

Calibration Done On . : 27/12/2021

Rajkot Rajkot

* Permissible limits as per GPCB CC&A.

Analy



Ref. No.: 60003/11/2022-23

Date: 30/11/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13	Stack No. 14
01	Stack Attached to	_	Coal Injector-1	Coal Injector-2	Intermediate Bin	Raw Material Junction House	Production Separation
02	Date of Sampling	_	24/11/2022	24/11/2022	23/11/2022	24/11/2022	23/11/2022
03	Time of Sampling	-	10:40	11:20	11:10	11:55	11:50
04	Air Pollution Control Measures	_	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	12	12	22	20	15
06	Stack Temperature	°C	63	65	68	60	70
07	Ambient Temperature	*c	29	29	29	30	30
80	Average Velocity of Flue Gases	M/Sec.	6.9	7.2	7	6.8	7.4
09	Isokinetic flow rate for P.M. Sampling	LPM	19	20	19	20	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	48	43	50	43	49

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 27/12/2021

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service





Ref. No.: 60004/11/2022-23

Date: 30/11/2022

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 15	Stack No.16
01	Stack Attached to	-	ET Furnace - SMS	IT Furnace - SMS
02	Date of sampling	7-4-	23/11/2022	23/11/2022
03	Time of Sampling	-	12:30	14:30
04	Air Pollution Control Measures	-	Bag Filter	Bag Filter
05	Stack Height	Meter		
06	Stack Temperature	°C	120	118
07	Ambient Temperature	°C	30	31
80	Average Velocity of Flue Gases	M/Sec.	7.5	7.2
09	Isokinetic flow rate for P.M. Sampling	LPM	21	19
10	Permissible Limit for P.M.*	mg/Nm³	100	100
11	Measured Concentration of P.M.	mg/Nm ³	49	51
12	Permissible Limit for Sox*	ppm	40	40
13	Measured Concentration of SOx	ppm	2.1	1.5
14	Permissible Limit for Nox*	ppm	25	25
15	Measured Concentration of Nox	ppm	11	10.7

Rajkot

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

Ashish

Ph.: +91 9099919954 E-mail: royalenvironment@live.com admin@royalconsultancy.com

Ref. No.: 60005/11/2022-23 Date: 30/11/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Test Method

: As per IS Standards - 5182_2/4/6

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Location No. 1
01.	Location of Sampling		Nr. Main Security Gate
02.	Date of sampling	12 <u>-0</u> 1	23/11/2022
03.	Time of sampling	Hrs.	08:30
04	Duration of Sampling	Min.	1440.00
05	Dominant Wind Direction (From)		sw
06	Wind Speed	Km./Hrs.	1 to 16
07	Average flow rate during sampling	m3/minutes	1.10
08	Average flow rate for Gas sampling	LPM	0.2
09	Permissible Limits of PM 10 *	μg/m³	100
10	Measured Concentration of PM 10	µg/m³	45
11	Permissible Limits of PM 2.5*	μg/m³	60
12	Measured Concentration of PM 2.5	µg/m³	38
13	Permissible Limits of SO ₂ *	μg/m³	80
14	Measured Concentration of SO ₂	µg/m³	13.2
15	Permissible Limits of NO ₂ *	μg/m³	80
16	Measured Concentration of NO ₂	µg/m³	19.0

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Instrument used : Ecotech RDS AAS 217BL , Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

Ashish

Royal Environment Auditing & Consultancy Service

^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 60006/11/2022-23

Date: 30/11/2022

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

est Meth	nod : As per IS Standards - 5182	_2/4/6		Sample Collected by :	Royal Environmen
Sr. No.	Particulars	Unit	Location No. 3	Location No. 4	Location No. 2
01.	Location of Sampling		Nr. SMS, TRIANGLE GARDEN	Nr. WEST SECURITY GATE	Weight Bridge Security Point
02.	Date of sampling	3-	24/11/2022	23/11/2022	24/11/2022
03.	Time of sampling	Hrs.	09:00	08:30	08:40
04	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)		sw	sw	sw
06.	Wind Speed	Km./Hrs.	1 to 16	3 to 18	4 to 12
07.	Average flow rate during sampling	m3/minutes	1.20	1.20	1.10
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible Limits of PM 10*	μg/m³	100	100	100
10.	Measured Concentration of PM 10	μg/m³	40	35	38
11.	Permissible Limits of PM 2.5*	μg/m³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m³	29	30	28
13.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
14.	Measured Concentration of SO ₂	μg/m³	14.3	11.6	12.4
15.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
16.	Measured Concentration of NO ₂	µg/m³	19.1	20.6	15.2

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

Royal Environment Auditing & Consultancy Service



^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 60008/11/2022-23

Date: 30/11/2022

AMBIENT NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 23th November 2022

Readings Taken by: Royal Environment

	mpming . Lotal Hotolibol Lott	1 (Cadings Tai	ten by . Itoyai Environin
Sr. No.	Location of Sampling	Results in dB(A) . (Day Time)	Results in dB(A) (Night Time)
	Permissible Limits	75.0	70.0
01.	Nr. Main Security Gate	65.8	54.0
02.	Nr. DRI Workshop area	64.2	54.4
03.	Nr. Weigh Bridge - Security Point	63.5	56.0
04.	Nr. SMS Triangle Garden	62.9	53.0
05.	Nr. CPP Plant - Coal Shed Corner	71.4	57.9
06.	Nr. West Security Gate	65.8	53.3

CPCB Standards

Area Code	Category of Area / Zone	Limit in o	dB(A) Leq.
Alea Coue	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

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service



Ref. No.: 60009/11/2022-23

Date: 30/11/2022

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 23th November 2022

Readings Taken by : Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	imits for 8:00 Hrs.	90.0
	DRI Plant	
01	Nr. WorkShop	77.0
02	Between Kiln 1 & 2 (Platform)	79.9
03	Nr. Pump House - DRI	76.3
04	Nr. RMHS	71.2
	CPP Plant	
05	Nr. FBC Boiler (CPP)	86.4
06	Nr. TG Building	74.6
07	Nr. Work Shop	73.9
08	Inside Control Room	70.9
	SMS Plant	
09	Nr. Furnace Platform Area	73.4
10	Nr. CCM Area	72.6
11	Nr. MECH. Workshop	79.7
12	Nr. Pump House Area	78.8
	RM Plant**	
13	Nr. Roughing Section	74.7
14	Nr. Electrical Room	70.1
15	Nr. MECH. WORK	81.2
16	Nr. Cooling Bed Area	70.6

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

Rajkot Rajkot



Ref. No.: 60010/11/2022-23

Date: 30/11/2022

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 23th November 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
01	Inside Office Building-ADM	200	360	260
02	Inside Control Room - DRI	300	375	370
03	Inside the Canteen	200	370	350
04	QC Lab - DRI Plant	300	365	320
05	Inside Control Room - CPP	300	385	330
06	QC Lab - SMS Plant	300	380	320

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service



ASWSY Analyst



Ref. No.: 60011/11/2022-23

Date: 30/11/2022

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 23th November 2022

Sample Collected by : Royal Environment

Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permissible Limit**			2000
01	Raw Material Handling Area	Screen Area	890
02		Transfer Point	910
03	-Crusher Area	Crushing Point	970
04		Transfer Point	1400
05	-Raw Material Feed Area	Feeder Area	940
06		Mixing Area	790
07	Cooler discharge Area	Transfer Point	960
08	Product processing Area	Product Sepration Area	1100
09		Bagging Area	780
10		Intermediate Stock bin area	1410

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

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Rajkot Rajkot

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



Ref. No.: 60012/11/2022-23

Date: 30/11/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 24/11/2022

Source of Sample: Canteen

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.34
02	Total Dissolved Solids	mg/l	500	2000	135
03	Total Hardness (As CaCO ₃)	mg/l	200	600	47.0
04	Calcium (as Ca)	mg/l	75	200	12.2
05	Magnesium (as Mg)	mg/l	30	100	4.0
06	Chlorides	mg/l	250	1000	34.1
07	Sulphates	mg/l	200	400	14.0
08	Total Alkalinity	mg/l	200	600	39
09	Nitrates	mg/l	45	No relaxation	2.8
10	Flouride	mg/l	1.0	1.5	0.06

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500: 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard

Royal Environment Auditing & Consultancy Service





Ref. No.: 60013/11/2022-23

Date: 30/11/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 24/11/2022

Source of Sample: Power Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.41
02	Total Dissolved Solids	mg/l	500	2000	130
03	Total Hardness (As CaCO ₃)	mg/l	200	600	28
04	Calcium (as Ca)	mg/l	75	200	5.0
05	Magnesium (as Mg)	mg/l	30	100	3.8
08	Chlorides	mg/l	250	1000	20.0
07	Sulphates	mg/l	200	400	5.9
08	Total Alkalinity	mg/l	200	600	32.1
09	Nitrates	mg/l	45	No relaxation	2.4
10	Flouride	mg/l	1.0	1.5	0.06

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard

Royal Environment Auditing & Consultancy Service



Ashish



Ref. No.: 60014/11/2022-23

Date: 30/11/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 24/11/2022

Source of Sample: DRI Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.50
02	Total Dissolved Solids	mg/l	500	2000	125
03	Total Hardness (As CaCO ₃)	mg/l	200	600	38
04	Calcium (as Ca)	mg/l	75	200	6.2
05	Magnesium (as Mg)	mg/l	30	100	5.5
06	Chloridoo	mg/l	250	1000	30.0
07	Sulphates	mg/l	200	400	6.9
08	Total Alkalinity	mg/l	200	600	40
09	Nitrates	mg/l	45	No relaxation	4.1
10	Flouride	mg/l	1.0	1.5	0.05

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drnking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service





Ref. No.: 60015/11/2022-23

Date: 30/11/2022

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 24/11/2022

Source of Sample: SMS Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.20
02	Total Dissolved Solids	mg/l	500	2000	135
03	Total Hardness (As CaCO ₃)	mg/l	200	600	40
04	Calcium (as Ca)	mg/l	75	200	7.0
05	Magnesium (as Mg)	mg/l	30	100	5.5
06	Chlorides	mg/l	250	1000	29
07	Sulphates	mg/l	200	400	6.4
80	Total Alkalinity	mg/l	200	600	42
09	Nitrates	mg/l	45	No relaxation	3.9
10	Flouride	mg/l	1.0	1.5	0.06

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service





Date: 30/11/2022

DETAILED RESULTS OF NATIONAL AMBIENT AIR QUALITY MONITORING OF THE MONTH NOVEMBER - 2022

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sample Collected by : Royal Environment

Ref. No.: 60016/11/2022-23

Test Method As per IS Standards - 5182 23/24/6/2

S. No.	Particulars	Unit		L	ocation No.	- 1: Nr. Sec	urity Gate (Welspun St	eel)	
01.	No. of Week	12	(01 02 03				3	0	14
02	Date & Time Starting of Monitoring	-	03/11/22 8.30	04/11/22 8.40	10/11/22 9.00	11/11/22 09.10	17/11/22 8.50	18/11/22 09.00	24/11/22 09.10	25/11/22 09.20
03	Date & Time - Ending of Monitoring	-	04/11/22 8.30	05/11/22 8.40	11/11/22 9.00	12/11/22 09.10	18/11/22 08.50	19/11/22 09.00	25/11/22 09.10	26/11/22 09.20
04	Duration of Sampling	Min.	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (From)	-	NE	SE	NE	sw	SF	SF	sw	NW
ΩΩ	Wind Speed Velocity	Km/Hi	2 to 18	1 to 15	4 to 18	2 lo 15	1 to 16	3 to 18	2 to 20	3 to 18
07.	Average Flow Rate For PM2.5	m3/Hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	m3/Min	1.20	1.10	1,20	1,10	1.20	1_10	1.10	1.20
09	Average Flow Rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m3	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m3	20	26.2	19.4	22	18.3	21.6	27.2	19.3
12.	Permissible Limits of PM10 *	μg/m3	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m3	36	40	45	40	39	34	31	30
14.	Permissible Limits of SO2 *	μg/m3	80	80	80	80	80	80	80	80
15	Measured Concentration of SO2	μg/m3	13.3	12.6	11.4	10.0	12.6	11.4	12.0	16.1
16.	Permissible Limits of NO2 *	μg/m3	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO2	μg/m3	18.5	19.3	20.0	17.2	21.1	18.3	16.4	20

Instrument Used: 1) Ecotech make RDS, Model No.: APM - 217BL & Gaseous Polllutants Sampler Model No.: APS 100, PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

Royal Environment Auditing & Consultancy Service, Rajkot

Ashish



Ref. No.: 60017/11/2022-23

Date: 30/11/2022

REPORT OF WASTE WATER SAMPLES

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sample Collection : 24/11/2022

Source of Sample: ETP Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Permissible Limits(*)	ETP I/L	ETP O/L
01	рН	pH Units	6.5 to 8.5	6.2	7.50
02	Temperature	·c	40	34	28
03	Color	pt.co.	100	60	25
04	Total Dissolved Solids	mg/l	2100	1600	940
05	Suspended Solids	mg/l	100	60	20
06	Oil & Grease	mg/l	10	N.D.	N.D.
07	BOD (3 Days @ 27°C)	mg/l	30	155	13.8
08	COD	mg/l	100	370	36.0
09	Chlorides	mg/l	600	570	290
10	Sulphates	mg/l	1000	250	90
11	Phenolic Compound	mg/l	2.0	1.7	N.D.
12	Amonical Nitrogen	mg/l	50	29	5.6
13	Sodium Absorption Ratio	%	26	26	15.0
14	Total Chromium (As Cr)	mg/l	0.2	0.60	0.05
15	Hexavalent Chromium (As Cr ⁺⁶)	mg/l	0.1	0.07	0.06
16	Total Copper (As Cu)	mg/l	1.0	0.05	0.04
17	Total Iron (As Fe)	mg/l	1.0	0.7	0.04
18	Zinc (As Zn)	mg/l	1.0	0.50	0.03
19	Bio - assay test	Hours	90% Survical of fish after 96 hours in 100% effluent	N.A.	97%

(*) Permissible Limit as per GPCB CC&A, Limits are only applicable to ETP O/L

Royal Environment Auditing & Consultancy Service

Rajkot Parks

Aghish

WORK PLACE MONITORING REPORT Form No. 37

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

- 1 Name of the Department/Plant.: KILN AREA, MECH.WORKSHOP, AFBC BOILER AFEA OF Welspun Corp Ltd.- Steel Divison
 - 2 Raw materials, by products and finished products involved in the process. TOTAL EUST
 - 3 Particulars of sampling

Date of Sampling: 23th November 2022

ent			Т				-			
oyal Environm	Name (in block letters)				Mr. PATAT ASHISH					
Sample Collected by : Royal Environment	Signature person taking		45ngs							
Sample	Remarks		I	ı	ı	ı	ı			
	Number of Workers exposed at the location being monitored		r.	4	-	2	п			
	Refrance Method				Gravimetric					
	TWA** concertration (As given in Second	Mg/m³	10	10	10	10	10			
	iinalion	Ажегаде	1.80	1.65	1.50	1.55	1.65			
	Airborne Contaminalion	Range	1.5-2.1	1.9-1.4	1.6-2.2	1.3-2.6	2.0-1.7			
	Airborr	Number of sample	2	2	2	2	2			
	Sampling Instrument used			Personal	Respirable Dust sampler VPDS 203					
smber 2022	Identified Contaminate		Total Dust	Total Dust	Total Dust	Total Dust	Total Dust			
Date of Sampling : ZStn November 2022	Location Operation monitored		DRI Plant - Kiln Plat form Area	DRI PLANT-Mech Work Shop	Power Plant - AFBC Area	SMS - ET Furnace Platform	SMS - IT Furnace Platform			
Dale	s. s		-	2	က	4	2			

** Permissible limits (TWA) are as per ACGIH Standards.

Calibration Done On.: 04/03/2022

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For. Royal Environment Auditing & Consultancy Service



Royal Environment Auditing & Consultancy Service



Date: 02/01/2023 Ref. No.: 70001/12/2022-23

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method : As per IS Standards - 11255_1/2/3/7 Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5
01	Stack Attached to		Kiln Exit 1 & 2	Kiln Exit 3 & 4	Boiler of CPP - 30 TPH	D. G. Set
02	Date of sampling	<u> 232</u> -	25/12/2022	25/12/2022	25/12/2022	7/200
03	Time of Sampling		09:00	9:40	10:30	_
04	Air Pollution Control Measures		Dust Settling Chamber, Bag Filter ESP	ESP with each Kiln	ESP & Wet Scrubber	·
05	Stack Height	Meter	30	30	30	30
06	Stack Temperature	°C	115	123	128	Not
07	Ambient Temperature	°C	27	27	28	Running
80	Average Velocity of Flue Gases	M/Sec.	6.8	7.2	7	During
09	Isokinetic flow rate for P.M. Sampling	LPM	21	20	20	Visit
10	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	
11	Permissible Limit for P.M.*	mg/Nm³	100	100	100	150
12	Measured Concentration of P.M.	mg/Nm ³	42	43	46	
13	Permissible Limit for SO2*	ppm	100	100	100	100
14	Measured Concentration of SO2	ppm	15	18	22	
15	Permissible Limit for Nox*	ppm	50	50	50	50
16	Measured Concentration of Nox	ppm	19	17	18	-

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 27/12/2021

Rajkot

* Permissible limits as per GPCB CC&A.

Ashish

Auditing & Consultancy Service Royal Environment



Ref. No.: 70002/12/2022-23 Date: 02/01/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Stack Attached to		Iron Ore Crusher Screen House	Coal Crusher Screen House	Stock House- 1	Stock House-2
02	Date of Sampling		25/12/2022	26/12/2022	26/12/2022	26/12/2022
03	Time of Sampling	****	11:10	09:10	09:50	10:30
04	Air Pollution Control Measures		Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	17	17	17	17
06	Stack Temperature	°C	73	64	70	75
07	Ambient Temperature	°C	28	27	27	28
08	Average Velocity of Flue Gases	M/Sec.	6.9	7.1	7.3	7.4
09	Isokinetic flow rate for P.M. Sampling	LPM	20	19	21	21
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	48	52	49	51

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On :: 27/12/2021

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

DEN'SY



Ref. No.: 70003/12/2022-23

Date: 02/01/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13	Stack No. 14
01	Stack Attached to	****	Coal Injector-1	Coal Injector-2	Intermediate Bin	Raw Material Junction House	Production Separation
02	Date of Sampling) -	26/12/2022	26/12/2022	26/12/2022	25/12/2022	25/12/2022
03	Time of Sampling	-	11.10	11:50	12:30	11:50	12:30
04	Air Pollution Control Measures	-	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	12	12	22	20	15
06	Stack Temperature	°C	65	64	69	62	72
07	Ambient Temperature	°C	29	29	30	29	30
08	Average Velocity of Flue Gases	M/Sec.	7.3	6.9	7.4	6.7	7.2
09	Isokinetic flow rate for P.M. Sampling	LPM	20	19	21	19	21
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	48	47	53	46	50

Instrument Used :Stack Monitoring Kit - Ecotech (ESS I00)

Calibration Done On .: 27/12/2021

* Permissible limits as per GPCB CC&A

Royal Environment Auditing & Consultancy Service

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Ref. No.: 70004/12/2022-23

Date: 02/01/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 15	Stack No.16
01	Stack Attached to	-	ET Furnace - SMS	IT Furnace - SMS
02	Date of sampling		25/12/2022	25/12/2022
03	Time of Sampling		14:00	14:40
04	Air Pollution Control Measures		Bag Filter	Bag Filter
05	Stack Height	Meter		-
06	Stack Temperature	°C	122	120
07	Ambient Temperature	°C	31	31
80	Average Velocity of Flue Gases	M/Sec.	7.6	7.4
09	Isokinetic flow rate for P.M. Sampling	LPM	20	21
10	Permissible Limit for P.M.*	mg/Nm³	100	100
11	Measured Concentration of P.M.	mg/Nm³	52	54
12	Permissible Limit for Sox*	ppm	40	40
13	Measured Concentration of SOx	ppm	3.4	2.9
14	Permissible Limit for Nox*	ppm	25	25
15	Measured Concentration of Nox	ppm	12.1	10.8

^{*} Permissible limits as per GPCB CC&A.

Consultancy Service Rajko Royal Environment



Ref. No.: 70005/12/2022-23

Date: 02/01/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650,

Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Test Method : As per IS Standards - 5182_2/4/6 Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Location No. 1
01.	Location of Sampling	n	Nr. Main Security Gate
02.	Date of sampling	, ,,,,, ,	25/12/2022
03.	Time of sampling	Hrs.	9:00
04	Duration of Sampling	Min.	1440.00
05	Dominant Wind Direction (From)		SE
06	Wind Speed	Km./Hrs.	2 to 20
07	Average flow rate during sampling	m3/minutes	1.20
80	Average flow rate for Gas sampling	LPM	0.2
09	Permissible Limits of PM 10 *	μg/m³	100
10	Measured Concentration of PM 10	μg/m³	48
11	Permissible Limits of PM 2.5*	μg/m³	60
12	Measured Concentration of PM 2.5	μg/m³	35
13	Permissible Limits of SO ₂ *	μg/m³	80
14	Measured Concentration of SO ₂	μg/m³	14.0
15	Permissible Limits of NO ₂ *	μg/m³	80
16	Measured Concentration of NO ₂	μg/m³	20.0

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

Royal Environment

*Permissible limits are as per NAAQ Standard 16th November 2009

Ashish



Ref. No.: 70006/12/2022-23

Date: 02/01/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sr. No.	Particulars	Unit	Location No. 3	Location No. 4	Location No. 2
01.	Location of Sampling		Nr. SMS, TRIANGLE GARDEN	Nr. WEST SECURITY GATE	Weight Bridge Security Point
02.	Date of sampling		26/12/2022	25/12/2022	26/12/2022
03.	Time of sampling	Hrs.	8:50	9:10	09:00
04	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)		SE	SE	SE
06.	Wind Speed	Km./Hrs.	2 to 20	1 to 15	3 to 12
07.	Average flow rate during sampling	m3/minutes	1.10	1.10	1.20
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible Limits of PM 10*	μg/m³	100	100	100
10.	Measured Concentration of PM 10	μg/m³	41	40	42
11.	Permissible Limits of PM 2.5*	μg/m³	60	60	60
12.	Measured Concentration of PM 2.5	μg/m³	30	31	29
13.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
14.	Measured Concentration of SO ₂	μg/m³	15.2	12.9	13.3
15.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
16.	Measured Concentration of NO ₂	μg/m³	20.0	21.0	14.9

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 27/12/2021

Royal Environment Auditing & Consultancy Service

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^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 70008/12/2022-23

Date: 02/01/2023

AMBIENT NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 25th December 2022

Readings Taken by : Royal Environment

ate or ear	riping . Zoti December 2022	Treadings Taken by . Troyal Environm				
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)			
	Permissible Limits	75.0	70.0			
01.	Nr. Main Security Gate	63.2	53.3			
02.	Nr. DRI Workshop area	65.3	57.9			
03.	Nr. Weigh Bridge - Security Point	64.1	58.8			
04.	Nr. SMS Triangle Garden	61.9	54.6			
05.	Nr. CPP Plant - Coal Shed Corner	70.5	61.3			
06.	Nr. West Security Gate	66	59.8			

CPCB Standards

Area Code	Category of Area / Zone	Limit in dB(A) Leq.			
Area Coue	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: Lutron Make Sound level meter, Model No. IL- 006719

Calibration done on: 04/03/2022

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Analyst

Royal Environment Auditing & Consultancy Service

Rajkot



Ref. No.: 70009/12/2022-23

Date: 02/01/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110

Date of Sampling: 25th December 2022

Readings Taken by: Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	imits for 8:00 Hrs.	90.0
	DRI Plant	
01	Nr WorkShop	76.9
02	Between Kiln 1 & 2 (Platform)	80.0
03	Nr. Pump House - DRI	77.2
04	Nr. RMHS	72.2
	CPP Plant	
05	Nr. FBC Boiler (CPP)	85.9
06	Nr. TG Building	75.2
07	Nr. Work Shop	74.0
08	Inside Control Room	69.7
	SMS Plant	
09	Nr. Furnace Platform Area	74.2
10	Nr. CCM Area	73.3
11	Nr. MECH. Workshop	78.5
12	Nr. Pump House Area	77.4
	RM Plant**	
13	Nr. Roughing Section	75.2
14	Nr. Electrical Room	69.9
15	Nr. MECH. WORK	80.3
16	Nr. Cooling Bed Area	73.4

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Servi

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Date: 02/01/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 25th December 2022

Ref. No.: 70010/12/2022-23

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
01	Inside Office Building-ADM	200	365	270
02	Inside Control Room - DRI	300	380	360
03	Inside the Canteen	200	375	355
04	QC Lab - DRI Plant	300	370	335
05	Inside Control Room - CPP	300	390	340
06	QC Lab - SMS Plant	300	375	330

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy

Ashi sh Analyst



Ref. No.: 70011/12/2022-23 Date: 02/01/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch- 370110.

Date of Sampling: 25th December 2022

Sample Collected by : Royal Environment

Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permiss	sible Limit**		2000
01	Day Material Heading Assa	Screen Area	900
02	Raw Material Handling Area	Transfer Point	925
03	Crusher Area	Crushing Point	980
04		Transfer Point	1430
05	D. Malacial Food According	Feeder Area	890
06	Raw Material Feed Area	Mixing Area	800
07	Cooler discharge Area	Transfer Point	940
08		Product Sepration Area	1090
09	Product processing Area	Bagging Area	770
10		Intermediate Stock bin area	1390

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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

Ashish Analyst



Ref. No.: 70012/12/2022-23

Date: 02/01/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 26/12/2022

Source of Sample: Canteen

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.40
02	Total Dissolved Solids	mg/l	500	2000	130
03	Total Hardness (As CaCO ₃)	mg/l	200	600	48.0
04	Calcium (as Ca)	mg/l	75	200	13.3
05	Magnesium (as Mg)	mg/l	30	100	3.6
06	Chlorides	mg/l	250	1000	35.0
07	Sulphates	mg/l	200	400	15.0
08	Total Alkalinity	mg/l	200	600	40
09	Nitrates	mg/l	45	No relaxation	3.1
10	Flouride	mg/l	1.0	1.5	0.07

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500: 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

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Ref. No.: 70013/12/2022-23

Date: 02/01/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 26/12/2022

Source of Sample: Power Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.30
02	Total Dissolved Solids	mg/l	500	2000	125
03	Total Hardness (As CaCO ₃)	mg/l	200	600	29
04	Calcium (as Ca)	mg/l	75	200	4.9
05	Magnesium (as Mg)	mg/l	30	100	4.1
06	Chlorides	mg/l	250	1000	21.0
07	Sulphates	mg/l	200	400	6.0
08	Total Alkalinity	mg/l	200	600	33
09	Nitrates	mg/l	45	No relaxation	2.6
10	Flouride	mg/l	1.0	1.5	0.07

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: 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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Ref. No.: 70014/12/2022-23

Date: 02/01/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 26/12/2022

Source of Sample: DRI Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.40
02	Total Dissolved Solids	mg/l	500	2000	130
03	Total Hardness (As CaCO ₃)	mg/l	200	600	39
04	Calcium (as Ca)	mg/l	75	200	6.4
05	Magnesium (as Mg)	mg/l	30	100	5.6
06	Chlorides	mg/l	250	1000	29.0
07	Sulphates	mg/l	200	400	7.0
08	Total Alkalinity	mg/I	200	600	42
09	Nitrates	mg/l	45	No relaxation	3.9
10	Flouride	mg/l	1.0	1.5	0.06

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500: 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service aikot

Ashish Analyst



Ref. No.: 70015/12/2022-23

Date: 02/01/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 26/12/2022

Source of Sample: SMS Plant

Sample Collected by : Royal Environment

				cample conceded by . Royal Environment			
Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results		
01	pH	pH Units	6.5 to 8.5	No relaxation	7.30		
02	Total Dissolved Solids	mg/I	500	2000	140		
03	Total Hardness (As CaCO ₃)	mg/l	200	600	42		
04	Calcium (as Ca)	mg/l	75	200	6.8		
05	Magnesium (as Mg)	mg/l	30	100	6.1		
06	Chlorides	mg/l	250	1000	30		
07	Sulphates	mg/l	200	400	6.0		
08	Total Alkalinity	mg/l	200	600	40		
09	Nitrates	mg/l	45	No relaxation	4.0		
10	Flouride	mg/l	1.0	1.5	0.07		

^(*) Permissible Limit in the Absense of Atternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 70016/12/2022-23

Date: 02/01/2023

DETAILED RESULTS OF NATIONAL AMBIENT AIR QUALITY MONITORING OF THE MONTH NOVEMBER - 2022

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar, Dist,: Kutch- 370110.

Sample Collected by : Royal Environment

Test Method As per IS Standards - 5182_23/24/6/2

S. No.	Particulars	Unit			L	ocation No.	- 1: Nr. Seci	urity Gate (Welspun St	eel)		
01.	No. of Week	-	0	11	0	02		3	0	4	0	05
02	Date & Time Starting of Monitoring		01/12/22 09:00	02/12/22 09:10	08/12/22 08:40	09/12/22 08.50	15/12/22 09:30	16/12/22 09:40	22/12/22 08:30	23/12/22 08:40	29/12/22 09:00	30/12/22 09:10
03	Date & Time - Ending of Monitoring	122	02/12/22 09:00	03/12/22 09:10	09/12/22 08.40	10/12/22 08:50	16/12/22 09:30	17/12/22 09:40	23/12/22 08:30	24/12/22 08:40	30/12/22 09:00	31/12/2: 09:10
04	Duration of Sampling	Min.	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (From)	-	NW	sw	NW	SE	sw	sw	SE	sw	SE	NE
06.	Wind Speed Velocity	Km/Hr.	1 to 18	2 to 16	4 to 15	1 to 20	2 to 18	4 to 16	1 to 15	2 to 20	1 to 16	2 to 14
07	Average Flow Rate For PM2.5	m3/Hr.	1.0	1.0	1.0	1.0	1.0	1.0	1,0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	m3/Min.	1.10	1.20	1.20	1.10	1.10	1.20	1.10	1.20	1.20	1,10
09.	Average Flow Rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m3	60	60	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m3	21.4	27	20	23.6	19.7	22.4	19.4	22.5	21.3	20.4
12.	Permissible Limits of PM10 *	µg/m3	100	100	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µg/m3	38	42	48	43	40	36	44	33	32	38
14.	Permissible Limits of SO2 *	µg/m3	80	80	80	80	80	80	80	80	80	80
15	Measured Concentration of SO2	µg/m3	14.9	13.0	12.0	11,6	13,5	14.2	13.9	12.1	13.3	17.6
16.	Permissible Limits of NO2 *	µg/m3	80	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO2	µg/m3	19.6	18.9	21.7	18.0	22.4	19.2	23.3	19.0	17.7	19.9

Instrument Used: 1) Ecolech make RDS, Model No. APM - 217BL & Gaseous Politutants Sampler Model No. AAS-109, PM Z.5 Sampler AAS 127

Auditing &

Rajkot

Calibration Done On.: 27/12/2021

Royal Environment Auditing & Consultancy Service, F

AS NISN Analyst



Date: 02/01/2023

REPORT OF WASTE WATER SAMPLES

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sample Collection : 26/12/2022

Source of Sample: ETP Plant

Ref. No.: 70017/12/2022-23

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Permissible Limits(*)	ETP I/L	ETP O/L
01	рН	pH Units	6.5 to 8.5	6	7.30
02	Temperature	°C	40	36	29
03	Color	pt.co.	100	70	28
04	Total Dissolved Solids	mg/l	2100	1700	950
05	Suspended Solids	mg/l	100	70	22
06	Oil & Grease	mg/l	10	N.D.	N.D.
07	BOD (3 Days @ 27°C)	mg/l	30	150	13.0
08	COD	mg/l	100	380	37.0
09	Chlorides	mg/l	600	550	280
10	Sulphates	mg/l	1000	260	80
11	Phenolic Compound	mg/l	2.0	2.1	N.D.
12	Amonical Nitrogen	mg/l	50	30	6
13	Sodium Absorption Ratio	%	26	29	16.0
14	Total Chromium (As Cr)	mg/l	0.2	0.80	0.06
15	Hexavalent Chromium (As Cr ⁺⁶)	mg/l	0.1	0.08	0.07
16	Total Copper (As Cu)	mg/l	1.0	0.06	0.05
17	Total Iron (As Fe)	mg/l	1.0	0.8	0.05
18	Zinc (As Zn)	mg/l	1.0	0.60	0.04
19	Bio - assay test	Hours	90% Survical of fish after 96 hours in 100% effluent	N.A.	95%

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(*) Permissible Limit as per GPCB CC&A, Limits are only applicable to ETP O/L

Royal Environment Auditing & Consultancy Servi

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Ref. No.: 70007/12/2022-23

WORK PLACE MONITORING REPORT Form No. 37

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

1 Name of the Department/Plant: KILN AREA, MECH.WORKSHOP, AFBC BOILER AREA OF Welspun Corp Ltd.- Steel Divison

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

3 Particulars of sampling

Sample Collected by: Royal Environment Mr. PATAT ASHISH (in block letters) Name Signature samples taking 451454 person Remarks 1 1 1 exposed at the location being Number of monitored Workers 4 7 3 3 4 Gravimetric Refrance Method concertration (As given in Schedule) Second Mg/m³ TWA** 10 9 10 10 10 Average 1.65 1.70 1.85 1.95 1.90 Airborne Contamination Range 1.3-2.0 1.8-1.9 1.6-2.2 2.3-1.6 2.3-1.1 Number sample ō 7 7 7 2 2 Dust sampler Instrument Respirable Sampling VPDS 203 Personal nseq Contaminate Identified Total Dust Total Dust Total Dust **Total Dust** Total Dust Date of Sampling: 25th December 2022 SMS - ET Furnace DRI PLANT-Mech SMS - IT Furnace DRI Plant - Kiln Plat form Area Location Operation nonitored Power Plant -Work Shop AFBC Area Platform Platform S. S 2 2 3 4

** Permissible limits (TWA) are as per ACGIH Standards

Calibration Done On.: 04/03/2022

Royal Environment Auditing & Consultancy Service



For. Royal Environment Auditing & Consultancy Service

Authorized Sign



Ref. No.: 80001/01/2022-23

Date: 01/02/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

T	A 10.01 1 1 440EE 4/0/0/E	
Test Method	: As per IS Standards - 11255_1/2/3/7	Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5
01	Stack Attached to		Kiln Exit 1 & 2	Kiln Exit 3 & 4	Boiler of CPP - 30 TPH	D. G. Set
02	Date of sampling	-	21/01/2023	21/01/2023	8000	
03	Time of Sampling	-	09:30	10:10		-
04	Air Pollution Control Measures	222	Dust Settling Chamber, Bag Filter ESP	ESP with each Kiln	ESP & Wet Scrubber	-
05	Stack Height	Meter	30	30	30	30
06	Stack Temperature	°C	118	121	Not	Not
07	Ambient Temperature	°C	21	21	Runnimg	Running
08	Average Velocity of Flue Gases	M/Sec.	7.2	7.6	During	During
09	Isokinetic flow rate for P.M. Sampling	LPM	22	21	Visit	Visit
10	Gaseous Sampling Flow Rate	LPM	2.0	2.0	-	775
11	Permissible Limit for P.M.*	mg/Nm³	100	100	100	150
12	Measured Concentration of P.M.	mg/Nm ³	48	46	-	200
13	Permissible Limit for SO2*	ppm	100	100	100	100
14	Measured Concentration of SO2	ppm	19	14	-	
15	Permissible Limit for Nox*	ppm	50	50	50	50
16	Measured Concentration of Nox	ppm	20	15	-	***

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service



Ref. No.: 80002/01/2022-23

Date: 01/02/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Stack Attached to	**************************************	Iron Ore Crusher Screen House	Coal Crusher Screen House	Stock House- 1	Stock House-2
02	Date of Sampling	****	21/01/2023	21/01/2023	21/01/2023	21/01/2023
03	Time of Sampling	00 M 40 M	10:50	11:30	12:20	14:00
04	Air Pollution Control Measures		Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	17	17	17	17
06	Stack Temperature	°C	76	68	69	71
07	Ambient Temperature	°C	21	22	22	23
80	Average Velocity of Flue Gases	M/Sec.	7.4	6.9	7.6	7
09	Isokinetic flow rate for P.M. Sampling	LPM	21	20	19	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	44	49	50	47

Instrument Used Stack Monitoring Kit - Ecotech (ESS I00)

* Permissible limits as per GPCB CC&A.

Calibration Done On .: 26/12/2022

Royal Environment Auditing & Consultancy Service

Ashish Analyst



Ref. No.: 80003/01/2022-23

Date: 01/02/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist : Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13	Stack No. 14
01	Stack Attached to		Coal Injector-1	Coal Injector-2	Intermediate Bin	Raw Material Junction House	Production Separation
02	Date of Sampling		21/01/2023	21/01/2023	22/01/2023	22/01/2023	22/01/2023
03	Time of Sampling	-	14:50	15:30	14:00	14:50	15:30
04	Air Pollution Control Measures		Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	12	12	22	20	15
06	Stack Temperature	°C	68	66	67	65	70
07	Ambient Temperature	°C	23	23	22	22	23
08	Average Velocity of Flue Gases	M/Sec.	6.8	7.2	7.4	7	6.9
09	sokinetic flow rate for P.M. Sampling	LPM	21	20	19	20	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	52	49	50	48	53

Instrument Used: Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On : 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy S

Ashish



Ref. No.: 80004/01/2022-23

Date: 01/02/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 15	Stack No.16
01	Stack Attached to	PAGE.	ET Furnace - SMS	IT Furnace - SMS
02	Date of sampling		22/01/2023	22/01/2023
03	Time of Sampling	200 500 500	09:00	09:40
04	Air Pollution Control Measures		Bag Filter	Bag Filter
05	Stack Height	Meter	(1 <u>4444</u>)	-
06	Stack Temperature	°C	119	121
07	Ambient Temperature	°C	20	20
80	Average Velocity of Flue Gases	M/Sec.	7.1	7.6
09	Isokinetic flow rate for P.M. Sampling	LPM	19	20
10	Permissible Limit for P.M.*	mg/Nm ³	100	100
11	Measured Concentration of P.M.	mg/Nm ³	49	51
12	Permissible Limit for Sox*	ppm	40	40
13	Measured Concentration of SOx	ppm	4.1	3.7
14	Permissible Limit for Nox*	ppm	25	25
15	Measured Concentration of Nox	ppm	13	12

^{*} Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service iko

Ph.: +91 9099919954 - E-mail: royalenvironment@live.com - admin@royalconsultancy.com

Ref. No.: 80005/01/2022-23 Date: 01/02/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Test Method

: As per IS Standards - 5182_2/4/6

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Location No. 1
01.	Location of Sampling		Nr. Main Security Gate
02.	Date of sampling	****	21/01/2023
03.	Time of sampling	Hrs.	08:30
04	Duration of Sampling	Min.	1440.00
05	Dominant Wind Direction (From)		SW
06	Wind Speed	Km./Hrs.	1 to 18
07	Average flow rate during sampling	m3/minutes	1.10
08	Average flow rate for Gas sampling	LPM	0.2
09	Permissible Limits of PM 10 *	μg/m³	100
10	Measured Concentration of PM 10	μg/m³	50
11	Permissible Limits of PM 2.5*	μg/m³	60
12	Measured Concentration of PM 2.5	μg/m³	40
13	Permissible Limits of SO ₂ *	μg/m³	80
14	Measured Concentration of SO ₂	μg/m³	16.0
15	Permissible Limits of NO ₂ *	μg/m³	80
16	Measured Concentration of NO ₂	μg/m ³	23.0

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 26/12/2022

Rajko

Analyst

Royal Environment Auditing & Consultancy Service

^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 80006/01/2022-23

Date: 01/02/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

est Meth	est Method : As per IS Standards - 5182_2/4/6			Sample Collected by : Royal Environm		
Sr. No.	Particulars	Unit	Location No. 3	Location No. 4	Location No. 2	
01.	Location of Sampling	(2222)	Nr. SMS, TRIANGLE GARDEN	Nr. WEST SECURITY GATE	Weight Bridge Security Point	
02.	Date of sampling	2002	22/01/2023	21/01/2023	22/01/2023	
03.	Time of sampling	Hrs.	8:30	9:00	09.10	
04	Duration of Sampling	Min.	1440.00	1440.00	1440.00	
05.	Dominant Wind Direction (From)	((*****	SW	sw	SW	
06.	Wind Speed	Km./Hrs.	1 to 18	2 to 20	2 to 16	
07.	Average flow rate during sampling	m3/minutes	1.20	1.20	1.10	
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2	
09.	Permissible Limits of PM 10*	μg/m³	100	100	100	
10.	Measured Concentration of PM 10	μg/m ³	45	4 7	48	
11.	Permissible Limits of PM 2.5*	μg/m³	60	60	60	
12.	Measured Concentration of PM 2.5	μg/m ³	27	28	30	
13.	Permissible Limits of SO ₂ *	μg/m³	80	80	80	
14.	Measured Concentration of SO ₂	μg/m ³	16.0	13	14	
15.	Permissible Limits of NO ₂ *	μg/m³	80	80	80	
16.	Measured Concentration of NO ₂	µg/m³	23.0	22.0	15.0	

Instrument used : Ecotech RDS AAS 217BL , Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 26/12/2022

Royal Environment Auditing & Consultancy ServiceRajkot

ServiceRajkot

Ashish

^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 80008/01/2022-23

Date: 01/02/2023

AMBIENT NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th January 2023

Readings Taken by: Royal Environment

no or our	Tipining . 2 to realited y 2020	reducings raker by . Royal Environm			
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)		
	Permissible Limits	75.0	70.0		
01.	Nr. Main Security Gate	64.0	54.0		
02.	Nr. DRI Workshop area	66.0	58.0		
03.	Nr. Weigh Bridge - Security Point	65.0	59.0		
04.	Nr. SMS Triangle Garden	62.0	55.0		
05.	Nr. CPP Plant - Coal Shed Corner	72.0	62.0		
06.	Nr. West Security Gate	65	60.0		

CPCB Standards

Aran Cada	Catagory of Area / Zone	Limit in dB(A) Leq.		
Area Coue	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: Lutron Make Sound level meter, Model No. IL- 006719

Royal Environment Auditing & Consultancy Ser

Calibration done on: 04/03/2022

Ashish



Ref. No.: 80009/01/2022-23

Date: 01/02/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist : Kutch- 370110.

Date of Sampling: 21th January 2023

Readings Taken by : Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
ermissible L	imits for 8:00 Hrs.	90.0
	DRI Plant	
01	Nr. WorkShop	75.7
02	Between Kiln 1 & 2 (Platform)	79.5
03	Nr. Pump House - DRI	78
04	Nr. RMHS	73.4
	CPP Plant	
05	Nr. FBC Boiler (CPP)	86.2
06	Nr. TG Building	79.9
07	Nr. Work Shop	76.8
08	Inside Control Room	75.2
	SMS Plant	
09	Nr. Furnace Platform Area	76.2
10	Nr. CCM Area	74.9
11	Nr. MECH. Workshop	79.1
12	Nr. Pump House Area	78.8
	RM Plant**	
13	Nr. Roughing Section	76.2
14	Nr. Electrical Room	72.2
15	Nr. MECH. WORK	81.0
16	Nr. Cooling Bed Area	75.1

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Raikot

Instruments used: Lutron Make Sound level meter, Model No. SL- 4030

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

Ashish Analyst



Ref. No.: 80010/01/2022-23

Date: 01/02/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th January 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
01	Inside Office Building-ADM	200	360	280
02	Inside Control Room - DRI	300	385	355
03	Inside the Canteen	200	365	350
04	QC Lab - DRI Plant	300	360	340
05	Inside Control Room - CPP	300	380	345
06	QC Lab - SMS Plant	300	370	335

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

Rajkot v Service



Ref. No.: 80011/01/2022-23

Date: 01/02/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th January 2023

Sample Collected by: Royal Environment

Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permiss	sible Limit**		2000
01	Dev Motorial Handling Area	Screen Area	890
02	Raw Material Handling Area	Transfer Point	900
03	-Crusher Area	Crushing Point	975
04	-Crusher Area	Transfer Point	1390
05	Day Metalial Front Arra	Feeder Area	900
06	-Raw Material Feed Area	Mixing Area	885
07	Cooler discharge Area	Transfer Point	955
08		Product Sepration Area	1100
09	Product processing Area	Bagging Area	785
10		Intermediate Stock bin area	1280

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

Royal Environment Auditing & Consultancy

Ashish Analyst

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



Ref. No.: 80012/01/2022-23

Date: 01/02/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/01/2023

Source of Sample: Canteen

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.30
02	Total Dissolved Solids	mg/l	500	2000	125
03	Total Hardness (As CaCO ₃)	mg/l	200	600	50.0
04	Calcium (as Ca)	mg/l	75	200	14.0
05	Magnesium (as Mg)	mg/l	30	100	3.7
06	Chlorides	mg/l	250	1000	38.0
07	Sulphates	mg/l	200	400	16.0
08	Total Alkalinity	mg/l	200	600	39
09	Nitrates	mg/l	45	No relaxation	4.0
10	Flouride	mg/l	1.0	1.5	0.08

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultance



Ref. No.: 80013/01/2022-23

Date: 01/02/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/01/2023

Source of Sample: Power Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.50
02	Total Dissolved Solids	mg/l	500	2000	115
03	Total Hardness (As CaCO ₃)	mg/l	200	600	30
04	Calcium (as Ca)	mg/l	75	200	5.0
05	Magnesium (as Mg)	mg/l	30	100	4.3
06	Chlorides	mg/l	250	1000	22.0
07	Sulphates	mg/l	200	400	5.0
80	Total Alkalinity	mg/l	200	600	35
09	Nitrates	mg/l	45	No relaxation	2.9
10	Flouride	mg/l	1.0	1.5	0.06

^(*) Permissible Limit în the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service ajkot



Ref. No.: 80014/01/2022-23

Date: 01/02/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/01/2023

Source of Sample: DRI Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.20
02	Total Dissolved Solids	mg/l	500	2000	125
03	Total Hardness (As CaCO ₃)	mg/l	200	600	40
04	Calcium (as Ca)	mg/l	75	200	5.9
05	Magnesium (as Mg)	mg/l	30	100	6.1
06	Chlorides	mg/l	250	1000	30.0
07	Sulphates	mg/l	200	400	6.0
80	Total Alkalinity	mg/l	200	600	45
09	Nitrates	mg/l	45	No relaxation	4.0
10	Flouride	mg/l	1.0	1.5	0.07

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 80015/01/2022-23

Date: 01/02/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/01/2023

Source of Sample: SMS Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.50
02	Total Dissolved Solids	mg/l	500	2000	135
03	Total Hardness (As CaCO ₃)	mg/l	200	600	45
04	Calcium (as Ca)	mg/l	75	200	7.0
05	Magnesium (as Mg)	mg/l	30	100	6.7
06	Chlorides	mg/l	250	1000	32
07	Sulphates	mg/l	200	400	7.0
08	Total Alkalinity	mg/l	200	600	43
09	Nitrates	mg/l	45	No relaxation	5.0
10	Flouride	mg/l	1.0	1.5	0.06

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500.2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 80016/01/2022-23

Date: 01/02/2023

DETAILED RESULTS OF NATIONAL AMBIENT AIR QUALITY MONITORING OF THE MONTH JANUARY - 2023

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sample Collected by : Royal Environment

Test Method : As per IS Standards - 5182_23/24/6/2

S. No.	Particulars	Unit		L	ocation No.	- 1: Nr. Sec	urity Gate (Welspun St	eel)	
01.	No. of Week	-	C)1	0	2	0	3	C)4
02.	Date & Time Starting of Monitoring		05/01/23 08:40	06/01/23 08:50	12/01/23 09:00	13/01/23 09.10	19/01/23 08:30	20/01/23 08:40	26/01/23 09:30	27/01/2: 09:40
03.	Date & Time - Ending of Monitoring	72.00	06/01/23 08:40	07/01/23 08:50	13/01/23 09.00	14/01/23 09:10	20/01/23 08:30	21/01/23 08:40	27/01/23 09:30	28/01/2 09:40
04.	Duration of Sampling	Min.	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	***	NE	SE	NE	sw	SE	SE	sw	NW
06.	Wind Speed Velocity	Km/Hr.	2 to 16	1 to 15	3 to 12	4 to 16	2 to 20	3 to 18	1 to 20	2 to 18
07.	Average Flow Rate For PM2.5	m3/Hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	m3/Min.	1.20	1.10	1.10	1.20	1.20	1.10	1.10	1.20
09.	Average Flow Rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	μg/m3	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m3	24	29	25	24	21	23	22	26
12.	Permissible Limits of PM10 *	μg/m3	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m3	40	47	52	50	49	48	39	40
14.	Permissible Limits of SO2 *	µg/m3	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO2	µg/m3	15.0	14.1	11.9	12.8	14.6	15.6	14.2	18.7
16.	Permissible Limits of NO2 *	µg/m3	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO2	µg/m3	18.7	19.2	22.4	19.8	21.0	20.0	18.9	20

Instrument Used: 1) Ecotech make RDS, Model No.: APM - 217BL & Gaseous Pollutants, Sampler Model No. AAS-109, PM 2.5 Sampler AAS 127

Calibration Done On. : 26/12/2022

Rajkot

Royal Environment Auditing & Consultancy Service, Rajkot



Ph.: +91 9099919954 = E-mail: royalenvironment@live.com = admin@royalconsultancy.com

Ref. No.: 80017/01/2022-23

Date: 01/02/2023

REPORT OF WASTE WATER SAMPLES

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sample Collection : 22/01/2023

Source of Sample: ETP Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Permissible Limits(*)	ETP I/L	ETP O/L
01	pH	pH Units	6.5 to 8.5	6.1	7.40
02	Temperature	°C	40	38	30
03	Color	pt.co.	100	75	30
04	Total Dissolved Solids	mg/l	2100	1680	930
05	Suspended Solids	mg/l	100	68	20
06	Oil & Grease	mg/l	10	N.D.	N.D.
07	BOD (3 Days @ 27°C)	mg/l	30	165	14.0
80	COD	mg/l	100	375	35.0
09	Chlorides	mg/l	600	545	275
10	Sulphates	mg/l	1000	255	75
11	Phenolic Compound	mg/l	2.0	2.8	N.D.
12	Amonical Nitrogen	mg/l	50	29	5
13	Sodium Absorption Ratio	%	26	30	17.0
14	Total Chromium (As Cr)	mg/l	0.2	0.90	0.07
15	Hexavalent Chromium (As Cr ⁺⁶)	mg/l	0.1	0.09	0.06
16	Total Copper (As Cu)	mg/l	1.0	0.07	0.06
17	Total Iron (As Fe)	mg/l	1.0	0.9	0.06
18	Zinc (As Zn)	mg/l	1.0	0.70	0.05
19	Bio - assay test	Hours	90% Survical of fish after 96 hours in 100% effluent	N.A.	96%

Rajkot

(*) Permissible Limit as per GPCB CC&A, Limits are only applicable to ETP O/L

Royal Environment Auditing & Consultancy Service

WORK PLACE MONITORING REPORT Form No. 37

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

1 Name of the Department/Plant: KILN AREA, MECH.WORKSHOP, AFBC BOILER AREA OF Welspun Corp Ltd.- Steel Divison

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

3 Particulars of sampling

Date of Sa

Sr.

of Sampling: 21th January 2023	uary 2023								Sample	Collected by : R	Sample Collected by: Royal Environment
Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborr	Airborne Contamination	nination	TWA** concertration (As given in Second Schedule)	Refrance Method	Number of Workers exposed at the location being	Remarks	Signature person taking	Name (in block letters)
			Number of sample	Range	Average	Mg/m³		monitored		samples	
DRI Plant - Kiln Plat form Area	Total Dust		2	1.2-1.9	1.55	10		2	-		
DRI PLANT-Mech Work Shop	Total Dust	Personal	2	2.0-1.3	1.65	10		ε	1		(0)
Power Plant - AFBC Area	Total Dust	Respirable Dust sampler VPDS 203	2	2.1-1.7	1.90	10	Gravimetric	2	-	75:7.	Mr. PATAT ASHISH
SMS - ET Furnace Platform	Total Dust		2	1.7-2.0	1.85	10		9		Str	
SMS - IT Furnace Platform	Total Dust		2	2.4-1.6	2.00	10		4			

** Permissible limits (TWA) are as per ACGIH Standards. Calibration Done On.: 04/03/2022



For. Royal Environment Auditing & Consultancy Service

Royal Environment Auditing & Consultancy Service



Ref. No.: 90001/02/2022-23

Date: 01/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method : As per IS Standards - 11255_1/2/3/7

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5
01	Stack Attached to		Kiln Exit 1 & 2	Kiln Exit 3 & 4	Boiler of CPP - 30 TPH	D. G. Set
02	Date of sampling		21/02/2023	21/02/2023	-	21/02/2023
03	Time of Sampling		10:30	09:45	₩.	12:15
04	Air Pollution Control Measures		Dust Settling Chamber, Bag Filter ESP	ESP with each Kiln	ESP & Wet Scrubber	-1
05	Stack Height	Meter	30	30	30	30
06	Stack Temperature	°C	121	124	Not	116
07	Ambient Temperature	°C	26	25	Running	26
80	Average Velocity of Flue Gases	M/Sec.	7.8	7.1	During	7.9
09	Isokinetic flow rate for P.M. Sampling	LPM	23	20	Visit	19
10	Gaseous Sampling Flow Rate	LPM	2.0	2.0	***	2.0
11	Permissible Limit for P.M.*	mg/Nm³	100	100	100	150
12	Measured Concentration of P.M.	mg/Nm ³	51	48		46
13	Permissible Limit for SO2*	ppm	100	100	100	100
14	Measured Concentration of SO2	ppm	20	17		23
15	Permissible Limit for Nox*	ppm	50	50	50	50
16	Measured Concentration of Nox	ppm	23	18		29.0

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On . : 26/12/2022

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* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

Ashish



Ref. No.: 90002/02/2022-23

Date: 01/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Stack Attached to		Iron Ore Crusher Screen House	Coal Crusher Screen House	Stock House- 1	Stock House-2
02	Date of Sampling	-	21/02/2023	21/02/2023	21/02/2023	21/02/2023
03	Time of Sampling	*****	09:45	12:00	13:30	15:00
04	Air Pollution Control Measures	****	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	17	17	17	17
06	Stack Temperature	°C	71	69	72	68
07	Ambient Temperature	°C	24	26	26	21
80	Average Velocity of Flue Gases	M/Sec.	7.6	6.3	7.8	6.6
09	Isokinetic flow rate for P.M. Sampling	LPM	23	19	23	22
10	Permissible Limit for P.M.*	mg/Nm ³	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	48	50	56	51

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

Ashish



Ref. No.: 90003/02/2022-23

Date: 01/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method : As per IS Standards - 11255_1/3

Sample Collected by: Royal Environment

Sr. No.	Particulars	Unit	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13	Stack No. 14
01	Stack Attached to	****	Coal Injector-1	Coal Injector-2	Intermediate Bin	Raw Material Junction House	Production Separation
02	Date of Sampling		21/02/2023	21/02/2023	22/02/2023	22/02/2023	22/02/2023
03	Time of Sampling	****	13:15	14:30	12:20	14:00	16:00
04	Air Pollution Control Measures	-	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	12	12	22	20	15
06	Stack Temperature	°C	71	63	69	62	72
07	Ambient Temperature	°C	26	26	25	27	25
80	Average Velocity of Flue Gases	M/Sec.	7.1	6.4	7.8	6.5	6.4
09	Isokinetic flow rate for P.M. Sampling	LPM	22	19	23	18	17
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm³	54	46	48	43	56

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On : 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service



Ashish



Ref. No.: 90004/02/2022-23

Date: 01/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 15	Stack No.16
01	Stack Attached to		ET Furnace - SMS	IT Furnace - SMS
02	Date of sampling		22/02/2023	-
03	Time of Sampling		09:10	
04	Air Pollution Control Measures		Bag Filter	Bag Filter
05	Stack Height	Meter	-	-
06	Stack Temperature	°C	120	NOT
07	Ambient Temperature	°C	25	RUNNING
08	Average Velocity of Flue Gases	M/Sec.	6.8	DURING
09	Isokinetic flow rate for P.M. Sampling	LPM	18	VISITE
10	Permissible Limit for P.M.*	mg/Nm³	100	100
11	Measured Concentration of P.M.	mg/Nm ³	52	
12	Permissible Limit for Sox*	ppm	40	40
13	Measured Concentration of SOx	ppm	5.3	-
14	Permissible Limit for Nox*	ppm	25	25
15	Measured Concentration of Nox	ppm	14	

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* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

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Ref. No.: 90005/02/2022-23

Date: 01/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Test Method

: As per IS Standards - 5182_2/4/6

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Location No. 1
01.	Location of Sampling		Nr. Main Security Gate
02.	Date of sampling		21/02/2023
03.	Time of sampling	Hrs.	08:40
04	Duration of Sampling	Min.	1440.00
05	Dominant Wind Direction (From)		SW
06	Wind Speed	Km./Hrs.	2 TO 16
07	Average flow rate during sampling	m3/minutes	1.20
80	Average flow rate for Gas sampling	LPM	0.2
09	Permissible Limits of PM 10 *	μg/m³	100
10	Measured Concentration of PM 10	μg/m³	48
11	Permissible Limits of PM 2.5*	μg/m³	60
12	Measured Concentration of PM 2.5	μg/m³	34
13	Permissible Limits of SO ₂ *	μg/m³	80
14	Measured Concentration of SO ₂	μg/m³	18.2
15	Permissible Limits of NO ₂ *	μg/m³	80
16	Measured Concentration of NQ ₂	μg/m³	24.9

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 26/12/2022

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Royal Environment Auditing & Consultancy Service

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^{*}Permissible limits are as per NAAQ Standard 16th November 200



Ref. No.: 90006/02/2022-23

Date: 01/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Meth	nod : As per IS Standards - 5182	_2/4/6	S	Sample Collected by :	Royal Environmen
Sr. No.	Particulars	Unit	Location No. 3	Location No. 4	Location No. 2
01.	Location of Sampling		Nr. SMS, TRIANGLE GARDEN	Nr. WEST SECURITY GATE	Weight Bridge Security Point
02.	Date of sampling		22/02/2023	21/02/2023	22/02/2023
03.	Time of sampling	Hrs.	8:20	9:10	09:20
04	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)		sw	sw	sw
06.	Wind Speed	Km./Hrs.	2 TO 16	1 To 18	1 To 14
07.	Average flow rate during sampling	m3/minutes	1.10	1.10	1.20
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible Limits of PM 10*	μg/m³	100	100	100
10.	Measured Concentration of PM 10	μg/m³	43	49	50
11.	Permissible Limits of PM 2.5*	μg/m³	60	60	60
12.	Measured Concentration of PM 2.5	μg/m³	24	29	33
13.	Permissible Limits of SO ₂ *	μg/m³	80	80	80
14.	Measured Concentration of SO ₂	μg/m³	16.3	16	18
15.	Permissible Limits of NO ₂ *	μg/m³	80	80	80
16.	Measured Concentration of NO ₂	μg/m³	25.6	23.0	21.0

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 26/12/2022

Royal Environment Auditing & Consultancy Service

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^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 90008/02/2022-23

Date: 01/03/2023

AMBIENT NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th February 2023

Readings Taken by: Royal Environment

ate of our	riping . 2 ftr rebruary 2025	Readings Taken by . Royal Enviro			
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)		
	Permissible Limits	75.0	70.0		
01.	Nr. Main Security Gate	63.0	55.0		
02.	Nr. DRI Workshop area	65.0	56.0		
03.	Nr. Weigh Bridge - Security Point	68.0	51.0		
04.	Nr. SMS Triangle Garden	61.0	58.0		
05.	Nr. CPP Plant - Coal Shed Corner	73.0	63.0		
06.	Nr. West Security Gate	66	59.0		

CPCB Standards

Area Code	Category of Area / Zone	Limit in o	dB(A) Leq.
Alea 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: Lutron Make Sound level meter, Model No. IL-006719

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

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Ref. No.: 90009/02/2022-23

Date: 01/03/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th February 2023

Readings Taken by : Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	imits for 8:00 Hrs.	90.0
	DRI Plant	
01	Nr. WorkShop	76.9
02	Between Kiln 1 & 2 (Platform)	80.2
03	Nr. Pump House - DRI	76.3
04	Nr. RMHS	72.9
	CPP Plant	
05	Nr. FBC Boiler (CPP)	88.9
06	Nr. TG Building	78.6
07	Nr. Work Shop	75.2
08	Inside Control Room	77.4
	SMS Plant	
09	Nr. Furnace Platform Area	76.3
10	Nr. CCM Area	75.5
11	Nr. MECH. Workshop	80.2
12	Nr. Pump House Area	81.3
	RM Plant**	
13	Nr. Roughing Section	75.3
14	Nr. Electrical Room	71.1
15	Nr. MECH. WORK	83.6
16	Nr. Cooling Bed Area	79.8

Instruments used: Lutron Make Sound level meter, Model No. SL- 4030

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Se

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Ref. No.: 90010/02/2022-23

Date: 01/03/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th February 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
01	Inside Office Building-ADM	200	360	280
02	Inside Control Room - DRI	300	385	355
03	Inside the Canteen	200	365	350
04	QC Lab - DRI Plant	300	360	340
05	Inside Control Room - CPP	300	380	345
06	QC Lab - SMS Plant	300	370	335

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

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Ref. No.: 90011/02/2022-23

Date: 01/03/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 21th February 2023

Sample Collected by : Royal Environment

	Camping . 2 turr estuary 2020		Collected by . Royal Environing
Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permiss	sible Limit**		2000
01	-Raw Material Handling Area	Screen Area	956
02	Traw Material Flantuing Area	Transfer Point	1009
03	Crusher Area	Crushing Point	898
04	-Crustier Area	Transfer Point	1565
05	Raw Material Feed Area	Feeder Area	846
06	-Raw Material Feed Area	Mixing Area	906
07	Cooler discharge Area	Transfer Point	866
08		Product Sepration Area	1230
09	Product processing Area	Bagging Area	909
10		Intermediate Stock bin area	1356

Instruments Used: HVS APM 430, RDS-AAS 217, Calibration done on.: 26/12/2022

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

Royal Environment Auditing & Consultancy Service

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Ref. No.: 90012/02/2022-23

Date: 01/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/02/2023

Source of Sample: Canteen

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.23
02	Total Dissolved Solids	mg/l	500	2000	156
03	Total Hardness (As CaCO ₃)	mg/l	200	600	58.0
04	Calcium (as Ca)	mg/l	75	200	21.0
05	Magnesium (as Mg)	mg/l	30	100	1.4
06	Chlorides	mg/l	250	1000	42.0
07	Sulphates	mg/l	200	400	18.0
08	Total Alkalinity	mg/l	200	600	43
09	Nitrates	mg/l	45	No relaxation	3.0
10	Flouride	mg/l	1.0	1.5	0.09

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500: 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500;2012 Standard.

Auditing & Consultancy Service Royal Environment



Ref. No.: 90013/02/2022-23

Date: 01/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/02/2023

Source of Sample: Power Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	8.10
02	Total Dissolved Solids	mg/l	500	2000	104
03	Total Hardness (As CaCO ₃)	mg/l	200	600	42
04	Calcium (as Ca)	mg/l	75	200	6.3
05	Magnesium (as Mg)	mg/l	30	100	6.4
06	Chlorides	mg/l	250	1000	28.0
07	Sulphates	mg/l	200	400	11.3
80	Total Alkalinity	mg/l	200	600	45
09	Nitrates	mg/l	45	No relaxation	3.6
10	Flouride	mg/l	1.0	1.5	0.04

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500;2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 90014/02/2022-23

Date: 01/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/02/2023

Source of Sample: DRI Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	6.90
02	Total Dissolved Solids	mg/l	500	2000	146
03	Total Hardness (As CaCO ₃)	mg/l	200	600	65
04	Calcium (as Ca)	mg/l	75	200	6.7
05	Magnesium (as Mg)	mg/l	30	100	11.7
06	Chlorides	mg/l	250	1000	36.0
07	Sulphates	mg/l	200	400	9.0
08	Total Alkalinity	mg/l	200	600	54
09	Nitrates	mg/l	45	No relaxation	7.0
10	Flouride	mg/l	1.0	1.5	0.06

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: 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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Ref. No.: 90015/02/2022-23

Date: 01/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 22/02/2023

Source of Sample: SMS Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.30
02	Total Dissolved Solids	mg/l	500	2000	165
03	Total Hardness (As CaCO ₃)	mg/l	200	600	44
04	Calcium (as Ca)	mg/l	75	200	8.0
05	Magnesium (as Mg)	mg/l	30	100	5.8
06	Chlorides	mg/l	250	1000	36
07	Sulphates	mg/l	200	400	8.6
08	Total Alkalinity	mg/l	200	600	60
09	Nitrates	mg/l	45	No relaxation	3.2
10	Flouride	mg/l	1.0	1.5	0.07

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 90016/02/2022-23

Date: 01/02/2023

DETAILED RESULTS OF NATIONAL AMBIENT AIR QUALITY MONITORING OF THE MONTH FEBRUARY - 2023

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sample Collected by: Royal Environment

Test Method : As per IS Standards - 5182_23/24/6/2

Particulars	Unit		L	ocation No.	- 1: Nr. Sec	urity Gate (Welspun St	eel)	
No. of Week		0)1	0)2	0	3	0	4
Date & Time Starting of Monitoring	***	02/02/23 08:30	03/02/23 08:40	09/02/23 09:10	10/02/23 09.20	16/02/23 08:40	17/02/23 08:50	23/02/23 09:20	24/02/23 09:30
Date & Time - Ending of Monitoring	-	03/02/23 08:30	04/02/23 08:40	10/02/23 09.10	11/02/23 09:20	17/02/23 08:40	18/02/23 08:50	24/02/23 09:20	25/02/23 09:30
Duration of Sampling	Min.	1440	1440	1440	1440	1440	1440	1440	1440
Dominant Wind Direction (From)	***	NE	SE	NE	sw	SE	SE	sw	NW
Wind Speed Velocity	Km/Hr.	3 To 13	2 To 16	3 To 17	1 To 15	2 To 21	4 To 21	3 To 18	2 To 14
Average Flow Rate For PM2.5	m3/Hr.	1.0	1.0	1.0	1.0	1,0	1.0	1.0	1.0
Average Flow Rate For PM10	m3/Min.	1.10	1.10	1.20	1.20	1.10	1.20	1.10	1.10
Average Flow Rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Permissible Limits of PM2.5 *	μg/m3	60	60	60	60	60	60	60	60
Measured Concentration of PM2.5	µg/m3	26	30	24	22	26	25	21	28
Permissible Limits of PM10 *	µg/m3	100	100	100	100	100	100	100	100
Measured Concentration of PM10	µg/m3	47	39	56	51	40	43	41	45
Permissible Limits of SO2 *	μg/m3	80	80	80	80	80	80	80	80
Measured Concentration of SO2	µg/m3	16.0	13.6	14.2	11.9	11.6	19.8	17.5	16.3
Permissible Limits of NO2 *	μg/m3	80	80	80	80	80	80	80	80
Measured Concentration of NO2	µg/m3	11.9	14.8	26.9	17.6	25.4	26.4	21.3	22.6
	No. of Week Date & Time Starting of Monitoring Date & Time - Ending of Monitoring Duration of Sampling Dominant Wind Direction (From) Wind Speed Velocity Average Flow Rate For PM2.5 Average Flow Rate For PM10 Average Flow Rate for Gas Monitoring Permissible Limits of PM2.5* Measured Concentration of PM2.5 Permissible Limits of PM10 * Measured Concentration of PM10 Permissible Limits of SO2 * Measured Concentration of SO2 Permissible Limits of NO2 *	No. of Week Date & Time Starting of Monitoring Date & Time - Ending of Monitoring Duration of Sampling Min. Dominant Wind Direction (From) Wind Speed Velocity Km/Hr. Average Flow Rate For PM2.5 m3/Hr. Average Flow Rate For PM10 m3/Min. Average Flow Rate for Gas Monitoring LPM Permissible Limits of PM2.5 pg/m3 Measured Concentration of PM2.5 pg/m3 Measured Concentration of PM10 pg/m3 Permissible Limits of SO2 pg/m3 Measured Concentration of SO2 pg/m3 Measured Concentration of SO2 pg/m3 Permissible Limits of NO2 pg/m3	No. of Week Date & Time Starting of Monitoring Date & Time - Ending of Monitoring Date & Time - Ending of Monitoring Duration of Sampling Min. 1440 Dominant Wind Direction (From) Wind Speed Velocity Average Flow Rate For PM2.5 Average Flow Rate For PM10 Average Flow Rate for Gas Monitoring Average Flow Rate for Gas Monitoring LPM 0.2 Permissible Limits of PM2.5 Permissible Limits of PM10 Measured Concentration of PM2.5 Permissible Limits of PM10 Measured Concentration of PM10 Measured Concentration of PM10 Permissible Limits of SO2 Measured Concentration of SO2 Permissible Limits of NO2 Permissible Limits of NO2	No. of Week 01 Date & Time Starting of Monitoring 02/02/23 08:30 08:40 08:40 08:40 08:30 08:40 Date & Time - Ending of Monitoring 03/02/23 08:30 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40 08:40	No. of Week 01 0 Date & Time Starting of Monitoring 02/02/23 08:30 08:40 09:10 09:10 09:10 Date & Time - Ending of Monitoring 03/02/23 08:40 09:10 10/02/23 08:30 08:40 09:10 Duration of Sampling Min. 1440 1440 1440 1440 Dominant Wind Direction (From) NE SE Wind Speed Velocity Km/Hr. 3 To 13 2 To 16 3 To 17 Average Flow Rate For PM2.5 m3/Hr. 1.0 1.0 1.0 1.0 Average Flow Rate For PM10 m3/Min. 1.10 1.10 1.20 Average Flow Rate for Gas Monitoring LPM 0.2 0.2 0.2 0.2 Permissible Limits of PM2.5 * μg/m3 60 60 60 60 Measured Concentration of PM2.5 μg/m3 26 30 24 Permissible Limits of PM10 * μg/m3 100 100 100 Measured Concentration of PM10 μg/m3 47 39 56 Permissible Limits of SO2 * μg/m3 80 80 80 Measured Concentration of SO2 μg/m3 16.0 13.6 14.2 Permissible Limits of NO2 * μg/m3 80 80 80	No. of Week 01 02 Date & Time Starting of Monitoring 02/02/23 08:30 08:40 09:10 09:20 09:10 09:20 09:10 09:20 09:10 09:20 09:10 09:20 Date & Time - Ending of Monitoring 03/02/23 08:40 09:10 10/02/23 09:10 09:20 09:20 09:10 09:20 10/02/23 08:40 09:10 10/02/23 09:20 09:20 09:20 09:20 09:20 Duration of Sampling Min. 1440 1440 1440 1440 1440 1440 1440 1440 1440 1440 1440 1440 Dominant Wind Direction (From) NE SE NE SW Wind Speed Velocity Km/Hr. 3 To 13 2 To 16 3 To 17 1 To 15 3 To 17 1 To 15 Average Flow Rate For PM2.5 m3/Hr. 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.20	No. of Week	No. of Week	No. of Week

Instrument Used: 1) Ecotech make RDS, Model No.: APM - 217BL & Gaseous Polllutants Sampler Model No. AAS-109, PM 2.5 Sampler AAS 127

Calibration Done On : 26/12/2022

Royal Environment Auditing & Consultancy Service, Rajkot

Ashish



Ref. No.: 90017/02/2022-23

Date: 01/03/2023

REPORT OF WASTE WATER SAMPLES

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sample Collection : 22/02/2023

Source of Sample: ETP Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Permissible Limits(*)	ETP I/L	ETP O/L
01	рН	pH Units	6.5 to 8.5	6.3	8.00
02	Temperature	°C	40	35	31
03	Color	pt.co.	100	70	29
04	Total Dissolved Solids	mg/l	2100	1466	1032
05	Suspended Solids	mg/l	100	56	19
06	Oil & Grease	mg/l	10	N.D.	N.D.
07	BOD (3 Days @ 27°C)	mg/l	30	189	16.0
80	COD	mg/l	100	298	42.0
09	Chlorides	mg/l	600	456	284
10	Sulphates	mg/l	1000	298	84
11	Phenolic Compound	mg/l	2.0	2.4	N.D.
12	Amonical Nitrogen	mg/l	50	26	6
13	Sodium Absorption Ratio	%	26	28	20.0
14	Total Chromium (As Cr)	mg/l	0.2	0.80	0.03
15	Hexavalent Chromium (As Cr ⁺⁶)	mg/l	0.1	0.07	0.07
16	Total Copper (As Cu)	mg/l	1.0	0.08	0.04
17	Total Iron (As Fe)	mg/l	1.0	0.6	0.08
18	Zinc (As Zn)	mg/l	1.0	0.80	0.06
19	Bio - assay test	Hours	90% Survical of fish after 96 hours in 100% effluent	N.A.	95%

(*) Permissible Limit as per GPCB CC&A, Limits are only applicable to ETP O/L

Royal Environment Auditing & Consultancy Service

Ashish

Ref. No.: 90007/02/2022-23

Date: 01/03/2023

WORK PLACE MONITORING REPORT Form No. 37

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

- 1 Name of the Department/Plant: KILN AREA, MECH.WORKSHOP, AFBC BOILER AREA OF Welspun Corp Ltd.- Steel Divison
- 2 Raw materials, by products and finished products involved in the process. TOTAL DUST
- 3 Particulars of sampling

Date of Sampling: 21th February 2023

Sample Collected by : Royal Environment

No.

	ı	4		10	1.75	2.1 - 1.4	2		Total Dust	SMS - IT Furnace Platform
Asl	ı	5		10	2.45	2.0 - 2.9	2		Total Dust	SMS - ET Furnace Platform
nisl	ı	2	Gravimetric	10	1.85	2.3 - 1.4	2	Respirable Dust sampler VPDS 203	Total Dust	Power Plant - AFBC Area
n	ı	ω		10	1.95	2.3 - 1.6	2	Personal	Total Dust	DRI PLANT-Mech Work Shop
113	-	5		10	1.55	1.3 - 1.8	2		Total Dust	DRI Plant - Kiln Plat form Area
ou libror		monitored		Mg/m³	Average	Range	Number of sample			
Signature person taking	Remarks	Number of Workers exposed at the location being	Refrance Method	TWA** concertration (As given in Second Schedule)	ination	Airborne Contamination	Airbon	Sampling Instrument used	Identified Contaminate	Location Operation monitored

^{**} Permissible limits (TWA) are as per ACGIH Standards. Calibration Done On.: 04/03/2022

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For. Royal Environment Auditing & Consultancy Service

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Ref. No.: 100002/03/2022-23 Date: 30/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

					2701	976
Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Stack Attached to	(2000	Iron Ore Crusher Screen House	Coal Crusher Screen House	Stock House- 1	Stock House-2
02	Date of Sampling		16/03/2023	17/03/2023	17/03/2023	17/03/2023
03	Time of Sampling		11:30	09:50	10:40	11:30
04	Air Pollution Control Measures		Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	17	17	17	17
06	Stack Temperature	°C	68	70	67	69
07	Ambient Temperature	°C	23	21	22	22
08	Average Velocity of Flue Gases	M/Sec.	7.4	6.8	7.2	7
09	Isokinetic flow rate for P.M. Sampling	LPM	22	20	21	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm ³	50	52	58	54

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

Ashish



Ref. No.: 100001/03/2022-23 Date: 30/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 5
01	Stack Attached to		Kiln Exit 1 & 2	Kiln Exit 3 & 4	Boiler of CPP - 30 TPH	D. G. Set
02	Date of sampling		16/03/2023	16/03/2023	-	16/03/2023
03	Time of Sampling		09:30	10:20	-	10:50
04	Air Pollution Control Measures		Dust Settling Chamber, Bag Filter ESP	ESP with each Kiln	ESP & Wet Scrubber	
05	Stack Height	Meter	30	30	30	30
06	Stack Temperature	°C	123	122	Not	109
07	Ambient Temperature	°C	21	22	Running	22
08	Average Velocity of Flue Gases	M/Sec.	7.4	7.6	During	7.7
09	Isokinetic flow rate for P.M. Sampling	LPM	22	21	Visit	20
10	Gaseous Sampling Flow Rate	LPM	2.0	2.0	-	2.0
11	Permissible Limit for P.M.*	mg/Nm³	100	100	100	150
12	Measured Concentration of P.M.	mg/Nm ³	54	53	****	51
13	Permissible Limit for SO2*	ppm	100	100	100	100
14	Measured Concentration of SO2	ppm	23	21	-	24
15	Permissible Limit for Nox*	ppm	50	50	50	50
16	Measured Concentration of Nox	ppm	21	20	-	30.0

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

Ashish





Ref. No.: 100003/03/2022-23

Date: 30/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/3

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13	Stack No. 14
01	Stack Attached to		Coal Injector-1	Coal Injector-2	Intermediate Bin	Raw Material Junction House	Production Separation
02	Date of Sampling		17/03/2023	17/03/2023	17/03/2023	17/03/2023	17/03/2023
03	Time of Sampling		12:20	14:00	14:50	15:30	16:10
04	Air Pollution Control Measures		Bag Filter	Bag Filter	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	12	12	22	20	15
06	Stack Temperature	°C	68	65	67	66	69
07	Ambient Temperature	°C	24	25	25	23	23
80	Average Velocity of Flue Gases	M/Sec.	7.4	6.9	7.1	7	6.8
09	Isokinetic flow rate for P.M. Sampling	LPM	20	21	19	22	20
10	Permissible Limit for P.M.*	mg/Nm³	100	100	100	100	100
11	Measured Concentration of P.M.	mg/Nm³	56	51	50	52	53

Instrument Used :Stack Monitoring Kit - Ecotech (ESS 100)

Calibration Done On .: 26/12/2022

* Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service

AShish Analyst



Ref. No.: 100004/03/2022-23

Date: 30/03/2023

REPORT OF STACK EMISSION ANALYSIS

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Test Method

: As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 15	Stack No.16
01	Stack Attached to		ET Furnace - SMS	IT Furnace - SMS
02	Date of sampling		16/03/2023	16/03/2023
03	Time of Sampling		14:00	14:50
04	Air Pollution Control Measures		Bag Filter	Bag Filter
05	Stack Height	Meter	-	
06	Stack Temperature	°C	114	118
07	Ambient Temperature	°C	24	24
80	Average Velocity of Flue Gases	M/Sec.	7.3	6.9
09	Isokinetic flow rate for P.M. Sampling	LPM	20	21
10	Permissible Limit for P.M.*	mg/Nm³	100	100
11	Measured Concentration of P.M.	mg/Nm ³	49	47
12	Permissible Limit for Sox*	ppm	40	40
13	Measured Concentration of SOx	ppm	5.6	5.1
14	Permissible Limit for Nox*	ppm	25	25
15	Measured Concentration of Nox	ppm	13	14

^{*} Permissible limits as per GPCB CC&A.

Royal Environment Auditing & Consultancy Service



Ref. No.: 100005/03/2022-23

Date: 30/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Test Method : As per IS Standards - 5182_2/4/6

Sample Collected by : Royal Environment

Sr. No.	Particulars	Unit	Location No. 1
01.	Location of Sampling		Nr. Main Security Gate
02.	Date of sampling	(#400m)	17/03/2023
03.	Time of sampling	Hrs.	09:10
04	Duration of Sampling	Min.	1440.00
05	Dominant Wind Direction (From)		SE
06	Wind Speed	Km./Hrs.	1 to 16
07	Average flow rate during sampling	m3/minutes	1.10
80	Average flow rate for Gas sampling	LPM	0.2
09	Permissible Limits of PM 10 *	μg/m³	100
10	Measured Concentration of PM 10	μg/m³	52
11	Permissible Limits of PM 2.5*	μg/m³	60
12	Measured Concentration of PM 2.5	μg/m³	37
13	Permissible Limits of SO ₂ *	μg/m³	80
14	Measured Concentration of SO ₂	µg/m³	19.2
15	Permissible Limits of NO ₂ *	μg/m³	80
16	Measured Concentration of NO ₂	μg/m³	25.4

Instrument used: Ecotech RDS AAS 217BL, Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

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Calibration Done On.: 26/12/2022

Ashish Analyst

Royal Environment Auditing & Consultancy Service

^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 100006/03/2022-23

Date: 30/03/2023

REPORT OF AMBIENT AIR QUALITY MONITORING

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

est Meth	nod : As per IS Standards - 5182	_2/4/6		Sample Collected by : Royal Environment		
Sr. No.	Particulars	Unit	Location No. 3	Location No. 4	Location No. 2	
01.	Location of Sampling		Nr. SMS, TRIANGLE GARDEN	Nr. WEST SECURITY GATE	Weight Bridge Security Point	
02.	Date of sampling		16/03/2023	17/03/2023	16/03/2023	
03.	Time of sampling	Hrs.	09:00	9:10	09:10	
04	Duration of Sampling	Min.	1440.00	1440.00	1440.00	
05.	Dominant Wind Direction (From)		SE	SE	SE	
06.	Wind Speed	Km./Hrs.	3 to 12	1 to 17	2 to 20	
07.	Average flow rate during sampling	m3/minutes	1.20	1.20	1.10	
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2	
09.	Permissible Limits of PM 10*	μg/m³	100	100	100	
10.	Measured Concentration of PM 10	µg/m³	45	50	52	
11.	Permissible Limits of PM 2.5*	μg/m³	60	60	60	
12.	Measured Concentration of PM 2.5	µg/m³	25	30	35	
13.	Permissible Limits of SO ₂ *	μg/m³	80	80	80	
14.	Measured Concentration of SO ₂	µg/m³	17.0	16.7	17.9	
15.	Permissible Limits of NO ₂ *	μg/m³	80	80	80	
16.	Measured Concentration of NO ₂	µg/m³	26.0	24.5	23.7	

Instrument used : Ecotech RDS AAS 217BL , Gaseous Sampling Kit AAS 109 & PM 2.5 Sampler AAS 127

Calibration Done On.: 26/12/2022

Royal Environment Auditing & Consultancy Service

Ashis Analyst

^{*}Permissible limits are as per NAAQ Standard 16th November 2009



Ref. No.: 100008/03/2022-23

Date: 30/03/2023

AMBIENT NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 17th MARCH 2023

Readings Taken by: Royal Environment

10 01 001		reduings raken by . Royal En				
Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)			
	Permissible Limits	75.0	70.0			
01.	Nr. Main Security Gate	65.0	56.0			
02.	Nr. DRI Workshop area	66.0	57.0			
03.	Nr. Weigh Bridge - Security Point	69.0	61.0			
04.	Nr. SMS Triangle Garden	63.0	58.0			
05.	Nr. CPP Plant - Coal Shed Corner	74.0	66.0			
06.	Nr. West Security Gate	67	59.0			

CPCB Standards

Area Code	Category of Area / Zone	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: Lutron Make Sound level meter, Model No. IL-006719

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service



Ref. No.: 100009/03/2022-23

Date: 30/03/2023

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 17th MARCH 2023

Readings Taken by: Royal Environment

Sr.No.	Location of Sampling	Results in dB(A)
Permissible L	imits for 8:00 Hrs.	90.0
	DRI Plant	
01	Nr. WorkShop	77.0
02	Between Kiln 1 & 2 (Platform)	79.0
03	Nr. Pump House - DRI	78
04	Nr. RMHS	74.0
	CPP Plant	
05	Nr. FBC Boiler (CPP)	89.0
06	Nr. TG Building	79.0
07	Nr. Work Shop	76.0
80	Inside Control Room	78.0
	SMS Plant	
09	Nr. Furnace Platform Area	77.0
10	Nr. CCM Area	76.0
11	Nr. MECH. Workshop	81.0
12	Nr. Pump House Area	82.0
	RM Plant**	
13	Nr. Roughing Section	76.1
14	Nr. Electrical Room	73.4
15	Nr. MECH. WORK	84.2
16	Nr. Cooling Bed Area	80.0

Instruments used: Lutron Make Sound level meter, Model No. SL- 4030

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

Ashish



Ref. No.: 100010/03/2022-23

Date: 30/03/2023

ILLUMINATION LEVEL MEASUREMENT

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 17th MARCH 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
01	Inside Office Building-ADM	200	370	285
02	Inside Control Room - DRI	300	390	360
03	Inside the Canteen	200	370	355
04	QC Lab - DRI Plant	300	365	345
05	Inside Control Room - CPP	300	375	350
06	QC Lab - SMS Plant	300	380	340

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

Calibration done on: 04/03/2022

Royal Environment Auditing & Consultancy Service

Ashish



Ref. No.: 100011/03/2022-23

Date: 30/03/2023

ANALYSIS RESULT OF FUGITIVE EMISSION

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sampling: 17th MARCH 2023

Sample Collected by : Royal Environment

Jale 01	Sampling . 17th MARCH 2023	Collected by . Royal Environm	
Sr. No.	Area	Monitoring Location	SPM Level (µg/Nm³)
Permis	sible Limit**		2000
01		Screen Area	949
02	Raw Material Handling Area	Transfer Point	1110
03	Crusher Area	Crushing Point	885
04	-Crusher Area	Transfer Point	1490
05	Day Material Food Asso	Feeder Area	835
06	Raw Material Feed Area	Mixing Area	920
07	Cooler discharge Area	Transfer Point	870
80		Product Sepration Area	1190
09	Product processing Area	Bagging Area	1000
10		Intermediate Stock bin area	1290
	1		

Instruments Used : HVS APM 430, RDS-AAS 217, Calibration done on.: 26/12/2022

Royal Environment Auditing & Consultancy Service

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



Ref. No.: 100012/03/2022-23

Date: 30/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 18/03/2023

Source of Sample: Canteen

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.30
02	Total Dissolved Solids	mg/l	500	2000	145
03	Total Hardness (As CaCO ₃)	mg/l	200	600	54.0
04	Calcium (as Ca)	mg/l	75	200	21.0
05	Magnesium (as Mg)	mg/l	30	100	0.4
06	Chlorides	mg/l	250	1000	40.0
07	Sulphates	mg/l	200	400	20.0
80	Total Alkalinity	mg/l	200	600	45
09	Nitrates	mg/l	45	No relaxation	4.0
10	Flouride	mg/l	1.0	1.5	0.08

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 100013/03/2022-23

Date: 30/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 18/03/2023

Source of Sample: Power Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.80
02	Total Dissolved Solids	mg/l	500	2000	110
03	Total Hardness (As CaCO ₃)	mg/l	200	600	46
04	Calcium (as Ca)	mg/l	75	200	6.6
05	Magnesium (as Mg)	mg/l	30	100	7.2
06	Chlorides	mg/l	250	1000	30.0
07	Sulphates	mg/l	200	400	12.0
08	Total Alkalinity	mg/l	200	600	43
09	Nitrates	mg/l	45	No relaxation	4.1
10	Flouride	mg/l	1.0	1.5	0.05

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service



Ref. No.: 100014/03/2022-23

Date: 30/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 18/03/2023

Source of Sample: DRI Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.20
02	Total Dissolved Solids	mg/l	500	2000	138
03	Total Hardness (As CaCO ₃)	mg/l	200	600	68
04	Calcium (as Ca)	mg/l	75	200	7.0
05	Magnesium (as Mg)	mg/l	30	100	12.3
06	Chlorides	mg/l	250	1000	39.0
07	Sulphates	mg/l	200	400	8.7
08	Total Alkalinity	mg/l	200	600	56
09	Nitrates	mg/l	45	No relaxation	6.9
10	Flouride	mg/l	1.0	1.5	0.07

(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment



Ref. No.: 100015/03/2022-23

Date: 30/03/2023

REPORT OF WATER SAMPLES

Name of company: Welspun Corp Ltd. - Steel Division

Welspun City, Survey No. 650, Village: Versamedi, Taluka: Anjar,

Dist.: Kutch-370110.

Date of Sample Collection : 18/03/2023

Source of Sample: SMS Plant

Sample Collected by: Royal Environment

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Sr.No.	Parameters	Unit	Acceptable Limits	Permissible Limit(*)	Results
01	рН	pH Units	6.5 to 8.5	No relaxation	7.40
02	Total Dissolved Solids	mg/l	500	2000	160
03	Total Hardness (As CaCO ₃)	mg/l	200	600	49
04	Calcium (as Ca)	mg/l	75	200	7.7
05	Magnesium (as Mg)	mg/l	30	100	7.2
06	Chlorides	mg/l	250	1000	39
07	Sulphates	mg/l	200	400	7.8
08	Total Alkalinity	mg/l	200	600	58
09	Nitrates	mg/l	45	No relaxation	3.6
10	Flouride	mg/l	1.0	1.5	0.08

^(*) Permissible Limit in the Absense of Alternate Source as per IS 10500 : 2012, Drinking Water Specification

Statement of Conformity: The water is safe to drink with respect of parameters checked above as per IS 10500:2012 Standard.

Royal Environment Auditing & Consultancy Service





Date: 30/03/2023

DETAILED RESULTS OF NATIONAL AMBIENT AIR QUALITY MONITORING OF THE MONTH MARCH - 2023

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650, Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Sample Collected by : Royal Environment

Ref. No.: 100016/03/2022-23

S. No.	Particulars	Unit			L	ocation No.	- 1: Nr. Sec	urity Gate (Weispun St	eel)		
01.	No. of Week			11	0	2	0	3	0	14	0	5
02,	Date & Time Starting of Monitoring	***	02/03/23 09:00	03/03/23 09:10	09/03/23 08:50	10/02/23 09.00	16/03/23 08:30	17/03/23 08:40	23/03/23 09:30	24/03/23 09:40	30/03/23 09:00	31/03/23 09:10
03.	Date & Time - Ending of Monitoring		03/03/23 09:00	04/03/23 09:10	10/02/23 08.50	11/02/23 09:00	17/03/23 08:30	18/03/23 08:40	24/03/23 09:30	25/03/23 09:40	31/03/23 09:00	01/04/23 09:10
04.	Duration of Sampling	Min.	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	-	NW	sw	NW	SE	sw	sw	SE	sw	SE	NE
06.	Wind Speed Velocity	Km/Hr.	2 to 20	1 to 17	3 to 18	1 to 16	2 to 20	3 to 12	1 to 18	2 to 16	1 to 14	2 to 12
07.	Average Flow Rate For PM2.5	m3/Hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	m3/Min.	1.20	1.20	1.10	1.10	1.20	1.10	1.20	1.10	1,20	1.10
09.	Average Flow Rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µд/т3	60	60	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m3	29	31	28	25	24	27	24	23	22	30
12.	Permissible Limits of PM10 *	μg/m3	100	100	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m3	50	42	59	54	41	48	42	45	46	47
14.	Permissible Limits of SO2 *	μg/m3	80	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO2	µg/m3	15.8	14.8	15.1	13.4	12.8	18.9	13.6	17.7	16.8	17.3
16.	Permissible Limits of NO2 *	µg/m3	80	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO2	µg/m3	13.8	12.7	24.4	18.0	24.1	25.5	23.9	27.7	23.0	21

Instrument Used: 1) Ecotech make RDS, Model No.: APM - 217BL & Gaseous Polllutants Sampler Model No. AAS-109, PM 2.5 Sampler AAS 127

Calibration Done On. : 26/12/2022

Royal Environment Auditing & Consultancy Service, Rajkot

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Ref. No.: 100017/03/2022-23

Date: 30/03/2023

REPORT OF WASTE WATER SAMPLES

Name of company: Welspun Corp Ltd - Steel Division

Welspun City, Survey No 650,

Village: Versamedi, Taluka: Anjar,

Dist,: Kutch- 370110.

Date of Sample Collection : 18/03/2023

Source of Sample : ETP Plant

Sample Collected by : Royal Environment

Sr.No.	Parameters	Unit	Permissible Limits(*)	ETP I/L	ETP O/L
01	рН	pH Units	6.5 to 8.5	6.9	7.80
02	Temperature	.c	40	39	32
03	Color	pt.co.	100	72	30
04	Total Dissolved Solids	mg/l	2100	1390	1010
05	Suspended Solids	mg/l	100	53	20
06	Oil & Grease	mg/l	10	N.D.	N.D.
07	BOD (3 Days @ 27°C)	mg/l	30	180	18.0
80	COD	mg/l	100	278	45.0
09	Chlorides	mg/l	600	445	280
10	Sulphates	mg/l	1000	285	79
11	Phenolic Compound	mg/l	2.0	2.7	N.D.
12	Amonical Nitrogen	mg/l	50	24	7
13	Sodium Absorption Ratio	%	26	30	19.0
14	Total Chromium (As Cr)	mg/l	0.2	0.78	0.04
15	Hexavalent Chromium (As Cr ⁺⁶)	mg/l	0.1	0.05	0.06
16	Total Copper (As Cu)	mg/l	1.0	0.07	0.05
17	Total Iron (As Fe)	mg/l	1.0	0.5	0.07
18	Zinc (As Zn)	mg/l	1.0	0.07	0.05
19	Bio - assay test	Hours	90% Survical of fish after 96 hours in 100% effluent	N.A.	96%

(*) Permissible Limit as per GPCB CC&A, Limits are only applicable to ETP O/L

RAJKOT

Royal Environment Auditing & Consultancy Service

Date: 30/03/2023

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.: KILN AREA, MECH.WORKSHOP, AFBC BOILER AREA OF Welspun Corp Ltd.- Steel Divison

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

3 Particulars of sampling

		מכון למי	23								Sample	S Collected by : R	Sample Collected by : Royal Environment
Location Identified Instrument monitored Contaminate used	Identified Instrument used	Sampling Instrument used		Air	porm	Airborne Contamination	ination	TWA** concertration (As given in Second Schedule)	Refrance Method	Number of Workers exposed at the location being	Remarks	Signature person taking	Name (in block letters)
Number of sample	Numbo of sampl	Numbo of sampl	Numbe of sampl	Numbe of sampl	5 9	Range	Average	Mg/m³		monitored		samples	(4)
DRI Plant - Kiln Total Dust 2	Total Dust		2	2		1.6-1.4	1.50	10		4	ŀ		
DRI PLANT-Mech Total Dust Personal 2	Total Dust		2 Personal	2		2.0-1.8	1.90	10		2	ı	٦s	
Power Plant - Total Dust Dust sampler 2 AFBC Area Total Dust Dust sampler 2 VPDS 203	Total Dust		Respirable Dust sampler VPDS 203	2		2.5-1.7	2.10	10	Gravimetric	8	1	75	Mr. PATAT ASHISH
SMS - ET Furnace Total Dust 2	Total Dust	Total Dust	2	2		2.3-3.0	2.65	10		4	1	&	
SMS - IT Furnace Total Dust 2		Total Dust 2	2	7		1.9-1.7	1.80	10		5	ı		

** Permissible limits (TWA) are as per ACGIH Standards

Calibration Done On.: 04/03/2022

For. Royal Environment Auditing & Consultancy Service

Royal Environment Auditing & Consultancy Service