# adani

Ref: MSTL/EMD/Solar/EC/MoEFCC/291/05/23 Date- 18.05.2023

### To,

Additional Principal Chief Conservator of Forest Ministry of Environment, Forest and Climate Change Integrated Regional Office (Near Kishan Circle) Aranya Bhavan, Fourth Floor, Room No 407 Sector 10A, Gandhinagar, 382010, Gujarat

### Sub: Six Monthly Compliance Status of Environment Clearance for 31,000 MTPA Polysilicon Manufacturing plant within Notified APSEZ, Mundra, Kutch, Gujarat.

Ref: EC Letter No. SEIAA/GUJ/EC/3(a)/1277/2019 Dated- 07.09.2019

Dear Sir,

With reference to above subject, please find enclosed herewith Six Monthly Environment Clearances (EC) compliance status report along with monitoring report etc. for the period of **October'2022 to March'2023** in soft (e-mail).

### Poly-silicon manufacturing plant construction work yet to start.

This is for your kind information & record please.

Thanking You. Yours faithfully, for **Mundra Solar Technology Ltd.** 

N

(R N Shukla) Head Env & Forest

Encl: as above

Member Secretary Central Pollution Control Board Parivesh Bhavan, East Arjun Nagar Kendriya Paryavaran Bhawan New Delhi- 110032

Member Secretary Gujarat Pollution Control Board Prayavaran Bhawan, Sector- 10 A Gandhinagar- 382010 Member Secretary State Level Environment Impact Assessment (SEIAA) Gandhinagar, Gujarat

**Regional Officer Gujarat Pollution Control Board** Gandhidham, Kutch, Gujarat

#### Mundra Solar Technology Limited Adani House Tel +91 79 2555 7022

Nr Mithakhali Six Roads env.power@adani.com Navrangpura www.adani.com Ahmedabad 380 009 Gujarat, India CIN: U40101GJ2015PLC083552

Registered Office: Adani House, Nr Mithakhali Six Roads, Navrangpura, Ahmedabad 380 009, Gujarat, India

### SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE (EC)

for

31,000 MTPA Poly-Silicon Manufacturing Plant

At Within Notified APSEZ, MUNDRA TALUKA, KUTCHH DISTRICT GUJARAT

Submitted to:

Integrated Regional Office Ministry of Environment & Forests & Climate Change State Level Environment Impact Assessment Authority Central Pollution Control Board, New Delhi & Gujarat State Pollution Control Board, Gandhinagar

# adani

Submitted By:

Environment Management Department **Mundra Solar Technology Limited** Adani Corporate House, Shantigram, S G Highway Ahmedabad, Gujarat

Period: October'2022 – March'2023

### **CONTENTS**

SI. No.	Title	Annexure					
1.	Compliance Status report on Environmental Clearance (EC)						
	Environmental Monitoring Reports:						
	(October'2022 – March'2023)						
2.	Ambient Air Quality Monitoring	I					
	Ground Water Quality						
	Noise Level Monitoring						
3.	Name Change and Transfer of EC from "Mundra Solar Ltd." to " <b>Mundra Solar Technology Ltd</b> ."	II					
	<u> </u>						

### Compliance status on Environmental Clearance ("Poly Silicon" manufacturing plant within Notified APSEZ, Mundra, Kutch)

EC Letter No. SEIAA/GUJ/EC/3(a)/1277/2019 Dated- 07.09.2019 and EC Transferred from Mundra Solar Ltd. to Mundra Solar Technology Ltd. on dated 10.11.2022.

SI.	CONDITIONS	COMPLIANCE STATUS
NO.	CONDITIONS	COMPLIANCE STATOS
Α.	CONDITIONS:	
A 1.	SPECIFIC CONDITIONS	
1.	All efforts shall be made to optimize water	Noted & Compliance assured.
	consumption by exploring Best Available	MSTL will make necessary efforts to optimize
	Technology (BAT). The unit shall continuously,	water consumption.
	strive to reduce, recycle and reuse the treated	
	effluent.	
2.	Unit shall have to adhere to the prevailing area	Compliance assured once project takes off.
	specific policies of GPCB with respect to the	
	discharge of pollutants, and shall carry out the	
	project development in accordance &	
	consistence with the same,	
3.		Compliance assured.
	environment friendly methods for disposal of	
	incinerable & land fillable wastes before sending	
	to CHWIF/TSDF sites.	for disposal of waste.
4.	Flame proof electric fitting shall be provided	-
	within premises.	Flame proof electric fitting will be considered
-		during design stage.
5.	Safety measures for Hazardous chemical	
	handling as per PESO standards shall be provided.	-
		handling as per PESO standards once project takes off.
6.	All measures shall be taken to prevent soil and	
0.	ground water contamination.	
7.	The project proponent must strictly adhere to the	Noted 8 Acroad
7.	stipulations made by the Gujarat Pollution	
	Control Board, State Government and/or any	
	other statutory authority	Government and/or any other statutory
		authority once project takes off.
8.	The National Ambient Air Quality Emission	
	Standards issued by the Ministry vide G. S. R. No.	MSTL has been proposed to be established
	826 (E) dated 16 <sup>th</sup> November, 2009 shall be	
	complied with.	being carried out by third party (Consultant).
		Monitoring report is enclosed As <b>Annexure- I</b>
9.	National Emission Standards for Organic	
	Chemicals Manufacturing Industry issued by the	
	Ministry vide G. S. R. 608 (E) dated 21.07.2010	
	and amended from time to time shall be followed,	
A 2.	WATER:	

10		Will be seen lied as a second below off
10.	Total Water requirement for the project shall not	
	exceed 20,048 KLD, Unit shall reuse 48 KLD	
	hence fresh water requirement 20,000 KLD and	
	it shall be met through APSEZ water supply only.	
	Prior permission from the concerned authority	
	shall be obtained for withdrawal of water.	871/21 on dated 19/05/2021.
11.	The industrial effluent generation from the	Will be complied once project takes off.
10	project shall not exceed 13,000 KLD.	Assad
12.	No ground water shall be tapped for the project requirements.	Agreeo. Ground water will not be extracted.
13.	Entire effluent generated 12,300 KLD {2,400 KLD	
, כו	from Cooling water blow down (considering 100	-
	KLD as evaporation loss); 5,600 KLD of treated	
	effluent from ETP (considering 500 KLD as	
	evaporation loss) & 4,300 from filtration	
	(considering 200 KLD evaporation loss)} shall be	
	disposed in guard basin of MSTPL and shall be	
	finally discharged into Sea through outfall	
	channel of APSEZ only after conforming	
	discharge norms prescribed by GPCB/ CPCB/	
	MoEF & CC norms.	
14.		Agreed.
	capacity 7,000 KLD shall be proposed for treating	Compliance assured once project takes off.
	6,100 KLD wastewater generated from Etching	We have proposed ETP with capacity of 7000
	and for Scrubbing.	KLD.
15.	4,500 KLD effluent generated from Cleaning &	Agreed.
	Slim Rod Cutting shall be Filtered and disposed	Will be complied once project takes off.
	into Guard Basin of MSTPL and finally discharged	
	into Sea through outfall channel of APSEZ.	
16.	2,400 KLD effluent generated from cooling tower	Agreed.
	blow down shall be treated, (Neutralized in	Will be complied once project takes off.
	Neutralization Pit) and disposed into Guard Basin	
	of MSTPL and finally discharged into Sea through	
	outfall channel of APSEZ.	
17.	Overall water loses in the Poly-silicon	Noted
	Manufacturing Plant shall be 1,200 KLD i.e. (500	
	KLD evaporation loss in ETP, 150 KLD from	
	etching and scrubbing, 250 loss from cleaning	
	and cutting, 200 KLD. loss from Filtration, 100	
	KLD loss from Neutralization Pit)	
18.	Domestic wastewater generation shall not	Noted & Agreed.
	exceed 48 KL/Day and it shall be treated in	•
	proposed STP (Primary, Secondary & Tertiary) and	
	treated sewage shall be reused for Greenbelt	
	development; gardening & Plantation within	
	premises.	
19.	Unit shall provide adequate effluent treatment	Compliance assured.
	plant (ETP) sewage treatment plant (STP),	
	plane (En ) sevege deadlient plane (STP),	

	Noute	alization Pit	8 Filtrat	ion System	n for	ΛΛςτι	has n	vonosed	ostablish	a adaqu	isto
		nent of indust		•			•	•	or treating	•	
		ed regularly an					•		respectively		0110
		PCB/ CPCB/ Mo		•		0011100					
20.	Unit s	hall provide Co	ontinuous (	Online moni	toring	Compl	iance a	assured,	during	the pl	lant
	Syster	n for waste	water di	scharge an	id an	-					
	-	ement shall als			-				onitoring	-	
		monitoring		-				•	will be esta	iblish dui	ring
		, which can be me basis.	assessable	e by the GP	CB on	plant u	unit oper	ation.			
21.		nit shall provide	metering	facility at th		Compl	ianco	assured,	during	the pl	lant
۷۱,		utlet of the ET	-	-		operat		530100,	ouning	the pi	10110
		ion System an				•		ty will b	e provided	at the i	nlet
	same	,					-	-	stem and re		
						mainta	ained.				
22.	Prope	r logbooks of E	TP Operatio	on, STP oper	ation,	Agreed	d Comp	liance as	ssured, duri	ng the pl	lant
		alization pit & I				operat					
		cal consumpti				-			tained and	reports	will
	-	ities and qualit			-	be sub	mitted to	o the GP	CB.		
		outfall chai	-								
		opment, garde	-								
		mption etc. sha ned to the GPC			iali ue						
A. 3.	AIR:			e to time.							
23.		hall not exceed	l fuel consi	Imption for	stand-	hy DG s	et as me	ntioned	helow:		
		Source of	Stack	0	Jantity						
	Sr. No.	emission with	Height in		f Fuel	Iy	pe of ission		APCM		
	NO.	capacity	meter	M	T/Day						
	1.	D. G. Set	30.00	HSD 2	5 L/hr.	PM <sub>2.5</sub> ,		Adequat		Heigh	
		(125 KVA)				SO <sub>2</sub> , N			n, Filter an		:ic
								Enclosul	e is propose	20	
24.		hall provide ad	•		ie gas				• •		
	-	ation sources a					-		ce project t		
25.		hall provide ac	•	•					he propose		
		neration sourc	es as ment	loned belov			-		ce project t	akes off.	•
		r. o. Specific	Source of	Emission		height neter	Type o emissio		APCM		
			ination TCS	Production		0.0	emissi				
			S Purificati			0.0 0.0	H2, HC	l. Ve	nturi Wet-So	cubber	
			ane Waste			D.0	CL2, N	-	System		
			ctor Off-Gas			0.0			-		
26	11-1-			nuous Em	ission	Will be	complie	d once p	project take	s off.	
26.	Unit	shall provid	Je Contin	10003 LIII							
20.		oring System					has pr	oposed	to install	Continu	ous
20.		oring System				MSTL Emissi	on Monit	oring Sy	to install stem [CEM		
	Monit guidel	oring System ines	[CEMS] a	s per the	СРСВ	MSTL Emissi CPCB	on Monit guideline	oring Sy			
26.	Monit guidel	oring System ines shall provide a	[CEMS] a	s per the	СРСВ	MSTL Emissi CPCB	on Monit guideline	oring Sy			

28.	The fugitive emission in the work zone	Anreed & Compliance assured
20.	environment shall be monitored. The emission	-
	shall conform to the standards prescribed by the	fugitive emissions.
	concerned authorities from time to time (e.g.	Internal pucca Roads is already constructed to
	Directors of Industrial Safety & Health). Following	reduce the fugitive emission during vehicular
	indicative guidelines shall also be followed to	
	reduce the fugitive emission.	Air borne dust will be controlled with water
	Internal roads shall be either concreted or	sprinklers at suitable locations in the plant.
	asphalted or paved properly to reduce the	A green belt will be developed all around the
	fugitive emission during vehicular movement.	plant boundary and also along the roads to
	> Air borne dust shall be controlled with water	mitigate fugitive & transport dust emission.
	sprinklers at suitable locations in the plant.	
	> A green belt shall be developed all around the	
	plant boundary and also along the roads to	
	mitigate fugitive & transport dust emission	
29.	Regular monitoring of Volatile Organic	Compliance assured once project takes off.
	Compounds (VOCs) shall be carried out in the	
	work zone area and ambient air.	
30.	For control of fugitive emission, VOCs, following	
	steps shall be followed:	MSTL has proposed closed handling and
	a. Closed handling and charging system shall be	charging system for chemicals & reactors.
	provided for chemicals	
	b. Reflux condenser shall be provided over	
	Reactors / Vessels.	
	c. Pumps shall be provided with mechanical	
74	seals to prevent leakages.	
31.	Air borne dust at all transfers operations/ points	
	shall be controlled either by spraying water or	
	providing enclosures.	dust by taking appropriate measures during operation phase.
32.	Regular monitoring of ground level concentration	
	of PM2.5, PM10, S02, NOX, HCI, CI2, H2 & VOC	
	shall be carried out in the impact zone and its	
	records shall be maintained. Ambient air quality	
	levels shall not exceed the standards stipulated	
	by the GPCB. If at any stage these levels are found	
	to exceed the prescribed limits, necessary	
	additional control measures shall be taken	
	immediately. The location of the stations and	
	frequency of monitoring shall be decided in	
	consultation with the GPCB	
	<u> </u>	<u> </u>

A. 4.	SOLID /	HAZARDOUS V	VASTE				
33.	All the	hazardous was	te management s	shall be I	aken	Agreed.	
	care as	mentioned belo	W			Complia off.	nce assured once project takes
	Sr. No	Types of Hazardous Waste	Specific Source of generation	Category		iantity /Annum)	Management of Disposal
	1	Chemical Sludge	From process, ETP, Scrubber	35.3	13870	Ton/Year	Disposal at the approved Common TSDF site (will explore feasibility to use as Raw material & re-process)
	2	Discarded Containers	Material Storage and Handing	33.1	1200	No./Year	Will be sell to registered recycler for recycling
	3	Used oil	Machinery & D.G. Set	5.1	20	KL/Year	Will be sell to registered recycler for recycling
	4	Oil Soaked Cotton waste & residue	Washing Floor, Machinery maintenance	33.2	1500	) kg/Year	Co-incineration & reuse
	5	Graphite Parts	CVD Reactors	B2010		MT/Year	To recycler/re-user as raw material
	6	Waste Silicon	Process reactors	B1010		AT/Year	TSDF & will explore feasibility to use as Raw material & re-process
	7	Spent Activated Carbon		A4160		MT/Year	TSDF & re-process
34.	8	Filters	Purification Process shall have permiss			MT/Year	TSDF & re-user
A. 5.	Hazardo Transbo	ous and Othe oundary Movem	er Wastes (Mana ent) Rules 2016.			end-use	ill take due care that Authorized rs shall have permissions from cerned authorities.
35.	OTHER:The project proponent shall allocate the separate fund of Rs. 36.905 Cr i.e. 0.5 % of the capital investment (whichever is applicable) for activities like Educational activities, Public Health and family welfare and Preservation of Environment, rain water harvesting under Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's Office Memorandum No. F.No.22-65/2017-IA.1II dated 01/05/2018. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.MSTL has proposed separate fund o 36.905 Cr i.e. 0.5 % of the ca investment (whichever is applicable acivities like Educational activities Public Health and family welfare Preservation of Environment, rain water harvesting under Corporate Environment Responsibility (CER) accordance to the MoEFCC Of Memorandum No. F.No.22-65/2017-I dated 01/05/2018.				Cr i.e. 0.5 % of the capital ent (whichever is applicable) for es like Educational activities, Health and family welfare and ation of Environment, rain water ing under Corporate ment Responsibility (CER) in ence to the MoEFCC Office andum No. F.No.22-65/2017-IA.1II		
36.	propose Wolche propone before	mental protect ed in the EIA re m India Limito ent and commit	ion measures an port of the project and submitte ments made during osed in the EIA r	id safeg t prepar d by pr g present	ed by oject ation	Agreed	& Compliance assured

В.	GENERAL CONDITIONS	
B. 1	CONSTRUCTION PHASE	
37.	Water demand during construction shall be reduced by	Noted.
	use of curing agents, super plasticizers and other best	
	construction practices.	off.
38.	Project proponent shall ensure that surrounding	Noted.
	environment shall not be affected due to construction	Will be complied once project takes off.
	activity. Construction materials shall be covered during	MSTL will take appropriate measure to
	transportation and regular water sprinkling shall be	control fugitive emissions.
	done in vulnerable areas for controlling fugitive	
39.	emission.	Noted.
59.	All required sanitary and hygienic measures shall be	Will be complied once project takes off.
	provided before starting the construction activities and to be maintained throughout the construction phase.	will be complied once project takes on.
40.	First Aid Box shall be made readily available in adequate	EMC premises already has well-
40.	quantity at all the times.	established First Aid center
41.	The project proponent shall strictly comply with the	
- 11	Building and other Construction Workers' (Regulation of	Will be complied once project takes off
	Employment & Conditions of Service) Act 1996 and	
	Gujarat rules made there under and their subsequent	
	amendments. Local byelaws of concern authority shall	
	be complied in letter and spirit.	
42.	Ambient noise levels shall conform to residential	Noted & will be complied.
	standards both during day and night. Incremental	Regular Noise monitoring report
	pollution load on the ambient air and noise quality shall	showing noise level below prescribed
	be closely monitored during construction phase.	standards is enclosed as <b>Annexure- I.</b>
43.	Use of Diesel Generator (DG) sets during construction	Will be complied once project takes off
	phase shall be strictly equipped with acoustic enclosure	
	and shall conform to the EPA Rules for air and noise	
	emission standards.	Nakad
44.	Safe disposal of waste water and municipal solid wastes	
	generated during the construction phase shall be ensured.	
45.	All topsoil excavated during construction activity shall	water and municipal solid wastes. Noted & Compliance assured
49.	be used in horticultural/landscape development within	
	the project site.	
46.		Noted
	construction phase shall be utilized within the premises	The proposed project area is almost flat.
	to the maximum extent possible and balance quantity	However, MSTL is ensured to utilize
	of excavated earth shall be disposed off with the	excavated earth in filling & surface
	approval of the competent authority after taking the	_
	necessary precautions for general safety and health	
	aspects. Disposal of the excavated earth during	
	construction phase shall not create adverse effect	
	neighboring communities	

47.	Project proponent shall ensure use of eco-friendly	Noted.
47.	building material including fly ash bricks, fly ash paver	Compliance assured once project takes
		off.
	blocks, Ready Mix Concrete [RMC] and lead free paints	
	in the project.	MSTL has considered use of Fly Ash
		based bricks for its construction
		purpose.
48.	Fly ash shall be used in construction wherever	Noted and will be followed.
	applicable as per provisions of Fly Ash Notification	
	under the E.P. Act, 1986 and its subsequent	
	amendments from time to time.	
B. 2	OPERATION PHASE	
B. 2.1	WATER	
49.	The water meter shall be installed and records of daily	Noted.
	and monthly water consumption shall be maintained.	Compliance assured once project takes
		off
50.	All efforts shall be made to optimize water consumption	Noted.
	by exploring Best Available Technology (BAT). The unit	MSTL will make necessary efforts to
	shall continuously strive to reduce, recycle and reuse	optimize water consumption.
	the treated effluent.	
B. 2.2:	AIR	
51.	In case of use of spray dryer, the unit shall provide the	MSTL has proposed to install adequate
	adequate & efficient APCMs with the spray dryer so that	APCM system and will carry out third
	there should not be any adverse impact on human	party monitoring of APCM and report will
	health & environment. Unit shall carry out third party	be sent to GPCB periodically.
	monitoring of the proposed Spray dryer & it's APCM	
	through the credible institutes and study report for	
	impacts on Environment and Human Health shall be	
	submitted to GPCB every year along with half yearly	
	compliance report.	
52.	Acoustic Enclosures should be provided DG sets (If	MSTL has proposed to provide Acoustic
52.	applicable) to mitigate the noise pollution and shall	
	conform to the EPA Rules for air emission standards.	-
		noise pollution.
53.	Stack/Vents (Whichever is applicable) of adequate	Compliance assured.
رر.		MSTL has considered adequate height
	height shall be provided as per the prevailing norms for	
	flue gas emission/Process gas emission.	of vents for process emissions.
54.	Flue gas emission & process gas emission (If any) shall	Noted and will be complied office
94.		
	conform to the standards prescribed by the	proposed project gets operational.
	GPCB/CPCB/MoEF&CC. At no time, emission level	
	should go beyond the stipulated standards.	
55.	All the reactors / vessels used in the manufacturing	Noted & Agreed,
	process shall be closed to reduce the fugitive emission.	
B .2.3	HAZARDOUS / SOLID WASTE	
56.	The company shall strictly comply with the rules and	Agreed and will be complied once
	regulations with regards to handling and disposal of	project takes off.
	Hazardous waste in accordance with the Hazardous and	
	Other Wastes (Management and Transboundary	

	Movement) Rules 2016, as may be amended from time	
	to time. Authorization of the GPCB shall be obtained for	
	collection / treatment / storage / disposal of hazardous wastes.	storage / disposal of hazardous wastes.
57.	Hazardous wastes shall be dried, packed and stored in	Noted.
	separate designated hazardous waste storage facility	Hazardous Waste Storage Shed will be
	with pucca bottom and leachate collection facility,	made to store waste in separate
	before its disposal.	designated place.
58.	The unit shall obtain necessary permission from the	
50.	nearby TSDF site and CHWIF. (Whichever is applicable)	project takes off.,
59.	Trucks/Tankers used for transportation of hazardous	
221	waste shall be in accordance with the provisions under	
	the Motor Vehicle Act, 1988, and rules made there	
	under	
60.	The design of the Trucks/tankers shall be such that	Noted
001	there is no spillage during transportation	
61.	All possible efforts shall be made for Co-Processing of	MSTL will make efforts to reuse/reutilize
•••	the Hazardous waste prior to disposal into TSDF/CHWIF.	
62.	Management of fly ash (If any) shall be as per the Fly	
02.	ash Notification 2009 & its amendment time to time	
	and it shall be ensured that there is 100% utilization of	
	fly ash to be generated from the unit.	
B. 2.4	SAFETY	
63.	The occupier/manager shall strictly comply the	Noted & Anreed
02.	provisions under the Factories Act 1948 and the Gujarat	
	Factories Rules 1963.	
64.	The project authorities shall strictly comply with the	Compliance assured once project takes
04.	provisions made in Manufacture. Storage and Import of	
		off
		off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended	off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for	off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary	off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and	off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before	off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-	off.
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off- site Disaster Management Plans have to be prepared	off.
65	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off- site Disaster Management Plans have to be prepared and implemented.	
65.	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off- site Disaster Management Plans have to be prepared and implemented. Main entry and exit shall be separate and clearly marked	
	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off- site Disaster Management Plans have to be prepared and implemented. Main entry and exit shall be separate and clearly marked in the facility	Noted.
65. 66.	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the</li> </ul>	Noted.
	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/</li> </ul>	Noted.
66.	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises</li> </ul>	Noted. Noted & Agreed.
	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises</li> <li>Storage of flammable chemicals shall be sufficiently</li> </ul>	Noted. Noted & Agreed. Noted and Agreed.
66. 67.	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises</li> <li>Storage of flammable chemicals shall be sufficiently away from the production area.</li> </ul>	Noted. Noted & Agreed. Noted and Agreed. Will be complied once project takes off.
66.	Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off- site Disaster Management Plans have to be prepared and implemented. Main entry and exit shall be separate and clearly marked in the facility Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises Storage of flammable chemicals shall be sufficiently away from the production area. Sufficient number of fire extinguishers shall be provided	Noted. Noted & Agreed. Noted and Agreed. Will be complied once project takes off. Noted and Agreed.
66. 67. 68.	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises</li> <li>Storage of flammable chemicals shall be sufficiently away from the production area.</li> <li>Sufficient number of fire extinguishers shall be provided near the plant and storage area</li> </ul>	Noted. Noted & Agreed. Noted and Agreed. Will be complied once project takes off. Noted and Agreed. Will be complied once project takes off.
66. 67.	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises</li> <li>Storage of flammable chemicals shall be sufficiently away from the production area.</li> <li>Sufficient number of fire extinguishers shall be provided near the plant and storage area</li> <li>All necessary precautionary measures shall be taken to</li> </ul>	Noted. Noted & Agreed. Noted and Agreed. Will be complied once project takes off. Noted and Agreed.
66. 67. 68.	<ul> <li>Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Offsite Disaster Management Plans have to be prepared and implemented.</li> <li>Main entry and exit shall be separate and clearly marked in the facility</li> <li>Sufficient peripheral open passage shall be kept in the margin area for free movement office tender/ emergency vehicle around the premises</li> <li>Storage of flammable chemicals shall be sufficiently away from the production area.</li> <li>Sufficient number of fire extinguishers shall be provided near the plant and storage area</li> </ul>	Noted. Noted & Agreed. Noted and Agreed. Will be complied once project takes off. Noted and Agreed. Will be complied once project takes off.

		Y
70.	All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this	
	regard shall be obtained before commencing the expansion activities.	
71.	The project management shall ensure to comply with all	Noted & agreed
	the environment protection measures, risk mitigation	
	measures and safeguards mentioned in the Risk	
	Assessment report.	
72.	Only flame proof electrical fittings shall be provided in	Agreed
	the plant premises	Flame proof electric fitting will be
		considered during designing stage.
73.	Storage of hazardous chemicals shall be minimized and	Noted and Agreed.
	it shall be in multiple small capacity tanks / containers	
	instead of one single large capacity tank / containers.	
74.	All the storage tanks shall be fitted with appropriate	Noted & Agreed
	controls to avoid any leakages. Bund/dyke walls shall be	Ū.
	provided for storage tanks for Hazardous chemicals	
75.	Handling and charging of the chemicals shall be done in	Noted.
	closed manner by pumping or by vacuum transfer so	MSTL has proposed closed type handling
	that minimal human exposure occurs.	and charging system for chemicals &
		reactors.
76.	Tie up shall be done with nearby health care unit /	Noted & Agreed
70.	doctor for seeking immediate medical attention in the	Noted & Agreed
	case of emergency.	
77		Natad Q Assad
77.	Personal Protective Equipments (PPEs) shall be	-
	provided to workers and its usage shall be ensured and	
70	supervised.	safety of manpower.
78.	First Aid Box and required antidotes for the chemicals	Noted
	used in the unit shall be made readily available in	
	adequate quantity.	
79.	Training shall be imparted to all the workers on safety	Agreed. Compliance assured once
	and health aspects of chemicals handling	project takes off.
80.	Occupational health surveillance of the workers shall be	J
	done and its records shall be maintained. Pre-	Compliance assured once project takes
	employment and periodical medical examination for all	off.
	the workers shall be undertaken as per the Factories Act	
	୫ Rules.	
81.	Transportation of hazardous chemicals shall be done as	Agreed.
	per the provisions of the Motor Vehicle Act & Rules.	
82.	The company shall implement all preventive and	Agreed
	mitigation measures suggested in the Risk Assessment	-
	Report.	mitigation measures as mentioned in
		Risk Plan.
83.	Necessary permissions from various statutory	
	authorities like PESO, Factory Inspectorate and others	
	shall be obtained prior to commissioning of the project.	

B. 2.5	NOISE:	
84.	The overall noise level in and around the plant area shall	Noted and will be complied during
	be kept well within the standards by providing noise	operation phase.
	control measures including Engineering controls like	Regular Noise monitoring reports
	acoustic insulation hoods, silencers, enclosures, etc. on	showing noise quality below prescribed
	all sources of noise generation. The ambient noise level	standard are attached as Annexure I.
	shall confirm to the standards prescribed under The	
	Environment (Protection) Act, 1986 & Rules.	
B. 2.6	CLEANER PRODUCTION AND WASTE MINIMISATION:	
85.	The unit shall undertake the Cleaner Production	Noted.
	Assessment study through a reputed institute /	Compliance assured once project takes
	organization and shall form a CP team in the company.	off.
	The recommendations thereof along with the	
	compliance shall be furnished to the GPCB.	
86.	The company shall undertake various waste	Noted & will be considered during
	minimization measures such as :	operation phase.
	a. Metering and control of quantities of active	
	ingredients to minimize waste.	
	b. Reuse of by-products from the process as raw	
	materials or as raw materials substitutes.	
	c. Use of automated and close filling to minimize	
	spillages	
	d. Use of close feed system into batch reactors	
	e. Venting equipment through vapour recovery system	
	f. Use of high pressure hoses for cleaning to reduce	
	wastewater generation	
	g. Recycling of washes to subsequent batches	
	h. Recycling of steam condensate	
	i. Sweeping 1 mopping of floor instead of floor	
	washing to avoid effluent generation	
	j. Regular preventive maintenance for avoiding	
	leakage, spillage etc.	
B. 2.7	GREEN BELT AND OTHER PLANTATION:	
87.	The unit shall develop green belt within premises as per	Compliance assured once project takes
	the CPCB guidelines. However, if the adequate land is	off.
	not available within the premises, the unit shall take up	
	adequate plantation on road sides and suitable open	
	areas in GIDC estate or any other open areas in	
	consultation with the GIDC / GPCB and submit an action	
	plan of plantation for next three years to the GPCB.	
88.	Drip irrigation / low-volume, low-angle sprinkler system	Compliance assured once project takes
	shall be used for the green belt development within the	off.
	premises	
B. 3	OTHER CONDITION:	
89.	Unit shall comply all the applicable standard conditions	Noted and will be complied once project
	prescribed in Office Memorandum (OM) published by	takes off.
	MoEF&CC vide no. F. No. 22-34/2018-IA.III dated	
	09/08/2018.	

90.	The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MOEFCC as part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.	fund for CER purpose and will be implemented during plant construction & operation. Noted & Agreed
91.	Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as recharge ground water. Before recharging the surface runoff, pre-treatment must be done to remove suspended matter.	Compliance assured once project takes
92.	The unit shall join and participate financially and technically for any common environment facility / infrastructure as and when the same is taken up either by the industrial Association or GIDC or any such authority created for this purpose by the Govt. / GIDC	Noted & Agreed
93.	Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.	MSTL will explore the feasibility of using
94.	The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.	Noted and Agreed.
95.	All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.	
96.	The project proponent 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 for the environmental protection and management	Noted and Agreed.
97.	In the event of failure 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.	Noted and Agreed.
98.	The project authorities must strict adhered to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory Authority.	_

99.	During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.	Noted and Agreed.
100.	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	off.
101.	Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.	Noted and Agreed.
102.	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	Noted and Agreed.
103.	The above conditions will be enforced, inter-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 Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	
104.	The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.	-
105.	The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	
106.	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Noted and Agreed.
107.	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAAI SEAC/GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied. MSTL has published the advertisement in one English language newspaper "The INDIAN EXPRESS, Ahmedabad" (Page 3) and one local language Gujarati newspaper "KUTCH MITRA, Bhuj" (Page 5) dated 18 <sup>th</sup> September 2019. Clippings of newspaper advertisement already submitted in compliance report of October'2019 – March'2020
108.	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the	Noted Being Complied.

# **ENVIRONMENTAL MONITORING REPORT**

Period: October - 2022

FOR



### M/s. MUNDRA SOLAR PV LIMITED



**At** Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta Vapi-396 195, Gujarat, India Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.

White House

# **1.0 AMBIENT AIR QUALITY MONITORING REPORT**



Period: October - 2022

FOR



### **M/s.MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization **GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline. Chemical Test		ting	Name Of Group	Atmospheric Pollution	
Test Report No.:	URAL/22/10/	/MSPVL/A-001	Report Issue Date	27/10/2022	
Service Request form No.:	UERL/AIR/SR	F/10/A-001	Service Request Date	11/10/2022	
Sample ID No.:	UERL/AIR/SR	F/10/A-001	Field Data Sheet No.	UERL/AIR/FDS/A-22/10/001	
Name & Add. of Customer	Village Vandh	a Solar PV Limited n & Tunda, Taluka M ch 370 435, Gujarat.	,		
Dates of Sampling:	11/10/2022		Date of Testing	13/10/2022	
Location of Sampling / Monitoring:		Near Canteen Area.			
Sampling Method		IS:5182(Part-14) and IS:5182 (Part-5)			
Details of Master Instrument Used for Monitoring					

Instrument ld No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
UERL/AIR/RDS/25	Respirable Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/04/2022	01/04/2023		
UERL/AIR/FPS/51	Fine Particulate Sampler	137-DTD-2013	02/04/2022	01/04/2023		
> General Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	24
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.26
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1814.4
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.04

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	76	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	24	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	13.6	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	16.7	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.3



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

mental ISO 9001:2015

ISO 45001:2018 Certified Company

#### TEST REPORT (AMBIENT AIR MONITORING)

			(AMBIEN	NT AIR MONITORIN	G)	
Disci	pline.		Chemical Testing		Name Of Group	Atmospheric Pollution
Test	Report No.:		URAL/22/10/MS	PVL/A-002	Report Issue Date	27/10/2022
Servi	ce Request form N	o.:	UERL/AIR/SRF/10	)/A-002	Service Request Date	11/10/2022
Samp	nple ID No.: UERL/AIR/SRF/10			)/A-002	Field Data Sheet No.	UERL/AIR/FDS/A-22/10/00
M/s. Mundra Sola			M/s. Mundra Sol	ar PV Limited		
Nam	e & Add. of Custom	er	Village Vandh & T	Tunda, Taluka Mundra	а,	
			Mundra, Kutch 37	70 435, Gujarat. India		
Date	s of Sampling:		11/10/2022		Date of Testing	13/10/2022
Locat	ion of Sampling / N	/Ionitorin	g:	Near ETP Guard Bas	sin (MSTPL)	
Samp	oling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)	
2	Details of Mast	er Instru	ment Used for Mo	nitoring	1	1
Ins	trument Id No.	Inst	rument Name	Serial Number	Cali. Date	Next Cali. Date
UE	RL/AIR/RDS/27	Respira	ble Dust Sampler	1751-DTA-2013, 1142-DTA-2013		
U	ERL/AIR/FPS/42	Fine Pa	rticulate Sampler	125-DTD-2013	02/04/2022	01/04/2023
)	General Sampli	ing / Mo	nitoring Observatio	on as per CPCB Guide	line	$\approx$
Sr. No.	D	escriptic	n Environm	Unit of measurement	Observation	
1.	Monitoring Durat	ion	LIMIOIIII	H and Noscaron	23.50	
2.	Flow Rate of PM <sub>1</sub>	0		m³/min	1.28	
3.	Volume of Air Sar	npled for	• PM <sub>10</sub>	m <sup>3</sup>	1804.8	
4.	Volume of Air Sar	npled for	PM <sub>2.5</sub>	m <sup>3</sup>	23.54	
2	<u>Test Parameter</u>	r Results		·	·	
Sr. No.	Test Parame	ter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter	r PM <sub>10</sub>	μg/m³	72	100	IS 5182 (Part-23)
2.	Particulate Matter	r PM <sub>2.5</sub>	μg/m³	21	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as	s SO2	μg/m³	15.4	80	IS 5182 (Part-22)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

17.6

80

µg/m³

**Checked By:** 

Nitrogen Dioxide as NO<sub>2</sub>

Nikunj D. Patel (Chemist)

Authorized By:

IS 5182 (Part-6)

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.4

4.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization **GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline. Chemical Te		esting	Name Of Group	Atmospheric Pollution
Test Report No.:	URAL/22/1	0/MSPVL/A-003	Report Issue Date	27/10/2022
Service Request form No.:	UERL/AIR/S	RF/10/A-003	Service Request Date	11/10/2022
Sample ID No.:	UERL/AIR/S	RF/10/A-003	Field Data Sheet No.	UERL/AIR/FDS/A-22/10/003
Name & Add. of Customer	Village Vand	ra Solar PV Limited dh & Tunda, Taluka M Itch 370 435, Gujarat.	-	
Dates of Sampling:	11/10/2022	2	Date of Testing	13/10/2022
Location of Sampling / Monitoring:		Near Occupational Health Center.		
Sampling Method		IS:5182(Part-14) and IS:5182 (Part-5)		

### **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
UERL/AIR/RDS/22	Respirable Dust Sampler	1745-DTB-2013 1151-DTB-2013	02/04/2022	01/04/2023		
UERL/AIR/FPS/22	Fine Particulate Sampler	129-DTB-2013	02/04/2022	01/04/2023		
> General Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H H	24.10
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.26
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1821.9
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.14

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	68	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	18	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	14.2	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	20.6	80	IS 5182 (Part-6)

### \*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.5



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

e-11) ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

			(AIVID		ino)		
Discip	oline.		Chemical Te	sting	Name Of Group	Atmospheric Pollution	
Test I	Report No.:		URAL/22/10	/MSPVL/A-004	Report Issue Date	27/10/2022	
Servi	ce Request form	No.:	UERL/AIR/SR	F/10/A-004	Service Request Date	12/10/2022	
Sample ID No.: UERL/AIR/SR			UERL/AIR/SR	F/10/A-004	Field Data Sheet No.	UERL/AIR/FDS/A-22/10/004	
			M/s. Mundra	Solar PV Limited			
			Village Vandh	& Tunda, Taluka Mundr	a,		
			Mundra, Kutcl	Mundra, Kutch 370 435, Gujarat. India.			
Dates	of Sampling:		12/10/2022		Date of Testing	13/10/2022	
Locat	ion of Sampling	/ Monitoring	:	Near Village Vandh		-	
Samp	ling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)		
>	Details of Ma	aster Instrun	nent Used for N	Ionitoring			
Inst	rument Id No.	Instrum	nent Name	Serial Number	Cali. Date	Next Cali. Date	
UER	RL/AIR/RDS/27 Respirable Dust Sampler		Dust Sampler	1751-DTA-2013 1142-DTA-2013	02/04/2022	01/04/2023	
UEF	RL/AIR/FPS/42	Fine Partic	ulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
>	General Sam	pling / Moni	toring Observa	tion as per CPCB Gui	deline	$\sim$	
Sr. No.		Description		Unit of measurement	C	Observation	
1.	Monitoring Du	ration	Enviror	ment and Researc	n Lads Pvi. Lid. 🗺	23.55	
2.	Flow Rate of PM <sub>10</sub>		m³/min		1.30		
3.	Volume of Air Sampled for PM <sub>10</sub>		m <sup>3</sup>	1836.9			
4.	Volume of Air Sampled for PM <sub>2.5</sub>			m <sup>3</sup>	23.59		
	Test Parame	ter Results					
Sr. No.	Test Para	meter	Unit	Result	Specific Value (As per NAAQMS)	Test Method	
4				83	100	IC E182 (Davt 22)	

No.	Test Parameter	Unit	Result	(As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	82	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	26	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	17.2	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	19.4	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

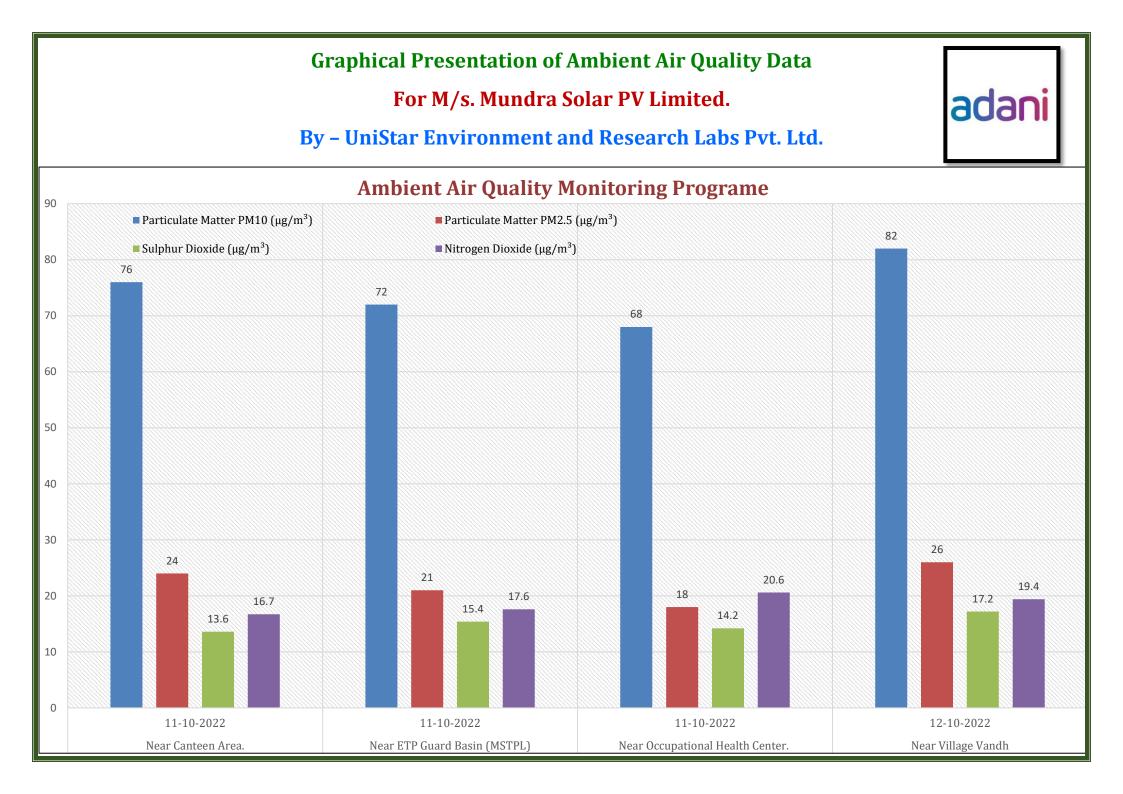
Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.6



# **3.0 NOISE LEVEL MONITORING REPORT**



Period: October - 2022

FOR



### **M/s. MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.

**Monitoring Organization** 



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House,



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company**  ISO 45001:2018

NOISE LEVEL MONITORING REPORT

**Certified Company** 

Test Report No.:	UERL/22/10/ MSPVL/N-001	Date Of Report:	20/07/2022
Name & Add. Of Industries	M/s. Mundra Solar PV Limited.		·
	Village Vandh & Tunda, Taluka Mundra,		
	Mundra, Kutch 370 435, Gujarat. India.		

Details of Instrument Used for Monitoring.  $\triangleright$ 

Instrument Id No.	Instrument Name	Model Number	Cali. Date	Next Cali. Date
UERL/AIR/SLM/Q630838	Sound Level Meter	SL 4023 SD	03/02/2022	02/02/2023
Sampling Method.	CPCB Guideline			

Date of Monitoring : 12/10/2022

### Result

Sr.	Location within company premises	Noise Le	vel dB(A)	Permissible Limit CPCB		
No.	Location within company premises	Day Time	Night Time	Day Time	Night Time	
1.	North: Near Canteen area	61.2	58.6	<75 dB(A)	<70 dB(A)	
2.	South: Near 66 KVA Sub Station	64.1	52.4	<75 dB(A)	<70 dB(A)	
3.	East: Near COE Building	63.2	57.1	<75 dB(A)	<70 dB(A)	
4.	West: Near ETP Guard basin	61.7	51.8	<75 dB(A)	<70 dB(A)	

### Note: Ambient Air Quality Standards in respected of Noise as per CPCB.

	Colores of America 17 and	Limit in dB (A) Leq			
Area Code	Category of Area/Zone	Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)		
(A)	Industrial area	75	70		
(B)	Commercial area	65	55		
(C)	Residential area	55	45		
(D)	Silence Zone	50	40		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

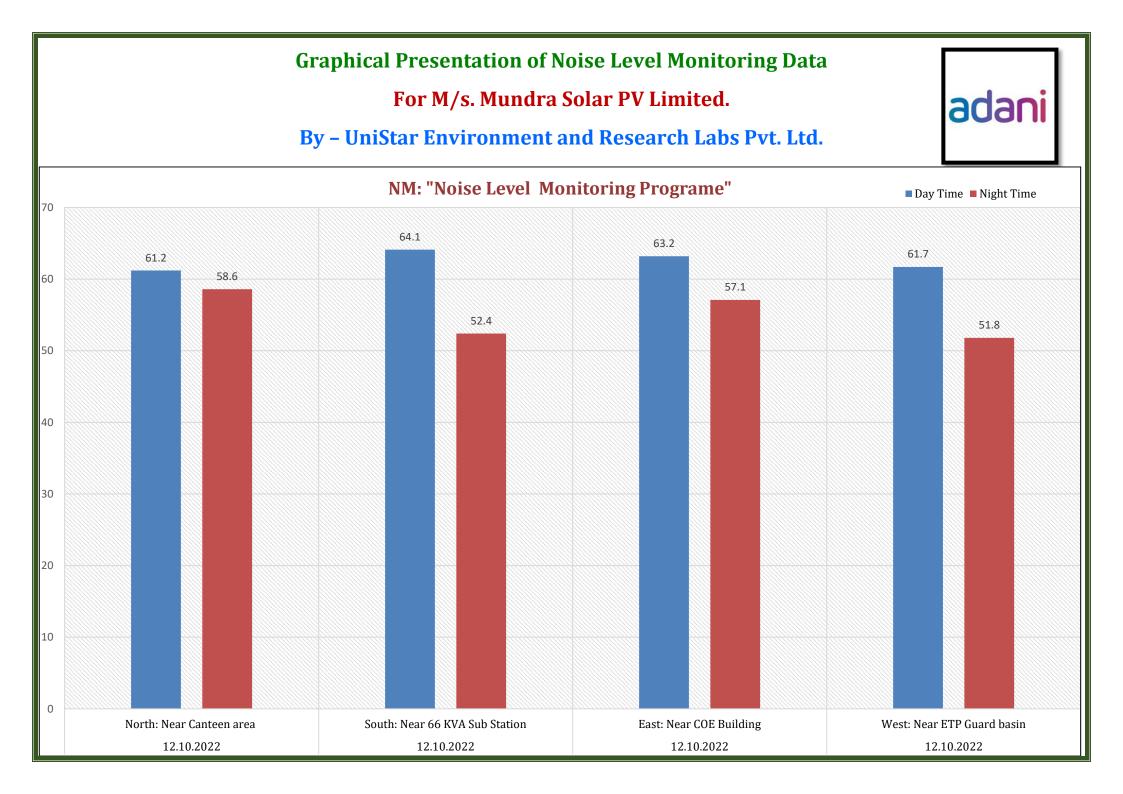
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 23



# **ENVIRONMENTAL MONITORING REPORT**

Period: November - 2022

### FOR



### M/s. Mundra Solar Energy Limited



**At** Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

Email : response@uerl.in Website : www.uerl.

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta Vapi-396 195, Gujarat, India Phone : +91 260 2433966 / 2425610

White House

# **1.0 AMBIENT AIR QUALITY MONITORING REPORT**



Period: November - 2022

FOR



### M/s. Mundra Solar Energy Limited

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

Email : response@uerl.in Website : www.uerl.in

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

White House.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization **GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.	Chemical Tes	ting	Name Of Group	Atmospheric Pollution	
Test Report No.:	URAL/22/11/	/MSEL/A-001	Report Issue Date	25/11/2022	
Service Request form No.:	UERL/AIR/SR	F/11/A-001	Service Request Date	15/11/2022	
Sample ID No.:	UERL/AIR/ID/	′11/A-001	Field Data Sheet No.	UERL/AIR/FDS/A-22/11/001	
Name & Add. of Customer	<b>M/s. Mundra Solar Energy Limited</b> Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.				
Dates of Sampling:	15/11/2022		Date of Testing	16/11/2022	
Location of Sampling / Monitorin	ng:	Near Canteen Are	a.		
Sampling Method IS:5182(Part-14) and IS:5182 (Part-5)					
Details of Master Instru	> Details of Master Instrument Used for Monitoring				

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date			
UERL/AIR/RDS/25	Respirable Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/04/2022	01/04/2023			
UERL/AIR/FPS/51	Fine Particulate Sampler	137-DTD-2013	02/04/2022	01/04/2023			
> General Sampling / Monitoring Observation as per CPCB Guideline							

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	23.55
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.28
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1808.64
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m <sup>3</sup>	23.59

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	74	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	22	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	16.4	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	19.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.3



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ental ISO 9001:2015 -11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

				0)		
Discipline.		Chemical Testing		Name Of Group	Atmospheric Pollution	
Test Report No.:		URAL/22/11/MS	EL/A-002	Report Issue Date 25/11/2022		
Service Request form No	o.:	UERL/AIR/SRF/11	/A-002	Service Request Date 15/11/2022		
Sample ID No.:		UERL/AIR/ID/11/	JERL/AIR/ID/11/A-002 Field Data Sheet No. UERL/AIR/FI			
M/s. Mundra Solar Energy Limited						
Name & Add. of Custom	er	Village Vandh & T	<sup>-</sup> unda, Taluka Mundra	а,		
		Mundra, Kutch 37	70 435, Gujarat. India			
Dates of Sampling:		15/11/2022		Date of Testing	16/11/2022	
Location of Sampling / N	Ionitorin	g:	Near ETP Guard Bas	sin (MSTPL)	·	
Sampling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)		
Details of Mast	er Instru	ment Used for Mo	nitoring			
Instrument Id No.	Inst	rument Name	Serial Number	Cali. Date Next Cali. Date		
UERL/AIR/RDS/27	Respira	ble Dust Sampler	1751-DTA-2013, 1142-DTA-2013	02/04/2022 01/04/2023		
UERL/AIR/FPS/42	Fine Pa	rticulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
General Sampli	ng / Mor	nitoring Observatio	on as per CPCB Guide	line	$\approx$	
Sr. No.	escriptio	n Environm	Unit of measurement	O	oservation	
1. Monitoring Durat	ion	LIMIONI	H and Hosearon		24	
2. Flow Rate of PM <sub>10</sub>	D		m³/min		1.28	
3. Volume of Air San	npled for	• PM <sub>10</sub>	m <sup>3</sup>		1843.2	
4. Volume of Air San	olume of Air Sampled for PM <sub>2.5</sub>		m <sup>3</sup>		24.04	
Test Parameter	Results			·		
Sr. Test Paramet	ter	Unit	Result	Specific Value (As per NAAQMS)	Test Method	
1. Particulate Matter	• PM <sub>10</sub>	μg/m³	71	100	IS 5182 (Part-23)	
2. Particulate Matter	• PM <sub>2.5</sub>	μg/m³	24	60	IS 5182 (Part-24)	
3. Sulphur Dioxide as	S SO2	μg/m³	16.7	80	IS 5182 (Part-22)	

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

18.4

µg/m³

80

**Checked By:** 

Nitrogen Dioxide as NO<sub>2</sub>

4.

Nikunj D. Patel (Chemist)

Authorized By:

IS 5182 (Part-6)

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.4



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

**GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.	Chemical Te	esting	Name Of Group	Atmospheric Pollution
Test Report No.:	URAL/22/1	1/MSEL/A-003	Report Issue Date	25/11/2022
Service Request form No.:	UERL/AIR/S	RF/11/A-003	Service Request Date	15/11/2022
Sample ID No.:	UERL/AIR/II	D/11/A-003	Field Data Sheet No.	UERL/AIR/FDS/A-22/11/003
Name & Add. of Customer	M/s. Mundra Solar Energy Limited Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.			
Dates of Sampling:	15/11/2022	2	Date of Testing	16/11/2022
Location of Sampling / Monitoring	Location of Sampling / Monitoring: Near Occupational Health Center.			
Sampling Method IS:5182(Part-14) and IS:5182 (Part-5)				

#### $\triangleright$ **Details of Master Instrument Used for Monitoring**

Instrument ld No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
UERL/AIR/RDS/22	Respirable Dust Sampler	1745-DTB-2013 1151-DTB-2013	02/04/2022	01/04/2023		
UERL/AIR/FPS/22	Fine Particulate Sampler	129-DTB-2013	02/04/2022	01/04/2023		
Seneral Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	23.55
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.30
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1836.9
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	23.59

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	68	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	22	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	15.4	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	18.2	80	IS 5182 (Part-6)

### \*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.5



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

e - 11) ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

Discip	Discipline. Chemical Tes			sting	Name Of Group	Atmospheric Pollution	
Test Report No.: URAL/22/11,			URAL/22/11	/MSEL/A-004	Report Issue Date	25/11/2022	
Service Request form No.: UERL/AIR/SR			UERL/AIR/SR	F/11/A-004	Service Request Date	16/11/2022	
Samp	le ID No.:		UERL/AIR/ID	/11/A-004	Field Data Sheet No.	UERL/AIR/FDS/A-22/11/004	
			M/s. Mundra	Solar Energy Limited	·		
			Village Vandh	& Tunda, Taluka Mundı	ra,		
		_	Mundra, Kutcl	Mundra, Kutch 370 435, Gujarat. India.			
Dates	of Sampling:		16/11/2022		Date of Testing	17/11/2022	
Locat	ion of Sampling ,	/ Monitoring	:	Near Village Vandh	I		
Samp	ling Method			IS:5182(Part-14) and IS:5182 (Part-5)			
2	Details of Ma	aster Instrum	nent Used for N	Ionitoring			
Instrument Id No. Instrument Name		Serial Number	Cali. Date	Next Cali. Date			
UERL/AIR/RDS/27 Respirable Dust Sampler		Dust Sampler	1751-DTA-2013 1142-DTA-2013	02/04/2022	01/04/2023		
UEF	RL/AIR/FPS/42	Fine Partic	ulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
2	General Sam	pling / Moni	toring Observa	tion as per CPCB Gui	deline	$\sim$	
Sr. No.	Description		Unit of measurement	Observation			
1.	Monitoring Du	ration	Environ	ment and Researc	1 Laos PVI. LIO. 24		
2.	Flow Rate of PM <sub>10</sub>		m³/min	1.29			
3.	Volume of Air Sampled for PM <sub>10</sub>		m <sup>3</sup>	1857.6			
4.	Volume of Air Sampled for PM <sub>2.5</sub>		m <sup>3</sup>	24.04			
5	> Test Parame	ter Results		•	•		
Sr. No.	Test Parameter Unit		Unit	Result	Specific Value (As per NAAQMS)	Test Method	

No.	Test Parameter	Unit	Result	(As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	μg/m³	88	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	26	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	15.2	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	24.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

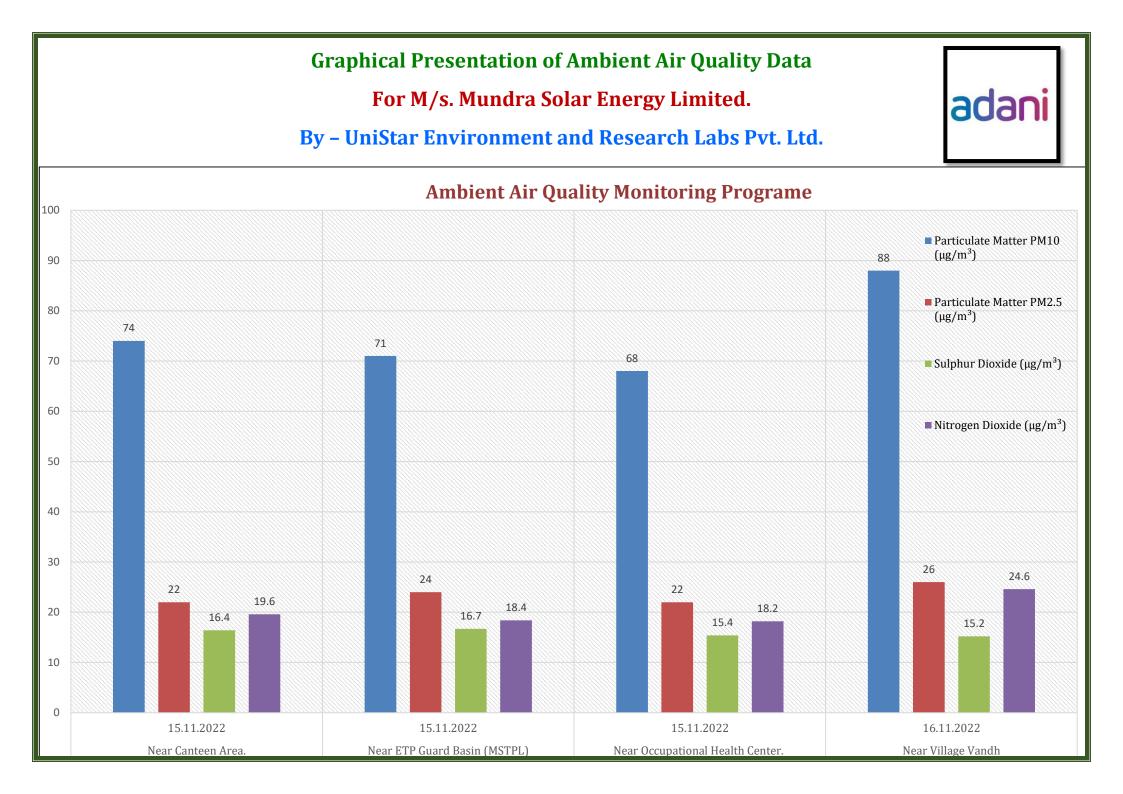
Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.6



# **3.0 NOISE LEVEL MONITORING REPORT**



Period: November - 2022

FOR



### M/s. Mundra Solar Energy Limited

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.

**Monitoring Organization** 



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House,



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company**  ISO 45001:2018

**Certified Company** 

### NOISE LEVEL MONITORING REPORT

Test Report No.:	UERL/22/11/ MSPVL/N-001	Date Of Report:	25/11/2022	
Name & Add. Of Industries	M/s. Mundra Solar Energy Limited.			
	Village Vandh &Tunda, Taluka Mundra,			
	Mundra, Kutch 370 435, Gujarat. India.			

#### **Details of Instrument Used for Monitoring.** $\triangleright$

Instrument Id No.	Instrument Name	Model Number	Cali. Date	Next Cali. Date
UERL/AIR/SLM/Q630838	Sound Level Meter	SL 4023 SD	03/02/2022	02/02/2023
Sampling Method.	CPCB Guideline			

Date of Monitoring : 15/11/2022

### Result

Sr. No.	Location within company premises	Noise Le	vel dB(A)	Permissible Limit CPCB	
		Day Time	Night Time	Day Time	Night Time
1.	North: Near Canteen area	69.4	52.6	<75 dB(A)	<70 dB(A)
2.	South: Near 66 KVA Sub Station	66.2	56.3	<75 dB(A)	<70 dB(A)
3.	East: Near COE Building	64.7	51.4	<b></b> <75 dB(A)	<70 dB(A)
4.	West: Near ETP Guard basin	62.8	53.7	<75 dB(A)	<70 dB(A)

### Note: Ambient Air Quality Standards in respected of Noise as per CPCB.

	Category of Area/Zone	Limit in dB (A) Leq			
Area Code		Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)		
(A)	Industrial area	75	70		
(B)	Commercial area	65	55		
(C)	Residential area	55	45		
(D)	Silence Zone	50	40		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

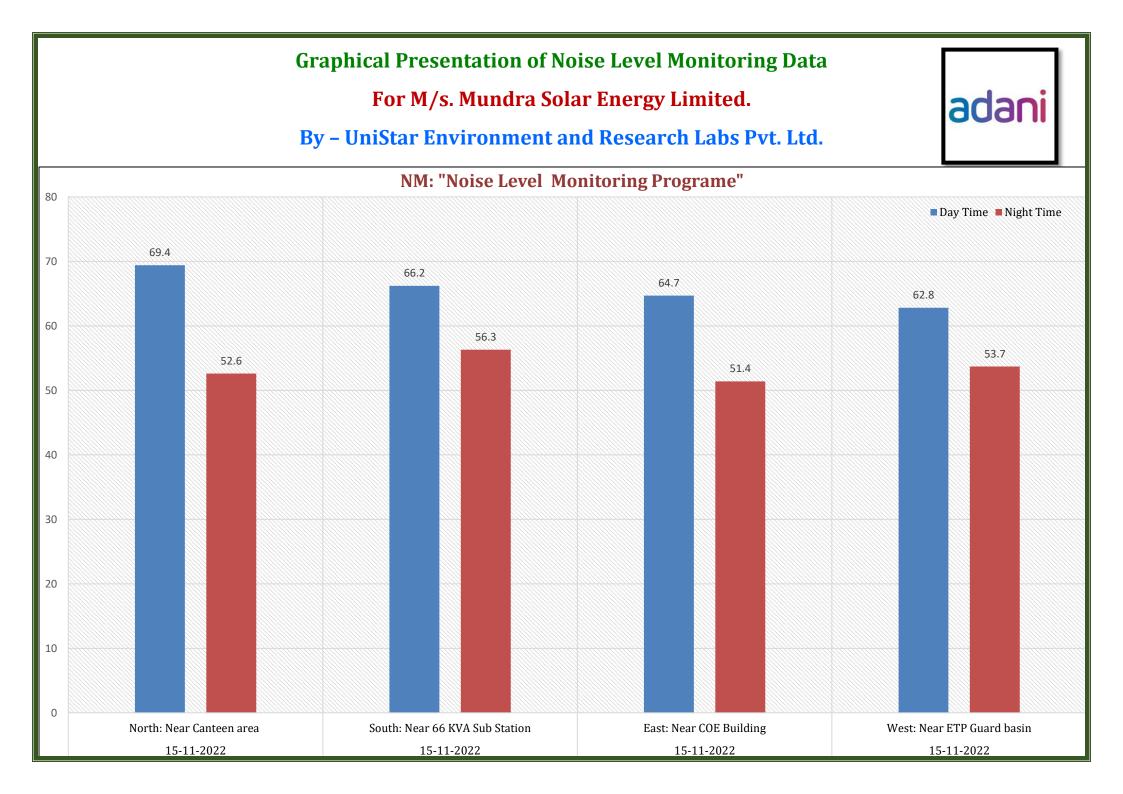
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 20



# **ENVIRONMENTAL MONITORING REPORT**

Period: December - 2022

### FOR



### M/s. MUNDRA SOLAR PV LIMITED



**At** Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta Vapi-396 195, Gujarat, India Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.

White House

# **1.0 AMBIENT AIR QUALITY MONITORING REPORT**



Period: December - 2022

FOR



## **M/s.MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization **GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.	Chemical Tes	ting	Name Of Group	Atmospheric Pollution		
Test Report No.:	URAL/22/12/	MSPVL/A-001	Report Issue Date	26/12/2022		
Service Request form No.:	UERL/AIR/SRI	F/12/A-001	Service Request Date	14/12/2022		
Sample ID No.:	UERL/AIR/ID/	12/A-001	Field Data Sheet No.	UERL/AIR/FDS/A-22/12/001		
Name & Add. of Customer	<b>M/s. Mundra Solar PV Limited</b> Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.					
Dates of Sampling:	14/12/2022		Date of Testing	15/12/2022		
Location of Sampling / Monitoring	g:	Near Canteen Area.				
Sampling Method		IS:5182(Part-14) and IS:5182 (Part-5)				
Details of Master Instrument Used for Monitoring						

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date				
UERL/AIR/RDS/25	Respirable Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/04/2022	01/04/2023				
UERL/AIR/FPS/51	Fine Particulate Sampler	137-DTD-2013	02/04/2022	01/04/2023				
> General Sampling / Monitoring Observation as per CPCB Guideline								

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Description Unit of measurement C	
1.	Monitoring Duration	H	24
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.33
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1915.2
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.04

**Test Parameter Results** 

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	81	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	26	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	14.2	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	18.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

Page No.3

Note: This report is subject to terms and conditions mentioned overleaf

UERL/AIR/F-05/05



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ental ISO 9001:2015 -11) Certified Company

ISO 45001:2018 Certified Company

#### TEST REPORT (AMBIENT AIR MONITORING)

			(AIVIBIEI	NT AIR MONITORIN	G)		
Disci	pline.		Chemical Testing		Name Of Group	Atmospheric Pollution	
Test	Report No.: URAL/2		URAL/22/12/MS	PVL/A-002	Report Issue Date 26/12/2022		
Servi	ce Request form No	ce Request form No.: UEI		/A-002	Service Request Date	14/12/2022	
Samp	ole ID No.:		UERL/AIR/ID/12/	A-002	Field Data Sheet No.	UERL/AIR/FDS/A-22/12/002	
			M/s. Mundra Sol	ar PV Limited			
Nam	e & Add. of Custom	er	Village Vandh & T	unda, Taluka Mundra	Э,		
			Mundra, Kutch 37	70 435, Gujarat. India			
Date	s of Sampling:		14/12/2022		Date of Testing	15/12/2022	
Locat	ion of Sampling / N	Ionitorin	g:	Near ETP Guard Bas	sin (MSTPL)		
Samp	oling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)		
)	Details of Mast	er Instru	ment Used for Mo	nitoring	_	-	
Ins	trument Id No.	Inst	rument Name	Serial Number	Cali. Date	Next Cali. Date	
UE	JERL/AIR/RDS/27 Respirable Dust Sampler			1751-DTA-2013, 1142-DTA-2013	02/04/2022	01/04/2023	
UE	ERL/AIR/FPS/42	Fine Pa	irticulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
)	General Sampli	ng / Moi	nitoring Observatio	on as per CPCB Guide	line	$\approx$	
Sr. No.	D	escriptio	n Environm	Unit of measurement	Observation		
1.	Monitoring Durat	ion	LIVIOIIII			24.05	
2.	Flow Rate of PM <sub>10</sub>	0		m³/min		1.30	
3.	Volume of Air San	npled for	<sup>•</sup> PM <sub>10</sub>	m <sup>3</sup>	1875.9		
4.	4. Volume of Air Sampled for PM <sub>2.5</sub>			m³	24.09		
)	Test Parameter	Results					
Sr. No.	Test Paramet	ter	Unit	Result	Specific Value (As per NAAQMS) Test Method		
1.	Particulate Matter	• PM <sub>10</sub>	μg/m³	82	100	IS 5182 (Part-23)	
2.	Particulate Matter	PM2.5	μg/m³	24	60	IS 5182 (Part-24)	
3.	Sulphur Dioxide as	SO2	μg/m³	13.4	80	IS 5182 (Part-22)	
			1	1			

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

21.6

µg/m³

80

**Checked By:** 

Nitrogen Dioxide as NO<sub>2</sub>

Nikunj D. Patel (Chemist)

Authorized By:

IS 5182 (Part-6)

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.4

4.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

**GPCB** Recognized Environmental Auditor (Schedule-II)

02/04/2022

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.	Chemical Te	esting	Name Of Group	Atmospheric Pollution	
Test Report No.:	URAL/22/1	2/MSPVL/A-003	Report Issue Date	26/12/2022	
Service Request form No.:	UERL/AIR/S	RF/12/A-003	Service Request Date	14/12/2022	
Sample ID No.:	UERL/AIR/II	D/12/A-003	Field Data Sheet No.	UERL/AIR/FDS/A-22/12/003	
Name & Add. of Customer	M/s. Mundra Solar PV Limited Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.				
Dates of Sampling:	14/12/2022	2	Date of Testing	15/12/2022	
Location of Sampling / Monitoring:		Near Occupational Health Center.			
Sampling Method		IS:5182(Part-14) and IS:5182 (Part-5)			

#### **Details of Master Instrument Used for Monitoring** Instrument Id No. Serial Number Cali. Date Next Cali. Date **Instrument Name** 1745-DTB-2013 UERL/AIR/RDS/22 **Respirable Dust Sampler** 02/04/2022 01/04/2023 1151-DTB-2013 UERL/AIR/FPS/22 129-DTB-2013

#### General Sampling / Monitoring Observation as per CPCB Guideline ⊳

Fine Particulate Sampler

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	23.45
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.32
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1857.2
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m <sup>3</sup>	23.49

### **Test Parameter Results**

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	71	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	22	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	16.3	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	22.4	80	IS 5182 (Part-6)

### \*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

01/04/2023

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.5



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ental ISO 9001:2015 e-11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

Discip	oline.	line. Chemical Tes			Name Of Group	Atmospheric Pollution	
Test F	Report No.:	No.:		/MSPVL/A-004	Report Issue Date	26/12/2022	
Servio	ce Request form	No.:	UERL/AIR/SF	RF/12/A-004	Service Request Date	15/12/2022	
Samp	le ID No.:		UERL/AIR/ID	/12/A-004	Field Data Sheet No.	UERL/AIR/FDS/A-22/12/004	
			M/s. Mundra	Solar PV Limited	·		
Name	e & Add. of Custo	omer	Village Vandh	& Tunda, Taluka Mundi	ra,		
		_	Mundra, Kutc	h 370 435, Gujarat. Indi	a.		
Dates	of Sampling:		15/12/2022		Date of Testing	16/12/2022	
Locat	ion of Sampling	/ Monitoring	:	Near Village Vandh	I		
Samp	ling Method			IS:5182(Part-14) an	IS:5182(Part-14) and IS:5182 (Part-5)		
>	Details of Ma	aster Instrun	nent Used for N	Aonitoring			
Inst	rument Id No.	Instrun	nent Name	Serial Number	Cali. Date	Next Cali. Date	
UER	L/AIR/RDS/27	Respirable	Dust Sampler	1751-DTA-2013 1142-DTA-2013	02/04/2022	01/04/2023	
UER	RL/AIR/FPS/42	Fine Partic	ulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
X	General Sam	pling / Moni	itoring Observa	tion as per CPCB Gui	deline		
Sr. No.		Description		Unit of measurement	Observation		
1.	Monitoring Du	ration	Enviror	ment and Keseard	n lads PVI. Ltd. 🗺	23.55	
2.	Flow Rate of Pl	M <sub>10</sub>		m³/min		1.30	
3.	Volume of Air Sampled for PM <sub>10</sub>			m <sup>3</sup>	1836.9		
4.	4. Volume of Air Sampled for PM <sub>2.5</sub>			m <sup>3</sup>	23.59		
	Test Parame	ter Results					
Sr. No.	Test Para	meter	Unit	Result	Specific Value (As per NAAQMS)	Test Method	
1	Particulate Mat	tor DM <sub>40</sub>	ug/m <sup>3</sup>	88	100	IS 5182 (Part-23)	

No.	Test Parameter	Unit	Result	(As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	μg/m³	88	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	32	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	18.4	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	22.3	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

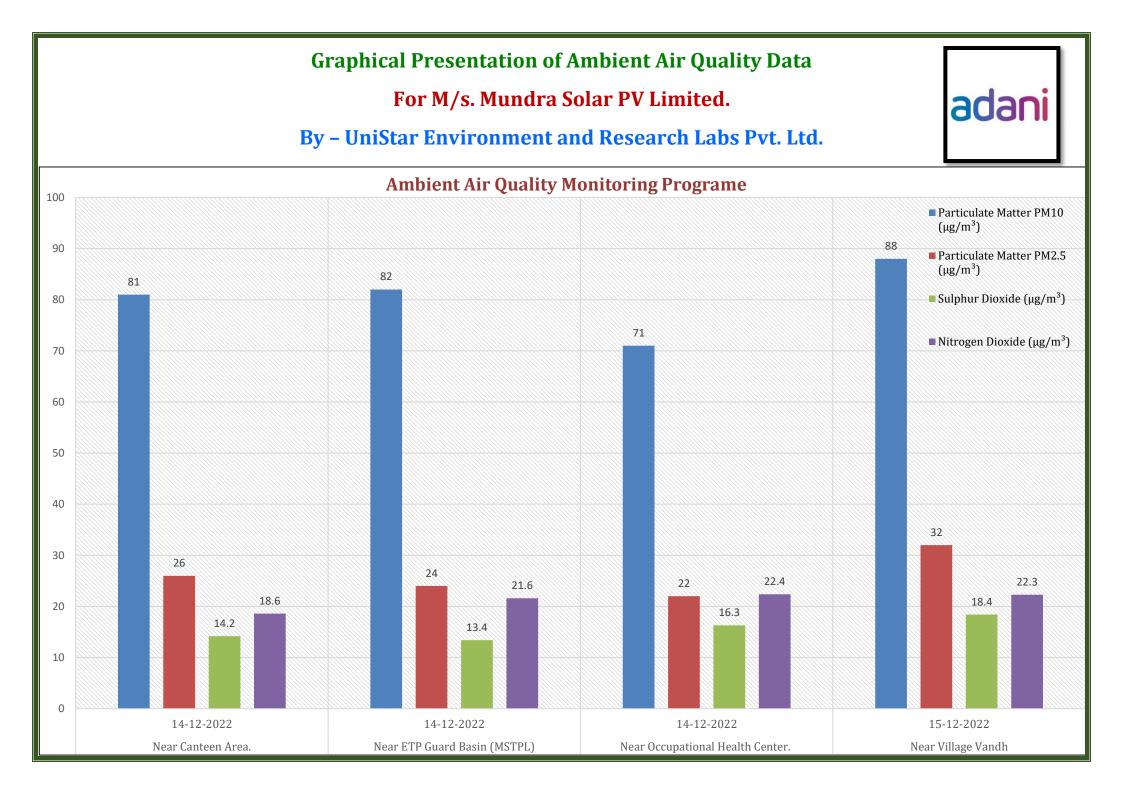
Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.6



# 2.0 WATER QUALITY MONITORING REPORT



Period: December - 2022

FOR



## **M/s. MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization  $\begin{array}{l} {\sf GPCB} \ {\sf Recognized} \ {\sf Environmental} \\ {\sf A} \ {\sf u} \ {\sf d} \ {\sf itor} \ (\ {\sf S} \ {\sf c} \ {\sf h} \ {\sf e} \ {\sf d} \ {\sf u} \ {\sf l} \ {\sf e} \ {\sf -II}) \end{array}$ 

ntal ISO 9001:2015 (11) Certified Company ISO 45001:2018 Certified Company

White House,

2015 ISO 45001:

Email : response@uerl.in Website : www.uerl.in

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

d Environmental ISO 9001:2015 : h e d u l e - II) Certified Company

ISO 45001:2018 Certified Company

			TEST REPORT			
Report N	lo.	URC /	22/12/006			
-		<b>Mundra Solar PV Limited</b> e Vandh&Tunda, Taluka Mundra,	Date of Report	26/12/20	22	
Name &	Address of Customer	-	lra, Kutch 370 435, Gujarat. India.	Customer's Ref.	57003131	66
Sample I	Details	Drink	ing Water Sample	Location	Near ETP	
Sample	Qty.	5 Lit.		Appearance	Colourles	5
Sampling	g Date	14/12	2/2022	Sample Received D	ate 15/12/20	22
Test Star	rted Date	15/12	2/2022	Test Completion Da	ate <b>20/12/20</b>	22
Sampled	ΙВγ	Party		Sampling Method		
UERL La		22/12	2/006			
TEST RES						
Sr.	INE: Chemical Testing		NAME OF GROUP: Water	As Per IS		
No.	Parameters		Test Method	10500:2012 Desirable Limit	Unit of Measurement	Results
			PHYSIO-CHEMICAL PARAME	TERS		
1.	Colour		IS 3025(Part 4)1983	5 Max	Pt. Co. Scale	<5
2.	Odour		IS 3025(Part 5)1983	Agreeable		Agreeable
3.	pH @ 25 ° C		IS 3025(Part 11)1983	6.5 - 8.5		6.98
4.	Turbidity		IS 3025(Part 10)1984	1 Max	NTU	BDL(MDL:0.1)
5.	Total Dissolved Solids		(APHA 23 <sup>rd</sup> Ed.,2017,2540- C),	500 Max	mg/L	66
			GENERAL CHEMICAL PARAME	TERS		
6.	Calcium as Ca		(APHA 23 <sup>rd</sup> Ed.,2017,3500 Ca.B)	75 Max	mg/L	2.6
7.	Chloride as Cl <sup>-</sup>		(APHA 23 <sup>rd</sup> Ed.,2017,4500-Cl)	250 Max	mg/L	11.2
8.	Fluoride as F		(APHA 23 <sup>rd</sup> Ed.,2017, 4500 F, D)	1.0 Max	mg/L	BDL(MDL:0.2)
9.	Free Residual Chlorine		APHA 23 <sup>rd</sup> Ed.,2017, 4500-Cl-G	0.2 Min.	mg/L	0.21
10.	Magnesium as Mg		(APHA 23 <sup>rd</sup> Ed.,2017,3500 Mg.B)	30 Max	mg/L	BDL(MDL:2.0)
11.	Nitrate as NO <sub>3</sub>		(APHA 23 <sup>rd</sup> Ed.,2017,4500 NO3-B)	45 Max	mg/L	0.4
12.	Phenolic Compound		IS 3025(Part 43)1992, Amd.2	0.001 Max	mg/L	BDL(MDL:0.001)
13.	Sulphate as SO <sub>4</sub> -2	Sulphate as SO <sub>4</sub> -2 IS 3025		200 Max	mg/L	2.1
14.	Sulphide as S <sup>-2</sup> (APHA 23 <sup>rd</sup> Ed.,2017,4		(APHA 23 <sup>rd</sup> Ed.,2017,4500 S <sup>-2</sup> F)	0.05 Max	mg/L	BDL(MDL:0.05)
15.	Total Alkalinity as CaCO	3	[IS 3025(Part 23)1986, Amd.2]	200 Max	mg/L	33.4
16.	Total Hardness as CaCC	3	[IS 3025(Part 21)2009, Amd.1]	200 Max	mg/L	16.2
17.	Ammonia		IS: 3025 (Part 34):1988 RA.2014 (By ISE Method)	0.5 Max	mg/L	BDL(MDL:0.2)
18.	Chloramines as Cl <sub>2</sub>		APHA 23 <sup>rd</sup> Ed.2017 4500-Cl, G DPD & Colorimetric Method	4.0 Max	mg/L	BDL(MDL:0.1)

Page No.14

UERL/CHM/F-02/05



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

**TEST REPORT** 

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

Report N	lo.	URC /	22/12/006				
		M/s. Mundra Solar PV Limited Village Vandh &Tunda, Taluka Mundra,		Date of Report	26/12/20	26/12/2022	
		-	lra, Kutch 370 435, Gujarat. India.	Customer's Ref.	57003131	66	
Sample D	Details	Drink	ing Water Sample	Location	Near ETP		
Sample C	Qty.	5 Lit.		Appearance	Colourles	5	
Sampling	g Date	14/12	2/2022	Sample Received D	oate 15/12/20	22	
Test Star	ted Date	15/12	2/2022	Test Completion D	ate <b>20/12/20</b>	22	
Sampled	Ву	Party		Sampling Method			
UERL Lab	DID.No.	22/12	2/006				
TEST RES							
DISCIPL	INE: Chemical Testing		NAME OF GROUP: Residues in Wa	ter			
Sr. No.	Parameters		Test Method	As Per IS 10500:2012 Desirable Limit	Unit of Measurement	Results	
			GENERAL CHEMICAL PARAM	IETERS			
19.	Copper as Cu		(APHA 23 <sup>rd</sup> Ed.,2017, 3111-B)	0.05 Max	mg/L	BDL(MDL:0.05)	
20.	Lead as Pb		(APHA 23 <sup>rd</sup> Ed.,2017,3111-B)	0.01 Max	mg/L	BDL(MDL:0.01)	
21.	Mercury as Hg		(APHA 23 <sup>rd</sup> Ed.,2017, 3112-B)	0.001 Max	mg/L	BDL(MDL:0.001)	
22.	Nickel as Ni		(APHA 23 <sup>rd</sup> Ed.,2017,3111-B)	0.02 Max	mg/L	BDL(MDL:0.02)	
23.	Total Arsenic as As		APHA 23 <sup>rd</sup> Ed.,2017,3114-C	0.01 Max	mg/L	BDL(MDL:0.01)	
24.	Total Chromium as Cr		(APHA 23 <sup>rd</sup> Ed.,2017,3111-B)	0.05 Max	mg/L	BDL(MDL:0.05)	
25.	Manganese as Mn		APHA 23 <sup>rd</sup> Ed.,2017, 3500 Mn B	0.1 Max	mg/L	BDL(MDL:0.1)	
26.	Iron (as Fe)		(APHA 23 <sup>rd</sup> Ed.,2017, 3111-B)	0.3 Max	mg/L	BDL(MDL:0.1)	
27.	Zinc as Zn		(APHA 23 <sup>rd</sup> Ed.,2017, 3111-B)	5 Max	mg/L	BDL(MDL:0.05)	
28.	Cadmium as Cd		(APHA 23 <sup>rd</sup> Ed.,2017,3111-B)	0.003 Max	mg/L	BDL(MDL:0.003)	
29.	Cyanide as CN		IS 3025(Part 27)1986	0.05 Max	mg/L	BDL(MDL:0.05)	
30.	Boron as B		IS: 3025 (Part 57) RA.2017 (Curcumin Method): 2005	0.5 Max	mg/L	BDL(MDL:0.5)	
31.	Aluminum as Al		APHA 23 <sup>rd</sup> Ed.20173500-Al,	0.03 Max	mg/L	BDL(MDL:0.03)	
32.	Silver as Ag		APHA 23rdEd.2017-3111 B- 3-20	0.1 Max	mg/L	BDL(MDL:0.1)	
Remarks:	Parameters analyzed are fou	ind to be	e in Desirable limit for potable Water, BDL= Bel	ow Detection Limit, MDL :	= Minimum Detectior	ı Limit.	

Opinion & Interpretation (If required): --

**Checked By** 

(Nilesh C. Patel) (Sr. Chemist)

Page No.15

\*\*\*\*\*\*\* End of Report \*\*\*\*

Authorized By

(Nitin B. Tandel) (Technical Manager)

UERL/CHM/F-02/05

Note: This report is subject to terms and conditions mentioned overleaf

Regd. Office : 215, Royal Arcade, Near G.I.D.C.Office, Char Rasta, Vapi-396 195, Gujarat, India. Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat. CIN:U73100GJ2007PTC051463



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

Environmental ISO 9001:2015 hedule-11) Certified Company ISO 45001:2018 Certified Company

Report I	No.	URC /	22/12/006					
No 0		M/s. Mundra Solar PV Limited		Date of Report	26/12/202	22		
Name & Address of Customer		-	e Vandh &Tunda, Taluka Mundra, Ira, Kutch 370 435, Gujarat. India.	Customer's Ref.	57003131	5700313166		
Sample	Details	Drink	ing Water Sample	Location	Near ETP			
Sample	Qty.	5 Lit.		Appearance	Colourless	5		
Samplin	ig Date	14/12	2/2022	Sample Received Da	ate <b>15/12/20</b> 2	22		
Test Sta	rted Date	15/12	2/2022	Test Completion Da	te <b>20/12/20</b> 2	22		
Sampleo	d By	Party		Sampling Method				
UERL La	b ID.No.	22/12	2/006		1			
TEST RE	SULTS:							
DISCIPI	LINE: Chemical Testing		NAME OF GROUP: Water					
Sr. No.	Parameters		Test Method	As Per IS 10500:2012 Desirable Limit	Unit of Measurement	Results		
			PHYSIO-CHEMICAL PARAME	TER				
1.	Taste		IS 3025(Part 7)1984	Agreeable		Agreeable		
			GENERAL CHEMICAL PARAMI	ETERS				
2.	Anionic Detergent as (M	BAS) IS 13428 Annex-K RA 2009		0.2 Max	mg/L	N.D.		
3. Mineral Oil		IS 3025(Part 39)1991	0.5 Max	mg/L	N.D.			
DISCIPI	LINE: Chemical Testing			NAME OF GROUP:	Residues in W	ater		
4.	Barium as Ba	AAS Method		0.7 Max	mg/L	N.D.		
5.	5. Selenium as Se		IS 3025(Part 56)2003	0.01 Max	mg/L	N.D.		
6.	Molybdenum as Mo		Molybdenum as Mo		AAS Method	0.07 Max	mg/L	N.D.

**TEST REPORT** 

Remarks: Parameters analyzed are found to be in Desirable limit for potable water., N.D. = Not Detectable,

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By** 

(Nilesh C. Patel) (Sr. Chemist)

Authorized By

(Nitin B. Tandel) (Technical Manager)

Page No.16

UERL/CHM/F-02/05



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

nmental ISO 9001:2015 (le-11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT

### (Microbiology)

Report No.	:	2/12/MSPL-006					
Name & Address of Customer		M/s. Mundra Solar PV Limited	Date Of Report	:	: 26/12/2022		
		Village Vandh&Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.	Customer's Ref.	:	5700313166		
Sample Details	:	Drinking Water Sample	Location	:	Near ETP		
Sample Qty.	:	500ml	Appearance	:	Colourless		
Sampling Date	:	14/12/2022	Sample Receipt Date	:	15/12/2022		
Test Start Date	:	15/12/2022	Test Completion Date	:	26/12/2022		
Sampled By	:	Party.	Sampling Method	:			
UERL Lab ID. No.	:	22/12/MSPL-006					

### **TEST RESULTS:**

DISCIPLINE: Biological Testing			GROUP: Water			
Sr. No.	Test Parameter	Test Method	Specified Limit as per IS:10500-2012	Unit of Measurement	Results	
1	Total Bacterial Count	APHA 23 <sup>rd</sup> Ed.2017,9215-C	100CFU/ml (Additional, ef.WHO)	CFU/ml	42	
2	Total Coliform	APHA 23 <sup>rd</sup> Ed.2017,9222-B	Absent	CFU/100 ml	Absent	
3	Fecal Coliform	APHA 23 <sup>rd</sup> Ed.2017,9222-D	Absent	CFU/100 ml	Absent	
4	E. coli	IS: 15185:2016	Absent	CFU/100 ml	Absent	

**Remarks:** The sample portion tested does/ doesn't comply as per the standard specifications.

### **Opinions and Interpretations: (if required)**

**Tested By** 

Shweta Rana Microbiologist

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Authorized By** 

Meera D. Patel Sr. Microbiologist

UERL/BIO/F-02/05

# **3.0 NOISE LEVEL MONITORING REPORT**



Period: December - 2022

FOR



## **M/s. MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.

**Monitoring Organization** 



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House,



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company**  ISO 45001:2018

**Certified Company** 

NOISE LEVEL MONITORING REPORT

Test Report No.:	UERL/22/12/ MSPVL/N-001	Date Of Report:	26/12/2022
Name & Add. Of Industries	M/s. Mundra Solar PV Limited.		
	Village Vandh &Tunda, Taluka Mundra,		
	Mundra, Kutch 370 435, Gujarat. India.		

**Details of Instrument Used for Monitoring.**  $\triangleright$ 

Instrument Id No.	Instrument Name	Model Number	Cali. Date	Next Cali. Date
UERL/AIR/SLM/Q630838	Sound Level Meter	SL 4023 SD	03/02/2022	02/02/2023
Sampling Method.	CPCB Guideline			

: 14/12/2022 Date of Monitoring

### Result

Sr. No.	Location within company premises	Noise Le	evel dB(A)	Permissible Limit CPCB	
	Location within company premises	Day Time	Night Time	Day Time	Night Time
1.	North: Near Canteen area	63.2	56.2	<75 dB(A)	<70 dB(A)
2.	South: Near 66 KVA Sub Station	65.4	55.4	<75 dB(A)	<70 dB(A)
3.	East: Near COE Building	66.2	58.1	<75 dB(A)	<70 dB(A)
4.	West: Near ETP Guard basin	62.7	52.6	<75 dB(A)	<70 dB(A)

Note: Ambient Air Quality Standards in respected of Noise as per CPCB.

		Limit in dB (A) Leq			
Area Code	Category of Area/Zone	Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)		
(A)	Industrial area	75	70		
(B)	Commercial area	65	55		
(C)	Residential area	55	45		
(D)	Silence Zone	50	40		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

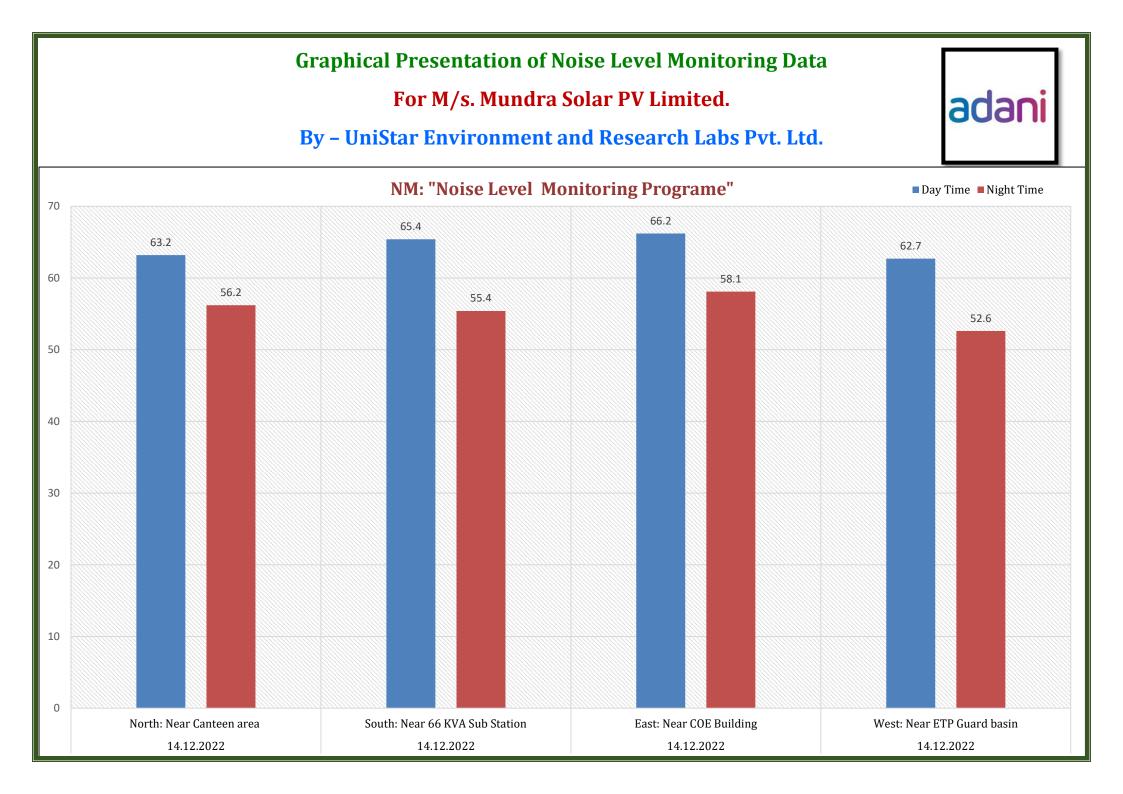
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 22



# **ENVIRONMENTAL MONITORING REPORT**

Period: January - 2023

### FOR



## M/s. Mundra Solar Energy Limited



**At** Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

Email : response@uerl.in Website : www.uerl.

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta Vapi-396 195, Gujarat, India Phone : +91 260 2433966 / 2425610

White House

# **1.0 AMBIENT AIR QUALITY MONITORING REPORT**



Period: January - 2023

### FOR



## M/s. Mundra Solar Energy Limited

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

Email : response@uerl.in Website : www.uerl.in

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

White House.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

onmental ISO 9001:2015 ule-II) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

· · · · · · · · · · · · · · · · · · ·							
Discipline.	scipline. Chemical Tes		Name Of Group	Atmospheric Pollution			
Test Report No.:	URAL/23/01/	/MSEL/A-001	Report Issue Date	16/01/2023			
Service Request form No.:	UERL/AIR/SRI	F/01/A-001	Service Request Date	09/01/2023			
Sample ID No.:	UERL/AIR/ID/	/01/A-001	Field Data Sheet No.	UERL/AIR/FDS/A-23/01/001			
Name & Add. of Customer	Village Vandh	<b>a Solar Energy Limite</b> a & Tunda, Taluka M ch 370 435, Gujarat.	undra,				
Dates of Sampling:	09/01/2023		Date of Testing	10/01/2023			
Location of Sampling / Monitorin	g:	Near Canteen Area.					
Sampling Method		IS:5182(Part-14) and IS:5182 (Part-5)					
Details of Master Instru	ment Used for	<u>Monitoring</u>					

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/25	Respirable Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/04/2022	01/04/2023
UERL/AIR/FPS/51	Fine Particulate Sampler	137-DTD-2013	02/04/2022	01/04/2023

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description Unit of measurement		Observation
1.	Monitoring Duration	H	24
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.30
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1872
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.04

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	82	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	26	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	18.6	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	21.2	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.3



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ental ISO 9001:2015 e-11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

					0)	
Disci	Discipline. Chemical Testing Name Of Group Atmospheric Po			Atmospheric Pollution		
Test	Test Report No.: URAL/23/01/MSE			EL/A-002	Report Issue Date	16/01/2023
Servi	Service Request form No.: UERL/AIR/SRF/01			/A-002	Service Request Date	09/01/2023
Samp	le ID No.:		UERL/AIR/ID/01/	A-002	Field Data Sheet No.	UERL/AIR/FDS/A-23/01/002
			M/s. Mundra Sol	ar Energy Limited		
Nam	e & Add. of Custom	er	Village Vandh & T	Tunda, Taluka Mundra	а,	
			Mundra, Kutch 37	70 435, Gujarat. India		
Date	of Sampling:		09/01/2023		Date of Testing	10/01/2023
Locat	ion of Sampling / N	Ionitorin	g:	Near ETP Guard Bas	sin (MSTPL)	
Samp	ling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)	
)	Details of Mast	er Instru	ment Used for Mo	nitoring		
Ins	trument Id No.	Inst	rument Name	Serial Number	Cali. Date	Next Cali. Date
UE	RL/AIR/RDS/27	Respira	ble Dust Sampler	1751-DTA-2013, 1142-DTA-2013	1 02/04/2022 01/04/2023	
U	RL/AIR/FPS/42	Fine Pa	rticulate Sampler	125-DTD-2013	02/04/2022	01/04/2023
)	General Sampli	ing / Mo	nitoring Observatio	on as per CPCB Guide	line	$\approx$
Sr. No.	D	escriptic	n Environm	Unit of measurement	Observation	
1.	Monitoring Durat	ion	LIMIOIIII	H and Hosearen		24
2.	Flow Rate of PM <sub>1</sub>	0		m³/min		1.29
3.	Volume of Air Sar	npled for	• PM <sub>10</sub>	m <sup>3</sup>		1857.6
4.	Volume of Air Sar	npled for	PM <sub>2.5</sub>	m <sup>3</sup>	24.04	
)	Test Parameter	Results		·	·	
Sr. No.	Test Parame	ter	Unit	Result	Specific Value (As per NAAQMS) Test Method	
1.	Particulate Matter	r <b>PM</b> 10	μg/m³	76	100	IS 5182 (Part-23)
2.	Particulate Matter	r PM <sub>2.5</sub>	μg/m³	22	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as	s SO2	μg/m³	17.2	80	IS 5182 (Part-22)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

20.8

µg/m³

80

**Checked By:** 

Nitrogen Dioxide as NO<sub>2</sub>

Nikunj D. Patel (Chemist)

Authorized By:

IS 5182 (Part-6)

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.4

4.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

**GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.	Chemical Testing		Name Of Group	Atmospheric Pollution
Test Report No.:	URAL/23/0	1/MSEL/A-003	Report Issue Date	16/01/2023
Service Request form No.:	UERL/AIR/S	RF/01/A-003	Service Request Date	09/01/2023
Sample ID No.:	UERL/AIR/II	D/01/A-003	Field Data Sheet No.	UERL/AIR/FDS/A-23/01/003
Name & Add. of Customer	<b>M/s. Mundra Solar Energy Limited</b> Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.			
Dates of Sampling:	09/01/2023	}	Date of Testing	10/01/2023
Location of Sampling / Monitoring	:	Near Occupational I	lealth Center.	
Sampling Method IS:5182(Part-14) and IS:5182 (Part-5)				

#### $\triangleright$ **Details of Master Instrument Used for Monitoring**

Instrument ld No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
UERL/AIR/RDS/22	Respirable Dust Sampler	1745-DTB-2013 1151-DTB-2013	02/04/2022	01/04/2023		
UERL/AIR/FPS/22	Fine Particulate Sampler	129-DTB-2013	02/04/2022	01/04/2023		
Seneral Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	24
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.32
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1900.8
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.04

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	66	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	21	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	18.6	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	21.4	80	IS 5182 (Part-6)

#### \*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.5



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

nental ISO 9001:2015 e-11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

Discip	oline.		Chemical Te	sting	Name Of Group	<b>Atmospheric Pollution</b>	
Test F	Report No.:		URAL/23/01	/MSEL/A-004	Report Issue Date 16/01/2023		
Servio	ce Request form	No.:	UERL/AIR/SR	F/01/A-004	Service Request Date 10/01/2023		
Samp	ole ID No.:		UERL/AIR/ID	/01/A-004	Field Data Sheet No. UERL/AIR/FDS/A-23/01/00		
M/s. Mundra Solar Energy Limited			Solar Energy Limited				
Name	e & Add. of Custo	omer	Village Vandh	& Tunda, Taluka Mundi	ra,		
			Mundra, Kutcl	n 370 435, Gujarat. Indi	a.		
Dates	s of Sampling:		10/01/2023		Date of Testing	11/01/2023	
Locat	ion of Sampling ,	/ Monitoring	:	Near Village Vandh	ndh		
Samp	ling Method		IS:5182(Part-14) and IS:5182 (Part-5)				
	Details of Ma	aster Instrum	nent Used for N	Ionitoring			
Inst	rument Id No.	Instrum	nent Name	Serial Number	Cali. Date Next Cali. Date		
UER	RL/AIR/RDS/27	Respirable	Dust Sampler	1751-DTA-2013 1142-DTA-2013	02/04/2022 01/04/2023		
UER	RL/AIR/FPS/42	Fine Partic	ulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
	General Sam	pling / Moni	itoring Observa	tion as per CPCB Gui	<u>deline</u>	$\sim$	
Sr. No.		Description		Unit of measurement	C C	Observation	
1.	Monitoring Du	ration		ment and Researc	n Lads Pvi. Lio. 🌌	24	
2.	Flow Rate of PI	<b>M</b> 10		m³/min		1.30	
3.	Volume of Air S	Sampled for F	PM <sub>10</sub>	m <sup>3</sup>		1872	
4.	Volume of Air S	Sampled for F	PM <sub>2.5</sub>	m <sup>3</sup>	24.04		
X	Test Paramet	ter Results			·		
Sr. No.	Test Para	meter	Unit	Result	Specific Value (As per NAAQMS)	Test Method	
			_				

No.	Test Parameter	Unit	Result	(As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	81	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	28	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	16.8	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	22.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

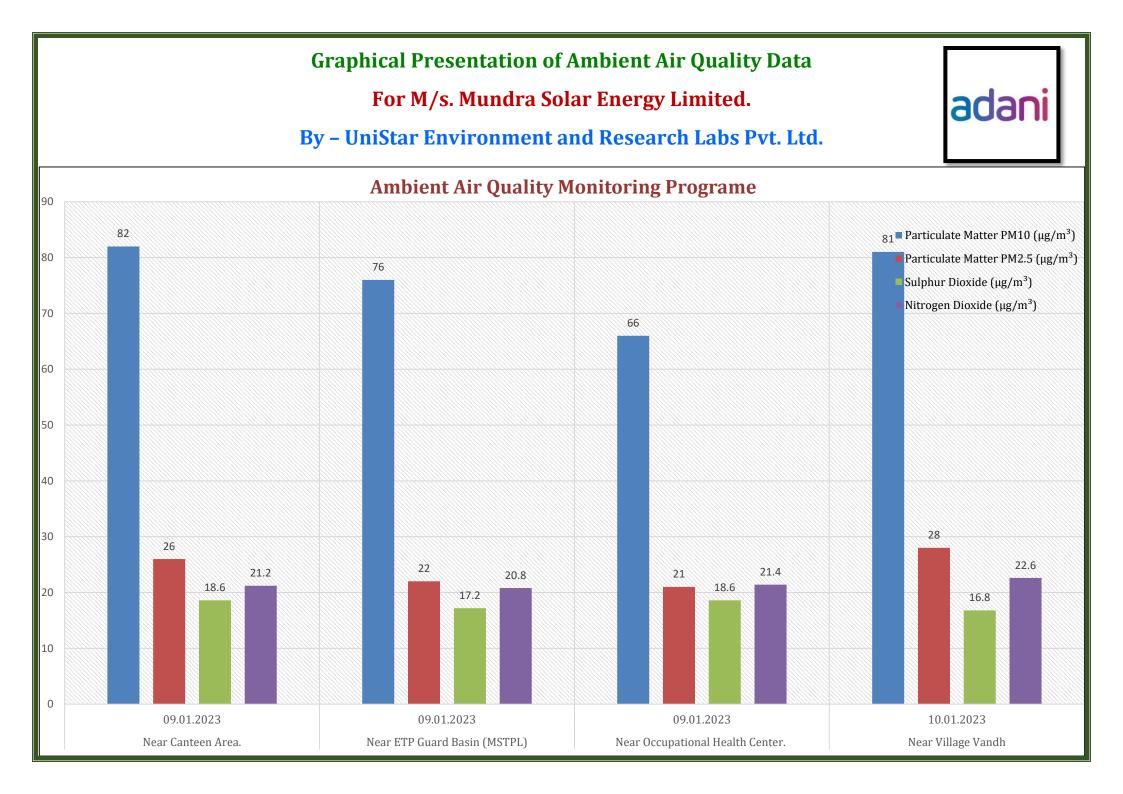
Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.6



# **3.0 NOISE LEVEL MONITORING REPORT**



Period: January - 2023

FOR



## M/s. Mundra Solar Energy Limited

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.

**Monitoring Organization** 



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House,



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company**  ISO 45001:2018

NOISE LEVEL MONITORING REPORT

**Certified Company** 

Test Report No.:	UERL/23/01/ MSPVL/N-001	Date Of Report:	16/01/2022
Name & Add. Of Industries	M/s. Mundra Solar Energy Limited.		
	Village Vandh &Tunda, Taluka Mundra,		
	Mundra, Kutch 370 435, Gujarat. India.		

**Details of Instrument Used for Monitoring.** 

Instrument Id No.	Instrument Name	Model Number	Cali. Date	Next Cali. Date
UERL/AIR/SLM/Q630838	Sound Level Meter	SL 4023 SD	03/02/2022	02/02/2023
Sampling Method.	CPCB Guideline			

: 09/01/2023 Date of Monitoring

### Result

Sr. No.	Location within company premises	Noise Le	evel dB(A)	Permissible Limit CPCB	
	Location within company premises	Day Time	Night Time	Day Time	Night Time
1.	North: Near Canteen area	68.8	48.6	<75 dB(A)	<70 dB(A)
2.	South: Near 66 KVA Sub Station	67.4	42.1	<75 dB(A)	<70 dB(A)
3.	East: Near COE Building	67.8	46.2	<b></b> <75 dB(A)	<70 dB(A)
4.	West: Near ETP Guard basin	64.2	48.7	<75 dB(A)	<70 dB(A)

### Note: Ambient Air Quality Standards in respected of Noise as per CPCB.

	Colores of Aug /7	Limit in dB (A) Leq			
Area Code	Category of Area/Zone	Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)		
(A)	Industrial area	75	70		
(B)	Commercial area	65	55		
(C)	Residential area	55	45		
(D)	Silence Zone	50	40		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

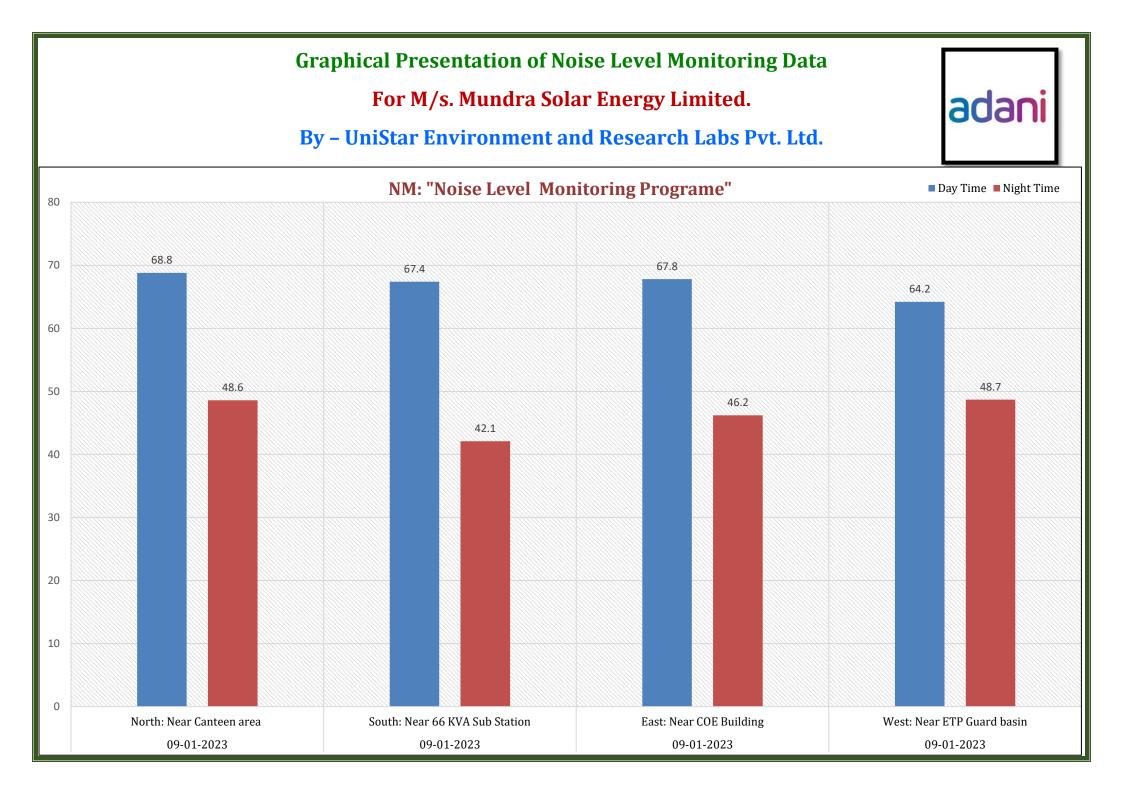
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 26



# **ENVIRONMENTAL MONITORING REPORT**

Period: February - 2023

FOR



## M/s. MUNDRA SOLAR PV LIMITED



**At** Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta Vapi-396 195, Gujarat, India Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.

White House

# **1.0 AMBIENT AIR QUALITY MONITORING REPORT**



Period: February - 2023

FOR



## **M/s.MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization **GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.	Chemical Testing		Name Of Group	Atmospheric Pollution
Test Report No.:	URAL/23/02/	MSPVL/A-001	Report Issue Date	16/02/2023
Service Request form No.:	UERL/AIR/SRI	-/02/A-001	Service Request Date	07/02/2023
Sample ID No.:	UERL/AIR/ID/	02/A-001	Field Data Sheet No.	UERL/AIR/FDS/A-23/02/001
Name & Add. of Customer	M/s. Mundra Solar PV Limited Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.			
Dates of Sampling:	07/02/2023		Date of Testing	09/02/2023
Location of Sampling / Monitoring	Near Canteen Area	ear Canteen Area.		
Sampling Method IS:5182(Part			nd IS:5182 (Part-5)	
Details of Master Instru	ment Used for I	Monitorin <u>g</u>		

Instrument ld No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
UERL/AIR/RDS/25	Respirable Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/04/2022	01/04/2023		
UERL/AIR/FPS/51	Fine Particulate Sampler	137-DTD-2013	02/04/2022	01/04/2023		
> General Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	24
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.28
3.	Volume of Air Sampled for $PM_{10}$	m³	1843.20
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.04

**Test Parameter Results** 

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	84	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	32	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	13.4	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	19.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.3



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

mental ISO 9001:2015 e-11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

			(AIVIBIEI)		G)	
Disci	pline.		Chemical Testing		Name Of Group	Atmospheric Pollution
Test	Report No.:		URAL/23/02/MS	PVL/A-002	Report Issue Date	16/02/2023
Servi	ce Request form N	0.:	UERL/AIR/SRF/02	/A-002	Service Request Date	07/02/2023
Sample ID No.: UERL/AIR/ID/02/			UERL/AIR/ID/02/	A-002	Field Data Sheet No.	UERL/AIR/FDS/A-23/02/002
			M/s. Mundra Sol	ar PV Limited		·
			Village Vandh & T	Tunda, Taluka Mundra	а,	
			Mundra, Kutch 37	70 435, Gujarat. India		
Date	s of Sampling:		07/02/2023		Date of Testing	09/02/2023
Locat	ion of Sampling / N	/Ionitorin	g:	Near ETP Guard Bas	sin (MSTPL)	
Samp	ling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)	
)	Details of Mast	er Instru	ment Used for Mo	nitoring		
Ins	trument Id No.	Inst	rument Name	Serial Number	Cali. Date	Next Cali. Date
UE	RL/AIR/RDS/27	Respira	ble Dust Sampler	1751-DTA-2013, 1142-DTA-2013	02/04/2022 01/04/2023	
UE	ERL/AIR/FPS/42	Fine Pa	rticulate Sampler	125-DTD-2013	02/04/2022	01/04/2023
)	General Sampli	ing / Moi	nitoring Observatio	on as per CPCB Guide	line	$\approx$
Sr. No.	C	escriptio	n Environm	Unit of measurement	Observation	
1.	Monitoring Durat	ion	LIMIOIIII	H and Noboaron		24.05
2.	Flow Rate of PM <sub>1</sub>	0		m³/min		1.33
3.	Volume of Air Sar	mpled for	• PM <sub>10</sub>	m <sup>3</sup>		1919.19
4.	Volume of Air Sar	npled for	PM <sub>2.5</sub>	m <sup>3</sup>	24.09	
)	Test Parameter	r Results		·	·	
Sr. No.	Test Parame	ter	Unit	Result	Specific Value (As per NAAQMS) Test Method	
1.	Particulate Matte	r PM <sub>10</sub>	μg/m³	86	100	IS 5182 (Part-23)
2.	Particulate Matte	r PM <sub>2.5</sub>	μg/m³	33	60	IS 5182 (Part-24)
3.	Sulphur Dioxide a	s SO2	μg/m³	14.6	80	IS 5182 (Part-22)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

22.3

µg/m³

80

**Checked By:** 

Nitrogen Dioxide as NO<sub>2</sub>

Nikunj D. Patel (Chemist)

Authorized By:

IS 5182 (Part-6)

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.4

4.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

**GPCB** Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company** 

ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline. Chemical Te		esting	Name Of Group	<b>Atmospheric Pollution</b>	
Test Report No.:	URAL/23/0	2/MSPVL/A-003	Report Issue Date	16/02/2023	
Service Request form No.:	UERL/AIR/S	RF/02/A-003	Service Request Date	07/02/2023	
Sample ID No.:	UERL/AIR/II	D/02/A-003	Field Data Sheet No.	UERL/AIR/FDS/A-23/02/003	
Name & Add. of Customer	M/s. Mundra Solar PV LimitedName & Add. of CustomerVillage Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.				
Dates of Sampling:	07/02/2023	3	Date of Testing	09/02/2023	
Location of Sampling / Monitoring:		Near Occupational Health Center.			
Sampling Method		IS:5182(Part-14) and IS:5182 (Part-5)			

#### **Details of Master Instrument Used for Monitoring** $\triangleright$

Instrument ld No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
UERL/AIR/RDS/22	Respirable Dust Sampler	1745-DTB-2013 1151-DTB-2013	02/04/2022	01/04/2023		
UERL/AIR/FPS/22	Fine Particulate Sampler	129-DTB-2013	02/04/2022	01/04/2023		
> General Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	23.40
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.28
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1797.12
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	23.40

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	76	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	21	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	17.4	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	20.1	80	IS 5182 (Part-6)

### \*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.5



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023) QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ental ISO 9001:2015 (-11) Certified Company

ISO 45001:2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

Discip	oline.		Chemical Te	sting	Name Of Group	Atmospheric Pollution		
Test F	Report No.:		URAL/23/02	/MSPVL/A-004	Report Issue Date	Report Issue Date 16/02/2023		
Servio	ce Request form	No.:	UERL/AIR/SR	RF/02/A-004	Service Request Date 08/02/2023			
Samp	Sample ID No.: UERL/AIR/ID			/02/A-004	Field Data Sheet No.	UERL/AIR/FDS/A-23/02/004		
			M/s. Mundra	Solar PV Limited				
Name	Name & Add. of Customer Village Var			& Tunda, Taluka Mundr	a,			
		-	Mundra, Kutcl	Mundra, Kutch 370 435, Gujarat. India.				
Dates	of Sampling:		08/02/2023		Date of Testing	11/02/2023		
Locat	ion of Sampling ,	/ Monitoring	:	Near Village Vandh		-		
Sampling Method				IS:5182(Part-14) an	IS:5182(Part-14) and IS:5182 (Part-5)			
	Details of Ma	aster Instrun	nent Used for N	Ionitoring				
Insti	rument Id No.	Instrum	nent Name	Serial Number	Cali. Date	Next Cali. Date		
UER	L/AIR/RDS/27	Respirable	Dust Sampler	1751-DTA-2013 1142-DTA-2013	02/04/2022 01/04/2023			
UER	RL/AIR/FPS/42	Fine Partic	ulate Sampler	125-DTD-2013	02/04/2022	01/04/2023		
	General Sam	pling / Moni	itoring Observa	tion as per CPCB Gui	deline	$\sim$		
Sr. No.		Description		Unit of measurement	C	Observation		
1.	Monitoring Du	ration	Environ	ment and Researc	Laos PVI. LIU. 24			
2.	Flow Rate of PN	<b>M</b> 10		m³/min		1.28		
3.	Volume of Air Sampled for PM <sub>10</sub>		m <sup>3</sup>		1843.20			
4.	4. Volume of Air Sampled for PM <sub>2.5</sub>			m <sup>3</sup>	24.04			
Þ	> Test Paramet	ter Results						
Sr. No.	Test Parar	meter	Unit	Result	Specific Value (As per NAAQMS)	Test Method		
1	Particulate Mat	ter PM10	ug/m <sup>3</sup>	92	100	IS 5182 (Part-23)		

No.	Test Parameter	Unit	Result	(As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	92	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	34	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	15.2	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	24.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

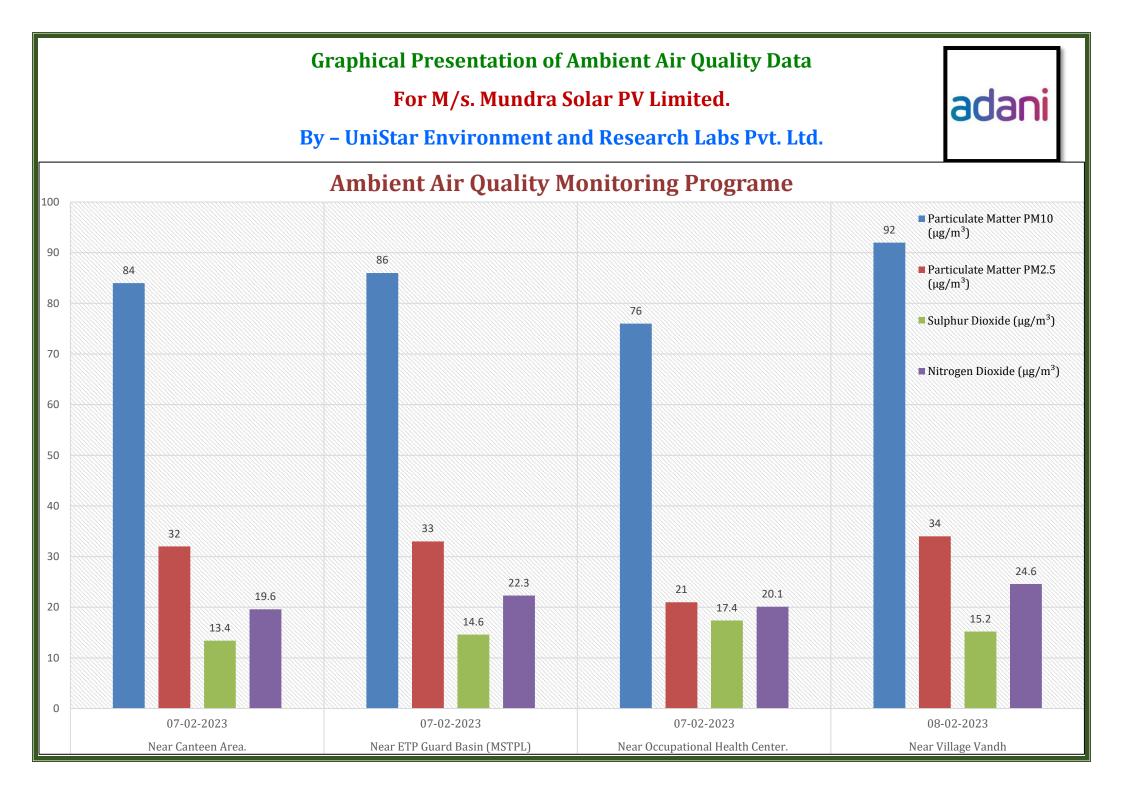
Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.6



# **3.0 NOISE LEVEL MONITORING REPORT**



Period: February - 2023

FOR



## **M/s. MUNDRA SOLAR PV LIMITED**

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.

**Monitoring Organization** 



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House,



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 **Certified Company**  ISO 45001:2018

**Certified Company** 

### NOISE LEVEL MONITORING REPORT

Test Report No.:	UERL/23/02/ MSPVL/N-001	Date Of Report:	20/02/2023					
Name & Add. Of Industries	M/s. Mundra Solar PV Limited.							
	Village Vandh &Tunda, Taluka Mundra,							
	Mundra, Kutch 370 435, Gujarat. India.							
Details of Instrument Used for Monitoring.								

### **Details of Instrument Used for Monitoring.**

Instrument Id No.	Instrument Name	Model Number	Cali. Date	Next Cali. Date
UERL/AIR/SLM/Q630838	Sound Level Meter	SL 4023 SD	03/02/2022	02/02/2024
Sampling Method.	CPCB Guideline			

: 07/02/2023 Date of Monitoring

### Result

Sr. No.	Location within company premises	Noise Le	evel dB(A)	Permissible Limit CPCB	
	Location within company premises	Day Time	Night Time	Day Time	Night Time
1.	North: Near Canteen area	64.8	55.2	<75 dB(A)	<70 dB(A)
2.	South: Near 66 KVA Sub Station	65.2	52.6	<75 dB(A)	<70 dB(A)
3.	East: Near COE Building	62.1	55.8	<75 dB(A)	<70 dB(A)
4.	West: Near ETP Guard basin	64.8	52.6	<75 dB(A)	<70 dB(A)

### Note: Ambient Air Quality Standards in respected of Noise as per CPCB.

	Colores of Aug /7	Limit in dB (A) Leq			
Area Code	Category of Area/Zone	Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)		
(A)	Industrial area	75	70		
(B)	Commercial area	65	55		
(C)	Residential area	55	45		
(D)	Silence Zone	50	40		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

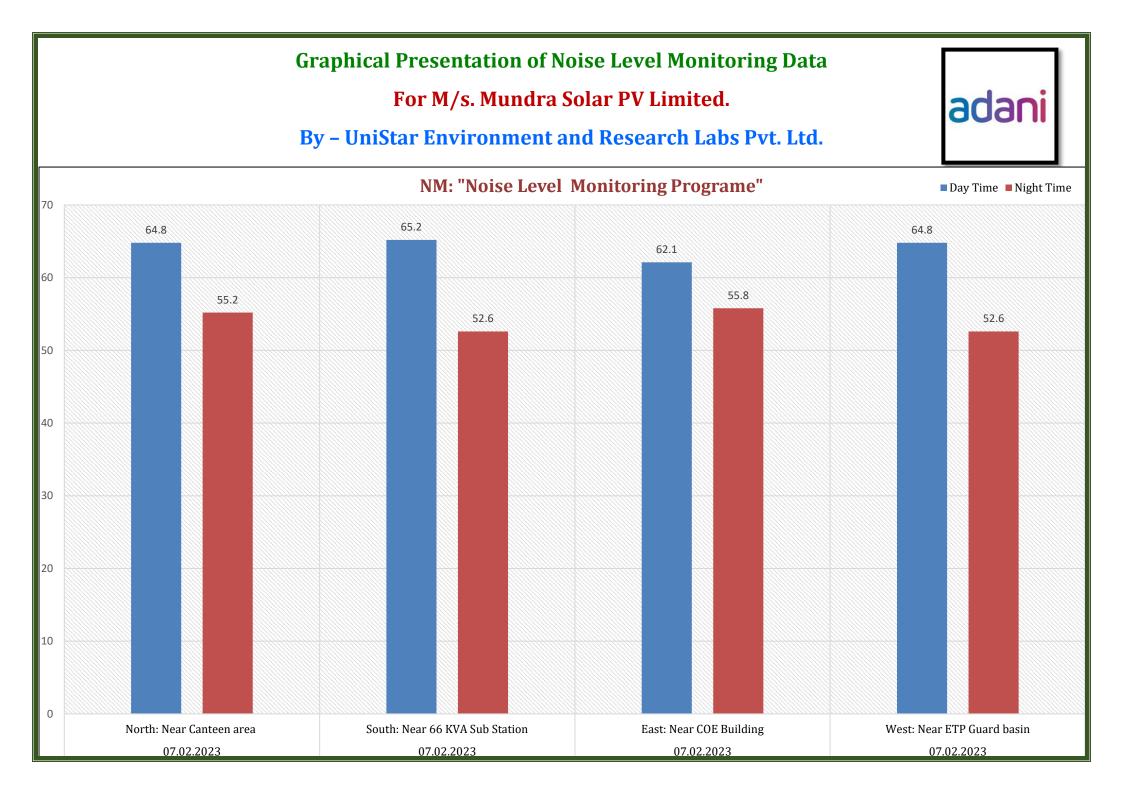
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 22



# **ENVIRONMENTAL MONITORING REPORT**

Period: March - 2023

FOR



## M/s. Mundra Solar Energy Limited



**At** Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



**Monitoring Organization** 

White House Near G.I.D.C. Office, Char Rasta, Vapi - 396 195. Gujarat, India. Phone : +91 260 2433966 / 2425610 Email : response@uerl.in Website : www.uerl.in

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11) ISO 9001 : 2015 Certified Company ISO 45001 : 2018 Certified Company

# **1.0 AMBIENT AIR QUALITY MONITORING REPORT**



Period: March - 2023

FOR



## M/s. Mundra Solar Energy Limited

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.



MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to17.03.2023)

QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-II)

ISO 9001:2015 Certified Company ISO 45001:2018 Certified Company

Near G.I.D.C. Office, Char Rasta, Vapi-396 195, Gujarat, India. Phone : +91 260 2433966 / 2425610

Email : response@uerl.in Website : www.uerl.in

White House.



QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11) ISO 9001 : 2015 Certified Company

ISO 45001 : 2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

Discipline.		Chemical Tes	ting	Name of Group	<b>Atmospheric Pollution</b>	
Test Report No.: URAL/23/0			MSEL/A-001	Report Issue Date	28/03/2023	
Service Request for	m No.:	UERL/AIR/SRI	F/03/A-001	Service Request Date	13/03/2023	
Sample ID No.:		UERL/AIR/ID/	′03/A-001	Field Data Sheet No.	UERL/AIR/FDS/A-23/03/001	
		M/s. Mundra	Solar Energy Limite	ed		
Name & Add. of Customer		Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.				
Dates of Sampling:		13/03/2023 Date of Testing		Date of Testing	15/03/2023	
Location of Samplin	g / Monitorin	g:	Near Canteen Area.			
Sampling Method			IS:5182(Part-14) and IS:5182 (Part-5)			
Details of I	Master Instru	ment Used for	Monitoring			
Instrument Id No.	Instrum	nent Name	Serial Number	Cali. Date	Next Cali. Date	
UERL/AIR/RDS/25	Respirable	Dust Sampler	1744-DTA-2013 1127-DTJ-2012	02/04/2022	01/04/2023	
UERL/AIR/FPS/51	Fine Partic	ulate Sampler	137-DTD-2013	02/04/2022	01/04/2023	
General Sa	mpling / Mor	nitoring Observ	ation as per CPCB G	uideline	$\sim$	
Sr. No.	Description		Unit of measurement	C	Observation	
1. Monitoring D	uration	211110	Н	24		

NO.	-n/iro	measurement	ron Lane PVI Ltd			
1.	Monitoring Duration	Н	24			
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.33			
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1915.2			
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m³	24.04			
1						

**Test Parameter Results** 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter PM <sub>10</sub>	µg/m³	84	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	24	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	15.4	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	19.6	80	IS 5182 (Part-6)

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.3



QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11) ISO 9001 : 2015 Certified Company ISO 45001 : 2018 Certified Company

### TEST REPORT (AMBIENT AIR MONITORING)

			(AMBIE)		<u> </u>			
Disci	pline.		Chemical Testing		Name of Group	Atmospheric Pollution		
Test	Report No.:		URAL/23/03/MS	EL/A-002	Report Issue Date 28/03/2023			
Servi	ce Request form N	0.:	UERL/AIR/SRF/03/A-002		Service Request Date 13/03/2023			
Sam	ole ID No.:		UERL/AIR/ID/03/	A-002	Field Data Sheet No.	UERL/AIR/FDS/A-23/03/002		
			<b>ar Energy Limited</b> <sup>-</sup> unda, Taluka Mundra 70 435, Gujarat. India.					
Date	s of Sampling:		13/03/2023		Date of Testing	15/03/2023		
Locat	tion of Sampling / N	Ionitorin	g:	Near ETP Guard Bas	sin (MSTPL)			
Samp	oling Method			IS:5182(Part-14) and	d IS:5182 (Part-5)			
)	Details of Mast	er Instru	ment Used for Mo	nitoring				
Ins	strument Id No.	Inst	rument Name	Serial Number	Cali. Date	Next Cali. Date		
UE	RL/AIR/RDS/27	Respira	ble Dust Sampler	ampler 1751-DTA-2013, 02/04/2022 01/04/2				
U	ERL/AIR/FPS/42	Fine Pa	rticulate Sampler	125-DTD-2013	02/04/2022	01/04/2023		
	General Sampli	ing / Mor	nitoring Observatio	on as per CPCB Guide	line	$\approx$		
Sr. No.	D	escriptio	n Environm	Unit of measurement	Observation			
1.	Monitoring Durat	ion	LINIOIIII	H		24		
2.	Flow Rate of PM <sub>1</sub>	0		m³/min		1.31		
3.	Volume of Air Sar	npled for	PM10	m³		1886.4		
4.	Volume of Air Sar	npled for	• PM <sub>2.5</sub>	m <sup>3</sup>		24.04		
)	Test Parameter	<u>Results</u>						
Sr. No.	Test Parame	ter	Unit	Result	Specific Value (As per NAAQMS)	Test Method		
1.	Particulate Matter	r PM <sub>10</sub>	μg/m³	68	100	IS 5182 (Part-23)		
2.	Particulate Matter	r PM <sub>2.5</sub>	μg/m³	21	60	IS 5182 (Part-24)		
3.	Sulphur Dioxide as	s SO2	µg/m³	16.3	80	IS 5182 (Part-22)		
4.	Nitrogen Dioxide a	as NO <sub>2</sub>	μg/m³	21.4	80	IS 5182 (Part-6)		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.4



QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11) ISO 9001:2015 Certified Company ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

Discipline.		Chemical Te	esting	Name of Group	Atmospheric Pollution	
Test Report No.:		URAL/23/03	3/MSEL/A-003	Report Issue Date	28/03/2023	
Service Request form No.: UERL/AIR/S		UERL/AIR/SI	RF/03/A-003	Service Request Date	13/03/2023	
Sample ID No.: UERL/AIR/II			0/03/A-003	Field Data Sheet No.	UERL/AIR/FDS/A-23/03/003	
Name & Add. of Customer Village Var		Village Vand	r <b>a Solar Energy Limit</b> lh & Tunda, Taluka M tch 370 435, Gujarat.	undra,		
Dates of Sampling:		13/03/2023		Date of Testing	15/03/2023	
Location of Sampling	/ Monitoring:		Near Occupational Health Center.			
Sampling Method			IS:5182(Part-14) and IS:5182 (Part-5)			
Details of M	Details of Master Instrument Used for Monitoring					
Instrument Id No	Instrumon	+ Nomo	Sorial Number	Cali Data	Next Cali, Data	

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date		
	Respirable Dust Sampler	1745-DTB-2013	02/04/2022	01/04/2023		
UERL/AIR/RDS/22		1151-DTB-2013				
UERL/AIR/FPS/22	Fine Particulate Sampler	129-DTB-2013	02/04/2022	01/04/2023		
General Sampling / Monitoring Observation as per CPCB Guideline						

### General Sampling / Monitoring Observation as per CPCB Guideline

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	H	24
2.	Flow Rate of PM <sub>10</sub>	m³/min	1.33
3.	Volume of Air Sampled for $PM_{10}$	m <sup>3</sup>	1915.2
4.	Volume of Air Sampled for PM <sub>2.5</sub>	m <sup>3</sup>	24.04

### **Test Parameter Results**

 $\triangleright$ 

Sr. No.	Test Parameter	Unit	Result	Specific Value (As per NAAQMS)	Test Method
1.	Particulate Matter $PM_{10}$	μg/m³	74	100	IS 5182 (Part-23)
2.	Particulate Matter PM <sub>2.5</sub>	µg/m³	26	60	IS 5182 (Part-24)
3.	Sulphur Dioxide as SO <sub>2</sub>	µg/m³	20.3	80	IS 5182 (Part-22)
4.	Nitrogen Dioxide as NO <sub>2</sub>	µg/m³	23.1	80	IS 5182 (Part-6)

### \*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.5



QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11)

ISO 9001:2015 **Certified Company**  ISO 45001:2018 **Certified Company** 

### **TEST REPORT** (AMBIENT AIR MONITORING)

D:'							
			Chemical Tes		Name of Group	Atmospheric Pollution	
Test	Report No.:		URAL/23/03	/MSEL/A-004	Report Issue Date	28/03/2023	
Servi	ce Request form	No.:	UERL/AIR/SR	F/03/A-004	Service Request Date	15/03/2023	
Samp	ble ID No.:		UERL/AIR/ID	/03/A-004	Field Data Sheet No.	UERL/AIR/FDS/A-23/03/004	
			M/s. Mundra	Solar Energy Limited			
Nam	e & Add. of Custo	omer	Village Vandh	& Tunda, Taluka Mundi	ra,		
			Mundra, Kutch	Mundra, Kutch 370 435, Gujarat. India.			
Dates	s of Sampling:		15/03/2023		Date of Testing	11/01/2023	
Locat	ion of Sampling	/ Monitoring:	1	Near Village Vandh			
Samp	ling Method			IS:5182(Part-14) an	d IS:5182 (Part-5)		
)	Details of Ma	aster Instrum	ent Used for N	Ionitoring			
Inst	rument Id No.	Instrum	ent Name	Serial Number	Cali. Date	Next Cali. Date	
UEF	RL/AIR/RDS/27	Respirable	Dust Sampler	1751-DTA-2013 1142-DTA-2013	02/04/2022	01/04/2023	
UEF	RL/AIR/FPS/42	Fine Partic	ulate Sampler	125-DTD-2013	02/04/2022	01/04/2023	
)	General Sam	pling / Moni	toring Observa	tion as per CPCB Gui	<u>deline</u>	$\sim$	
Sr. No.		Description		Unit of measurement	Observation		
1.	Monitoring Du	ration	Environ	ment and Researc	n Lads PVI. LIQ. 🐖	24	
2.	Flow Rate of Pl	M <sub>10</sub>		m³/min		1.29	
3.	Volume of Air S	Sampled for F	PM10	m <sup>3</sup>		1857.6	
4.	Volume of Air S	Sampled for F	PM <sub>2.5</sub>	m <sup>3</sup>		24.04	
)	Test Parame	ter Results					
Sr. No.	Test Para	meter	Unit	Result	Specific Value (As per NAAQMS)	Test Method	
1.	Particulate Matter PM <sub>10</sub>		µg/m³	88	100	IS 5182 (Part-23)	
2.	Particulate Mat	ter PM <sub>2.5</sub>	µg/m³	32	60	IS 5182 (Part-24)	
3.	Sulphur Dioxide	e as SO <sub>2</sub>	µg/m³	22.4	80	IS 5182 (Part-22)	
4.	Nitrogen Dioxid	e as NO <sub>2</sub>	µg/m³	24.5	80	IS 5182 (Part-6)	
					I	I	

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

**Checked By:** 

Nikunj D. Patel (Chemist)

**Authorized By:** 

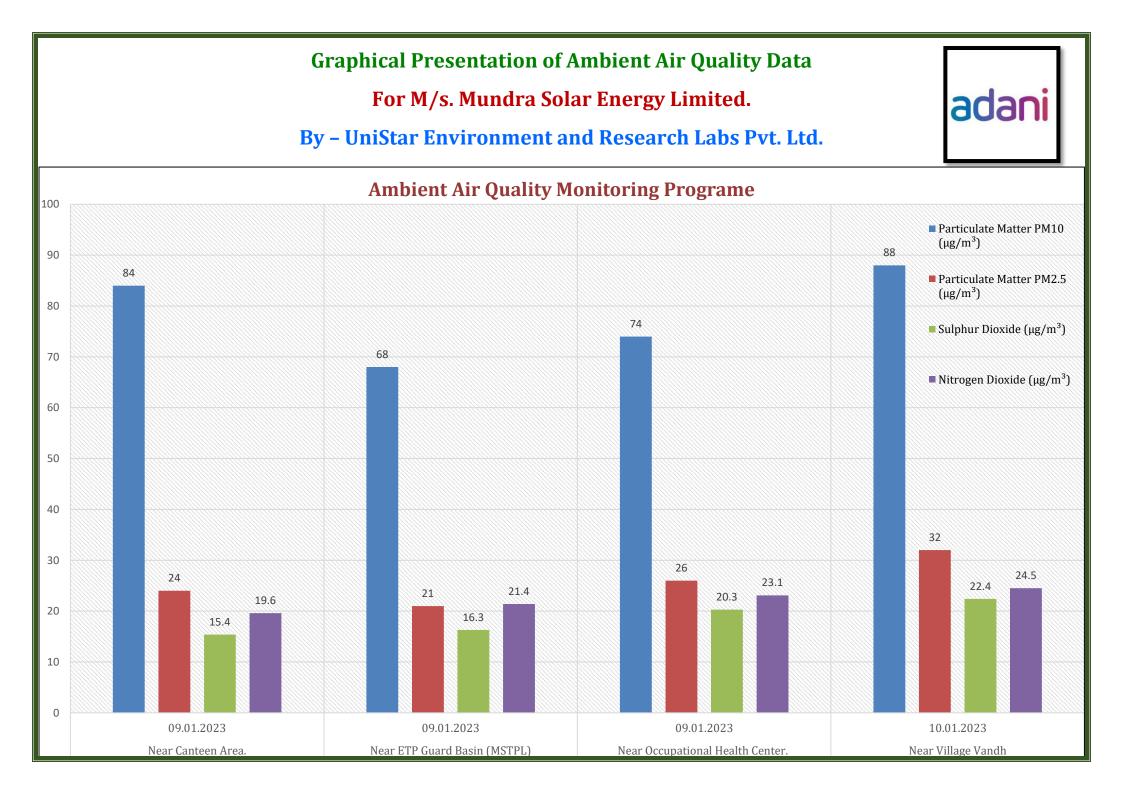
Jaivik S. Tandel (Manager - Operations)

UERL/AIR/F-05/05

Page No.6

Note: This report is subject to terms and conditions mentioned overleaf

Regd. Office : 215, Royal Arcade, Near G.I.D.C., Office, Char Rasta, Vapi-396 195. Gujarat. Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat. CIN: U73100GJ2007PTC051463



# **3.0 NOISE LEVEL MONITORING REPORT**



Period: March - 2023

FOR



## M/s. Mundra Solar Energy Limited

Village Vandh & Tunda, Taluka Mundra, Mundra, Kutch 370 435, Gujarat. India.

**Monitoring Organization** 



QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11) White House Near G.I.D.C. Office, Char Rasta, Vapi - 396 195. Gujarat, India. Phone : +91 260 2433966 / 2425610 Email : response@uerl.in Website : www.uerl.in

ISO 9001 : 2015 Certified Company ISO 45001 : 2018 Certified Company



QCI-NABET Accredited EIA Consultant Organization GPCB Recognized Environmental Auditor (Schedule-11) ISO 9001 : 2015 Certified Company

ISO 45001 : 2018 Certified Company

### **NOISE LEVEL MONITORING REPORT**

Test Report No.:	UERL/23/03/ MSPVL/N-001	Date Of Report:	28/03/2023			
Name & Add. Of Industries	M/s. Mundra Solar Energy Limited.					
	/illage Vandh &Tunda, Taluka Mundra,					
	Mundra, Kutch 370 435, Gujarat. India.					

Details of Instrument Used for Monitoring.

Instrument Id No.	Instrument Name	Model Number	Cali. Date	Next Cali. Date
UERL/AIR/SLM/Q630838	Sound Level Meter	SL 4023 SD	03/02/2022	02/02/2024
Sampling Method.	CPCB Guideline			

Date of Monitoring : 13/03/2023

### Result

Sr. No.	Location within company premises	Noise Level dB(A)		Permissible Limit CPCB	
	Location within company premises	Day Time	Night Time	Day Time	Night Time
1.	North: Near Canteen area	67.2	47.3	<75 dB(A)	<70 dB(A)
2.	South: Near 66 KVA Sub Station	64.8	44.2	<75 dB(A)	<70 dB(A)
3.	East: Near COE Building	66.1	48.6	<75 dB(A)	<70 dB(A)
4.	West: Near ETP Guard basin	68.4	44.8	<75 dB(A)	<70 dB(A)

Note: Ambient Air Quality Standards in respected of Noise as per CPCB.

		Limit in dB (A) Leq			
Area Code	Category of Area/Zone	Day Time (6:00 am to 10:00 pm)	Night Time (10:00 pm to 6:00 am)		
(A)	Industrial area	75	70		
(B)	Commercial area	65	55		
(C)	Residential area	55	45		
(D)	Silence Zone	50	40		

\*\*\*\*\*\*\* End of Report \*\*\*\*\*\*

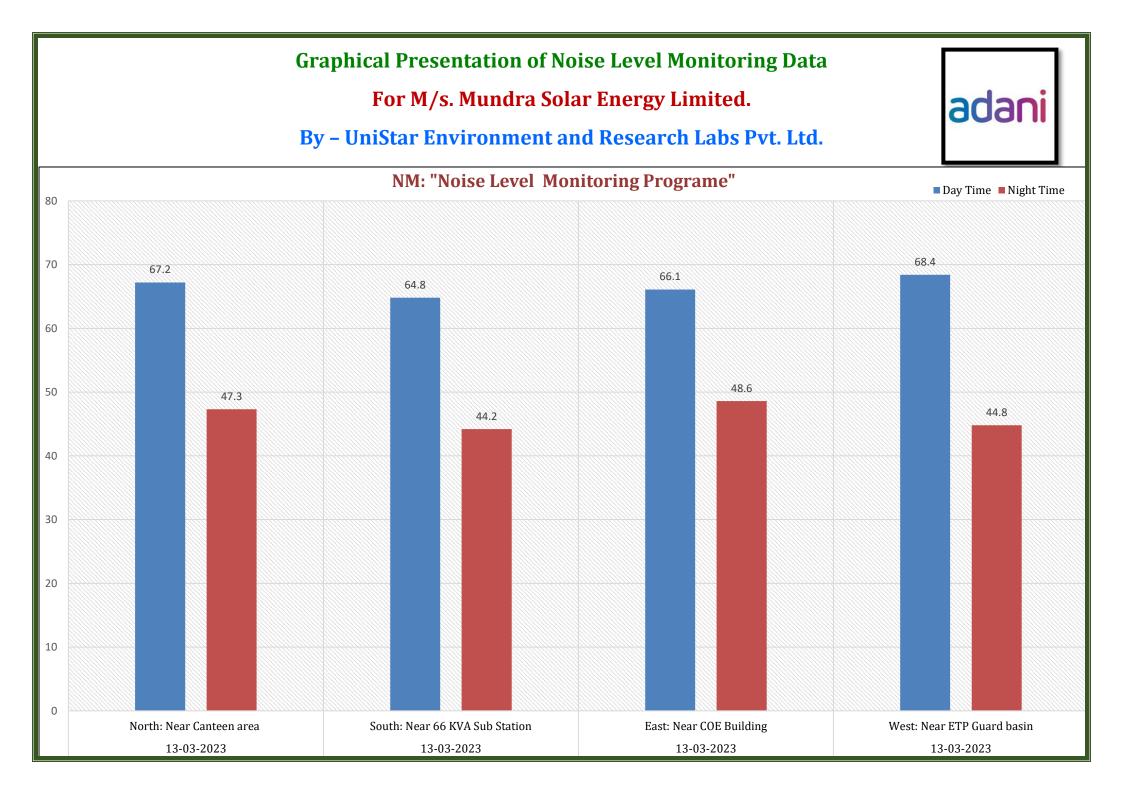
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 26



	stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1 <sup>st</sup> June and 1 <sup>st</sup> December of each calendar year.	regularly submitted to MoEF&CC, CPCB
109.	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provision of Environment (Protection) Act, 1986.	
110.	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Noted & Agreed.
111.	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	-
112.	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.	Noted & Compliance assured
113.	The project authorities shall inform the GPCB, Regional Office. MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authority and date of start of project.	
114.	This environmental clearance is valid for seven years from, the date of Issue	Noted & Agreed
115.	Any appeal against this environmental/clearance shall lie with the National Green tribunal, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010	_
116.	Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.	

NISCHAL JOSHI MEMBER SECRETARY SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

No. SEIAA/GUJ/EC/3(a)/ /2022

Date:

BY R.P.A.D.

Transfer of Environment Clearance Order No:- SEIAA/GUJ/EC/3(a)/1277/2019 dated: 07/09/2019. (Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to M/s. MUNDRA SOLAR LTD for setting up manufacturing plant of 'Synthetic Organic Chemicals' at Survey No. 180/P, Within Notified APSEZ, Mundra, Kutch, vide this office letter no. SEIAA/GUJ/EC/3(a)/1277/2019 dated: 07/09/2019, is being subjected to EC transfer for the following change in the project.

office order letter no. And whereas SEIAA has granted Clearance vide Environment SEIAA/GUJ/EC/3(a)/1277/2019 dated: 07/09/2019, under the provisions of the aforesaid Notification.

And whereas project proponent has applied for Name change and EC transfer in the environmental clearance vide their online application vide No. SIA/GJ/IND3/283114/2022 dated 13/07/2022. The project was scheduled for hearing in the SEAC meeting held on 02/09/2022.

The SEAC, Gujarat had recommended the project vide their letter dated 07/10/2022 to grant transfer in Environmental Clearance to the SEIAA, Gujarat based on the decision taken during SEAC meeting held on 02/09/2022. The proposal was considered by SEIAA, Gujarat in its meeting held on 10/11/2022 at Gandhinagar. After careful consideration, Environment Clearance order dated 07/09/2019 is hereby transferred as under.

1. Environment Clearance accorded vide no. SEIAA/GUJ/EC/3(a)/1277/2019 dated: 07/09/2019 to "M/s. MUNDRA SOLAR LTD" is hereby transferred to "M/s. MUNDRA SOLAR TECHNOLOGY LTD".

### Additional Condition

- 1. PP shall comply with notarized undertaking submitted as they have to accept all terms and conditions in the EC and shall comply with the same and also submit 6 months compliance report to MoEF & CC, SEIAA and SEAC.
- 2. The grant of permission for transfer/name change given by SEIAA does not confirm any legal right of ownership/acquisition. If there is issue of ownership the proponent has to take necessary action for obtaining approval/order of the competent authority.
  - The proponent has to submit consent of the transfer including legal certificate/order of competent authority within a month's time, failing which the permission will be treated as provisional.

Office : Gujarat Pollution Control Board, "Paryavaran Bhavan" Sector-10 A, Gandhinagar-382010 Phone No.:- (079) 232-32152,232-41514 Fax No.:-(079) 232-22784 E-mail : msseiaagi@gmail.com, Website:- www.seiaa.gujarat.gov.in

Page 1 of 2





4. The transferee has submitted notarized agreement/undertaking to abide by all terms conditions of the EC and comply the same and shall be responsible for the same failing which action can be taken under Environment Protection Act, 1986 and further notification thereof.

Rest of all the conditions of the Environment Clearance orders no SEIAA/GUJ/EC/3(a)/1277/2019 dated: 07/09/2019 shall remain unchanged.

(NISCHAL JOSHI) Member Secretary

Issued to: M/s. MUNDRA SOLAR TECHNOLOGY LTD Survey No. 180/P, Within Notified APSEZ, Mundra, Kutch

#### Copy to:-

- 1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar 382010.
- 2. The Additional Chief Secretary, Forests & Environment Department, Govt. of Gujarat, Block 14, 8th floor, Sachivalaya, Gandhinagar-382010.
- 3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
- 4. The Additional Principal Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
- 5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
- 6. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
- 7. Select File.



