# 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<br>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.<br>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<br>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<br>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.<br>No.      | emission with                           | Height in    |                | f Fuel  | Iy                     | pe of<br>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.<br>o. Specific                       | Source of    | Emission       |         | height<br>neter        | Type o<br>emissio     |           | APCM                    |            |       |
|       |                 |   | ination TCS  | Production     |         | 0.0                    | emissi                |           |                         |            |       |
|       |                 |   | S Purificati |                |         | 0.0<br>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<br>Emissi         | on Monit              | oring Sy  | to install<br>stem [CEM |            |       |
|       | Monit<br>guidel | oring System<br>ines                    | [CEMS] a     | s per the      | СРСВ    | MSTL<br>Emissi<br>CPCB | on Monit<br>guideline | oring Sy  |                         |            |       |
| 26.   | Monit<br>guidel | oring System<br>ines<br>shall provide a | [CEMS] a     | s per the      | СРСВ    | MSTL<br>Emissi<br>CPCB | on Monit<br>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<br>off.    | nce assured once project takes  |
|       | Sr.<br>No  | Types of<br>Hazardous<br>Waste   | Specific Source of generation  | Category                                     |   | iantity<br>/Annum) | Management of Disposal  |
|       | 1  | Chemical<br>Sludge   | From process, ETP,<br>Scrubber   | 35.3   | 13870   | Ton/Year           | Disposal at the approved<br>Common TSDF site (will explore<br>feasibility to use as Raw material<br>& re-process) |
|       | 2  | Discarded<br>Containers  | Material Storage<br>and Handing  | 33.1   | 1200  | No./Year           | Will be sell to registered recycler<br>for recycling  |
|       | 3  | Used oil   | Machinery & D.G.<br>Set  | 5.1  | 20  | KL/Year            | Will be sell to registered recycler<br>for recycling  |
|       | 4  | Oil Soaked<br>Cotton waste &<br>residue                                | Washing Floor,<br>Machinery<br>maintenance   | 33.2   | 1500  | ) kg/Year          | Co-incineration & reuse   |
|       | 5  | Graphite Parts   | CVD Reactors   | B2010  |   | MT/Year            | To recycler/re-user as raw<br>material  |
|       | 6  | Waste Silicon  | Process reactors   | B1010  |   | AT/Year            | TSDF & will explore feasibility to<br>use as Raw material & re-process  |
|       | 7  | Spent Activated<br>Carbon  |  | A4160  |   | MT/Year            | TSDF & re-process   |
| 34.   | 8  | Filters  | Purification Process<br>shall have permiss   |  |   | MT/Year            | TSDF & re-user  |
| A. 5. | Hazardo<br>Transbo   | ous and Othe<br>oundary Movem  | er Wastes (Mana<br>ent) Rules 2016.  |  |   | end-use            | ill take due care that Authorized<br>rs shall have permissions from<br>cerned authorities.                        |
| 35.   | OTHER:The project proponent shall allocate the separate fund<br>of Rs. 36.905 Cr i.e. 0.5 % of the capital investment<br>(whichever is applicable) for activities like Educational<br>activities, Public Health and family welfare and<br>Preservation of Environment, rain water harvesting<br>under Corporate Environment Responsibility (CER) in<br>accordance to the MoEF&CC's Office Memorandum No.<br>F.No.22-65/2017-IA.1II dated 01/05/2018. The entire<br>activities proposed under CER shall be monitored and<br>the monitoring report shall be submitted to the regional<br>office of MoEF&CC as a part of half-yearly compliance<br>report and to district collector. The monitoring report<br>shall be posted on the website of the project proponent.MSTL has proposed separate fund o<br>36.905 Cr i.e. 0.5 % of the ca<br>investment (whichever is applicable<br>acivities like Educational activities<br>Public Health and family welfare<br>Preservation of Environment, rain water<br>harvesting<br>under Corporate<br>Environment Responsibility (CER)<br>accordance to the MoEFCC Of<br>Memorandum No. F.No.22-65/2017-I<br>dated 01/05/2018. |  |  |  | Cr i.e. 0.5 % of the capital<br>ent (whichever is applicable) for<br>es like Educational activities,<br>Health and family welfare and<br>ation of Environment, rain water<br>ing under Corporate<br>ment Responsibility (CER) in<br>ence to the MoEFCC Office<br>andum No. F.No.22-65/2017-IA.1II |                    |   |
| 36.   | propose<br>Wolche<br>propone<br>before   | mental protect<br>ed in the EIA re<br>m India Limito<br>ent and commit | ion measures an<br>port of the project<br>and submitte<br>ments made during<br>osed in the EIA r | id safeg<br>t prepar<br>d by pr<br>g present | ed by<br>oject<br>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<br>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.<br>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<br>time to time and the Public Liability Insurance Act for   | off.  |
|                   | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary   | off.  |
|                   | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and  | off.  |
|                   | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before  | off.  |
|                   | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before<br>commissioning of the project. Requisite On-site and Off-  | off.  |
|                   | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before<br>commissioning of the project. Requisite On-site and Off-<br>site Disaster Management Plans have to be prepared  | off.  |
| 65                | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before<br>commissioning of the project. Requisite On-site and Off-<br>site Disaster Management Plans have to be prepared<br>and implemented.  |   |
| 65.               | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before<br>commissioning of the project. Requisite On-site and Off-<br>site Disaster Management Plans have to be prepared<br>and implemented.<br>Main entry and exit shall be separate and clearly marked  |   |
|                   | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before<br>commissioning of the project. Requisite On-site and Off-<br>site Disaster Management Plans have to be prepared<br>and implemented.<br>Main entry and exit shall be separate and clearly marked<br>in the facility   | Noted.  |
| 65.<br>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.<br>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.<br>Noted & Agreed.<br>Noted and Agreed.  |
| 66.<br>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.<br>Noted & Agreed.<br>Noted and Agreed.<br>Will be complied once project takes off.  |
| 66.               | Hazardous Chemicals Rules (MSIHC) 1989, as amended<br>time to time and the Public Liability Insurance Act for<br>handling of hazardous chemicals etc. Necessary<br>approvals from the Chief Controller of Explosives and<br>concerned Govt. Authorities shall be obtained before<br>commissioning of the project. Requisite On-site and Off-<br>site Disaster Management Plans have to be prepared<br>and implemented.<br>Main entry and exit shall be separate and clearly marked<br>in the facility<br>Sufficient peripheral open passage shall be kept in the<br>margin area for free movement office tender/<br>emergency vehicle around the premises<br>Storage of flammable chemicals shall be sufficiently<br>away from the production area.<br>Sufficient number of fire extinguishers shall be provided  | Noted.<br>Noted & Agreed.<br>Noted and Agreed.<br>Will be complied once project takes off.<br>Noted and Agreed.   |
| 66.<br>67.<br>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.<br>Noted & Agreed.<br>Noted and Agreed.<br>Will be complied once project takes off.<br>Noted and Agreed.<br>Will be complied once project takes off. |
| 66.<br>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.<br>Noted & Agreed.<br>Noted and Agreed.<br>Will be complied once project takes off.<br>Noted and Agreed.   |
| 66.<br>67.<br>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.<br>Noted & Agreed.<br>Noted and Agreed.<br>Will be complied once project takes off.<br>Noted and Agreed.<br>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<br>for Corporate Environment Responsibility (CER) in<br>accordance to the MoEFCC's Office Memorandum No.<br>F.No.22-65/2017-IA.III dated 01/05/2018 to carry out<br>the activities under CER in affected area around the<br>project. The entire activities proposed under CER shall<br>be monitored and the monitoring report shall be<br>submitted to the regional office of MOEFCC as part of<br>half-yearly compliance report and to district collector.<br>The monitoring report shall be posted on the website of<br>the project proponent. | fund for CER purpose and will be<br>implemented during plant construction<br>& operation.<br>Noted & Agreed |
|-----|---|---|
| 91. | Rain water harvesting of surface as well as rooftop<br>runoff shall be undertaken and the same water shall be<br>used for the various activities of the project to conserve<br>fresh water as well as recharge ground water. Before<br>recharging the surface runoff, pre-treatment must be<br>done to remove suspended matter.   | Compliance assured once project takes   |
| 92. | The unit shall join and participate financially and<br>technically for any common environment facility /<br>infrastructure as and when the same is taken up either<br>by the industrial Association or GIDC or any such<br>authority created for this purpose by the Govt. / GIDC   | Noted & Agreed  |
| 93. | Application of solar energy shall be incorporated for<br>illumination of common areas, lighting for gardens and<br>street lighting in addition the provision for solar water<br>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<br>during the appraisal process for the purpose of<br>environmental protection and management shall be<br>strictly adhered to.   |   |
| 96. | The project proponent shall also comply with any<br>additional condition that may be Imposed by the SEAC<br>or the SEIAA or any other competent authority for the<br>purpose for the environmental protection and<br>management   | Noted and Agreed.   |
| 97. | In the event of failure of any pollution control system<br>adopted by the unit, the unit shall be safely closed down<br>and shall not be restarted until the desired efficiency of<br>the control equipment has been achieved.  | Noted and Agreed.   |
| 98. | The project authorities must strict adhered to the<br>stipulations made by the Gujarat Pollution Control<br>Board (GPCB), State Government and any statutory<br>Authority.  | _   |

| 99.  | During material transfer there shall be no spillages and<br>garland drain shall be constructed to avoid mixing of<br>accidental spillages with domestic wastewater or storm<br>water.   | Noted and Agreed.   |
|------|---|---|
| 100. | Pucca flooring / impervious layer shall be provided in the<br>work areas, chemical storage areas and chemical<br>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<br>to cause environmental impacts shall be carried out<br>without obtaining prior Environment Clearance from the<br>concerned authority.  | Noted and Agreed.   |
| 103. | The above conditions will be enforced, inter-alia under<br>the provisions of the Water (Prevention & Control of<br>Pollution) Act, 1974, Air (Prevention~& Control of<br>Pollution) Act, 1981, the Environment (Protection) Act,<br>1986, Hazardous Wastes (Management, Handling and<br>Transboundary Movement) Rules, 2008 and the Public<br>Liability Insurance Act, 1991 along with their<br>amendments and rules.   |   |
| 104. | The project proponent shall comply all the conditions<br>mentioned in "The Companies (Corporate Social<br>Responsibility Policy) Rules, 2014" and its amendments<br>from time to time in a letter and spirit.   | -   |
| 105. | The project management shall ensure that unit<br>complies with all the environment protection measures,<br>risk mitigation measures and safeguards recommended<br>in the EMP report and Risk Assessment study report as<br>well as proposed by project proponent.   |   |
| 106. | The project authorities shall earmark adequate funds to<br>implement the conditions stipulated by SEIAA as well as<br>GPCB along with the implementation schedule for all<br>the conditions stipulated herein. The funds so provided<br>shall not be diverted for any other purpose.  | Noted and Agreed.   |
| 107. | The applicant shall inform the public that the project<br>has been accorded environmental clearance by the<br>SEIAA and that the copies of the clearance letter are<br>available with the GPCB and may also be seen at the<br>Website of SEIAAI SEAC/GPCB. This shall be advertised<br>within seven days from the date of the clearance letter,<br>in at least two local newspapers that are widely<br>circulated in the region, one of which shall be in the<br>Gujarati language and the other in English. A copy each<br>of the same shall be forwarded to the concerned<br>Regional Office of the Ministry. | Complied.<br>MSTL has published the advertisement<br>in one English language newspaper "The<br>INDIAN EXPRESS, Ahmedabad" (Page 3)<br>and one local language Gujarati<br>newspaper "KUTCH MITRA, Bhuj" (Page<br>5) dated 18 <sup>th</sup> September 2019.<br>Clippings of newspaper advertisement<br>already submitted in compliance report<br>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<br>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

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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<br>n & Tunda, Taluka M<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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#### 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,<br>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.<br>No.       | D                            | escriptic           | n<br>Environm       | Unit of<br>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.<br>No.       | Test Parame                  | ter                 | Unit                | Result                          | Specific Value<br>(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.



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### **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<br>dh & Tunda, Taluka M<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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)

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Page No.5



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### 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<br>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.<br>No.                 |   | Description   |                 | Unit of<br>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.<br>No.                 | Test Para                                   | meter         | Unit            | Result                                 | Specific Value<br>(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:** 

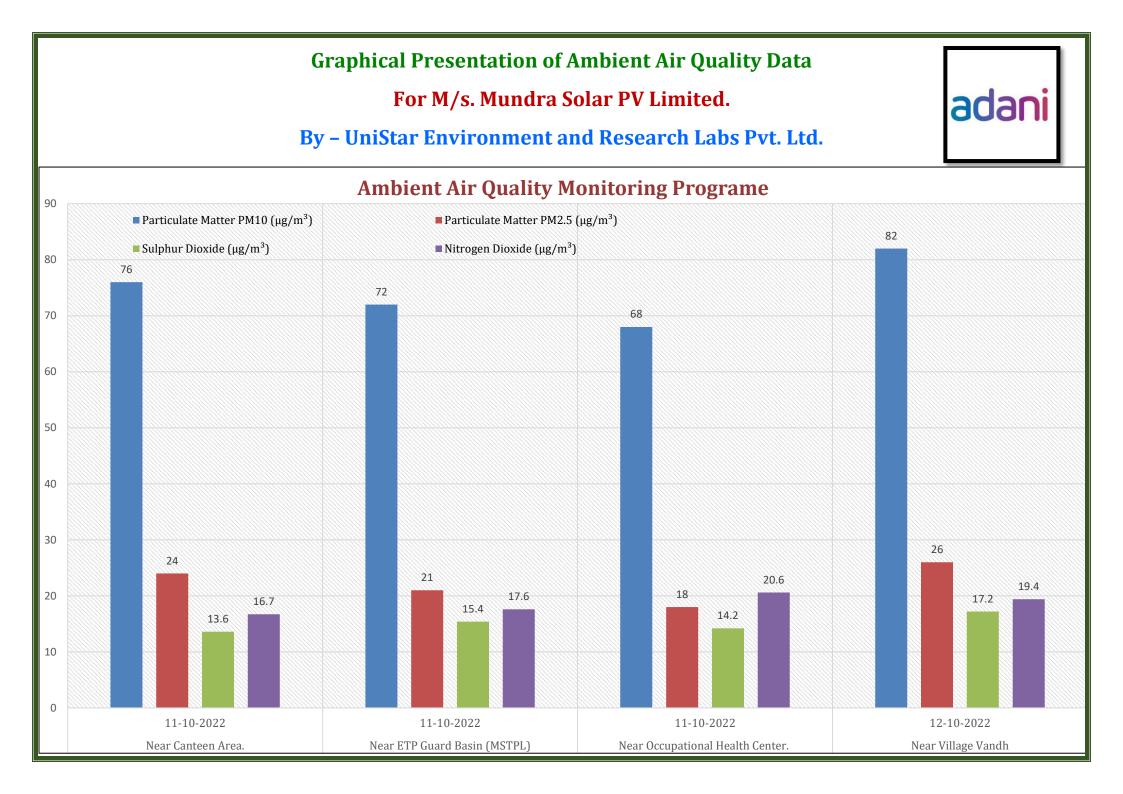
Nikunj D. Patel (Chemist)

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** 



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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<br>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 \*\*\*\*\*\*

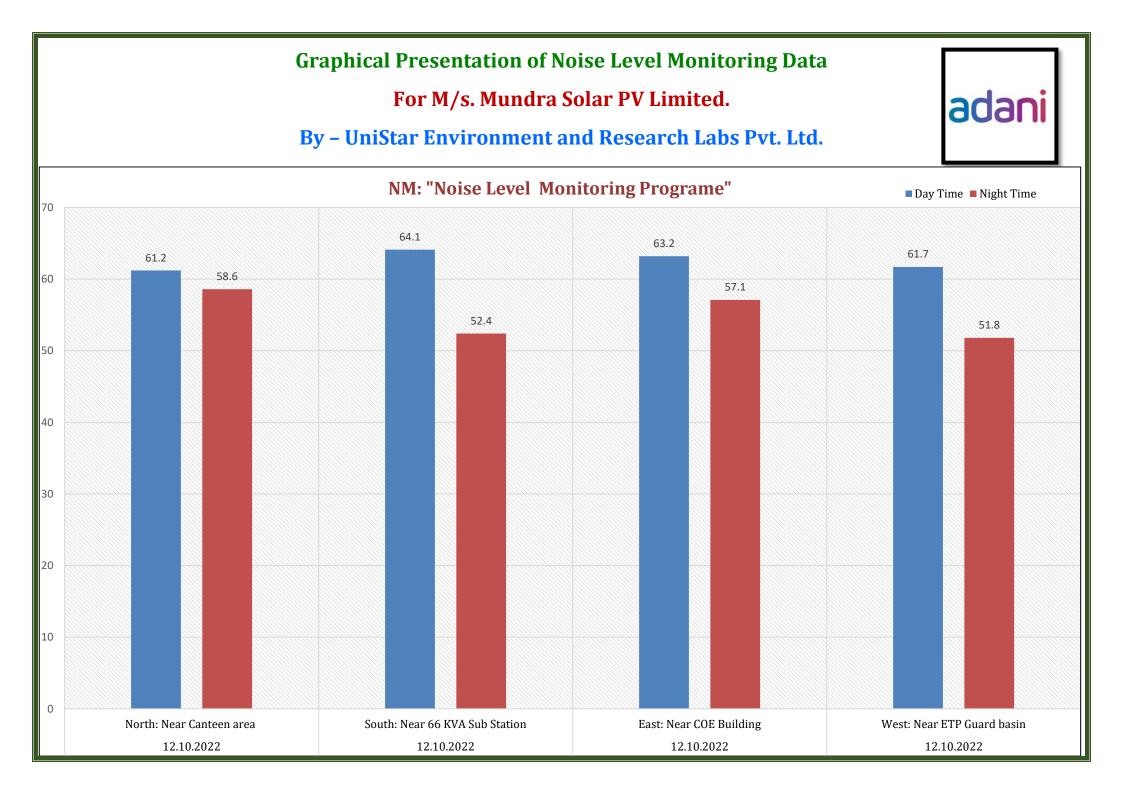
**Checked By:** 

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.



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# **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.



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

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### **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><br>Village Vandh & Tunda, Taluka Mundra,<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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

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### 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,<br>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.<br>No.                       | escriptio                                  | n<br>Environm       | Unit of<br>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.<br>Test Paramet              | ter  | Unit                | Result  | Specific Value<br>(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



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### **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<br>Village Vandh & Tunda, Taluka Mundra,<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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### 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<br>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.<br>No.                              | Description                                 |               | Unit of<br>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.<br>No.                              | Test Parameter Unit                         |               | Unit                           | Result                                 | Specific Value<br>(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:** 

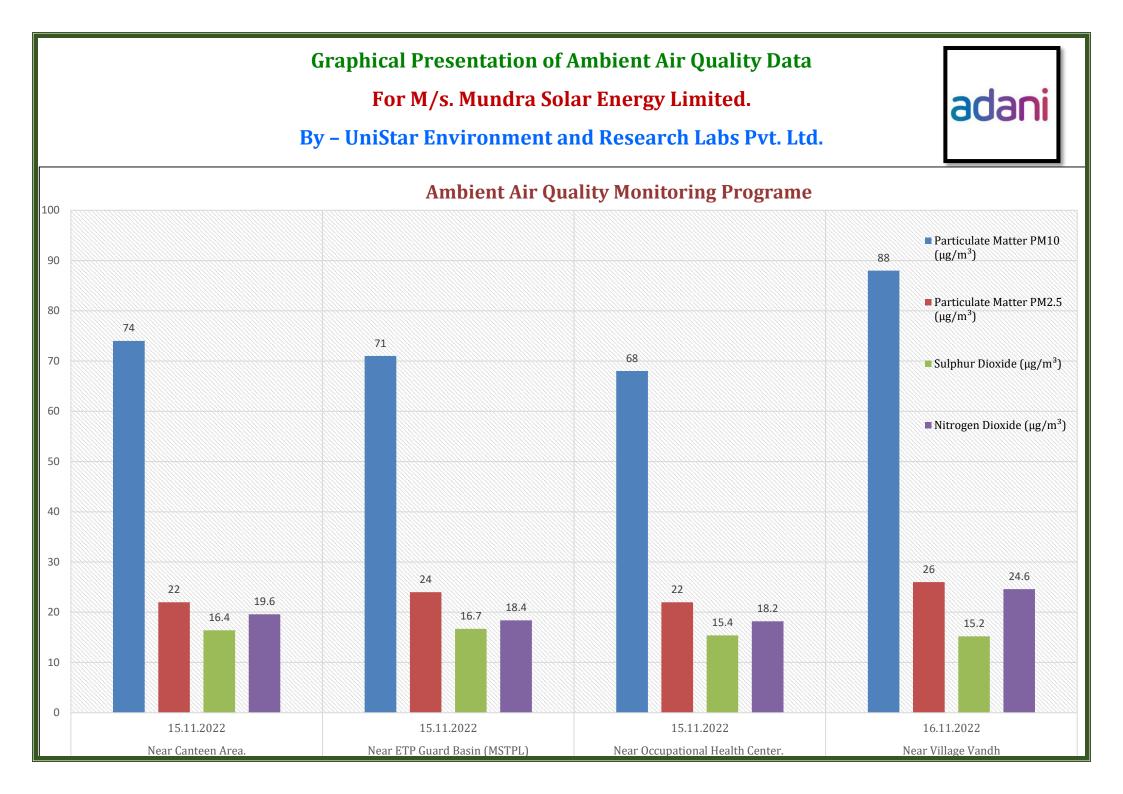
Nikunj D. Patel (Chemist)

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** 



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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,



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### 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.<br>No. | Location within company premises | Noise Le | vel dB(A)  | Permissible<br>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 \*\*\*\*\*\*

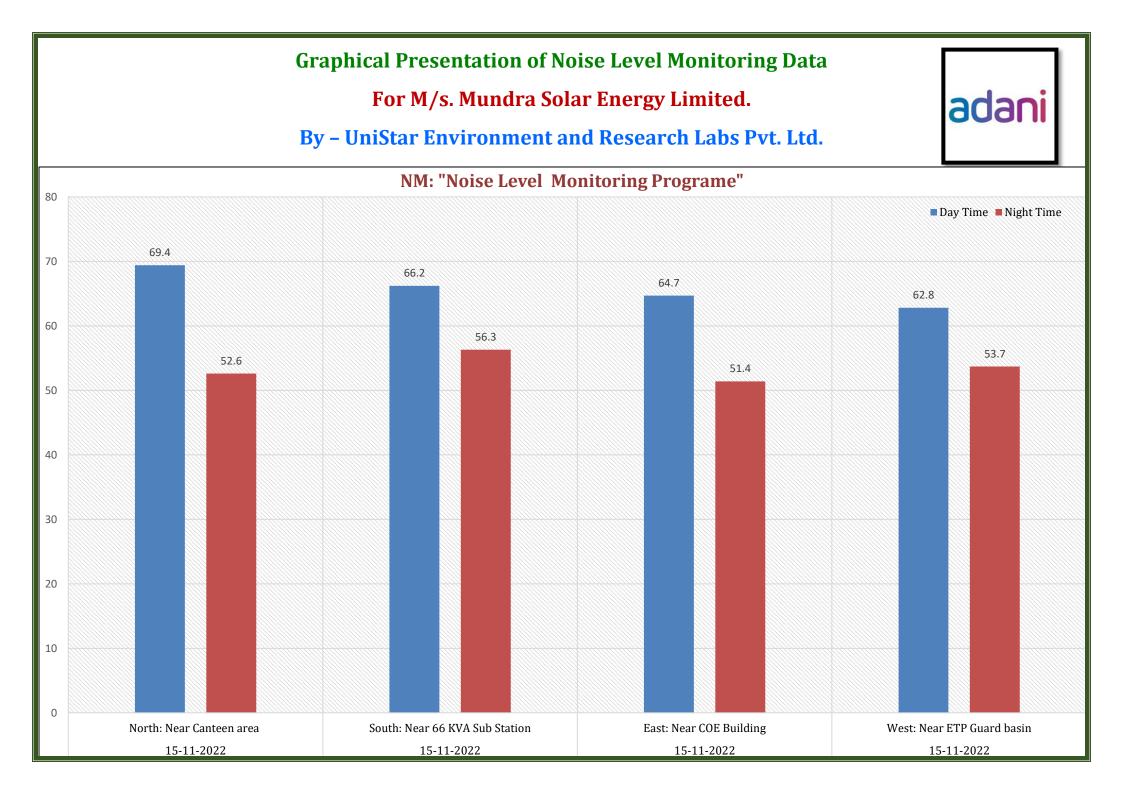
**Checked By:** 

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.



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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.



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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

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### **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><br>Village Vandh & Tunda, Taluka Mundra,<br>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<br>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.<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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#### 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,<br>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.<br>No. | D  | escriptio                | n<br>Environm                 | Unit of<br>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.<br>No. | Test Paramet                                   | ter                      | Unit                          | Result                          | Specific Value<br>(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.



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02/04/2022

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### **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<br>Village Vandh & Tunda, Taluka Mundra,<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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### 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<br>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.<br>No. |  | Description          |                   | Unit of<br>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.<br>No. | Test Para                                      | meter                | Unit              | Result                         | Specific Value<br>(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:** 

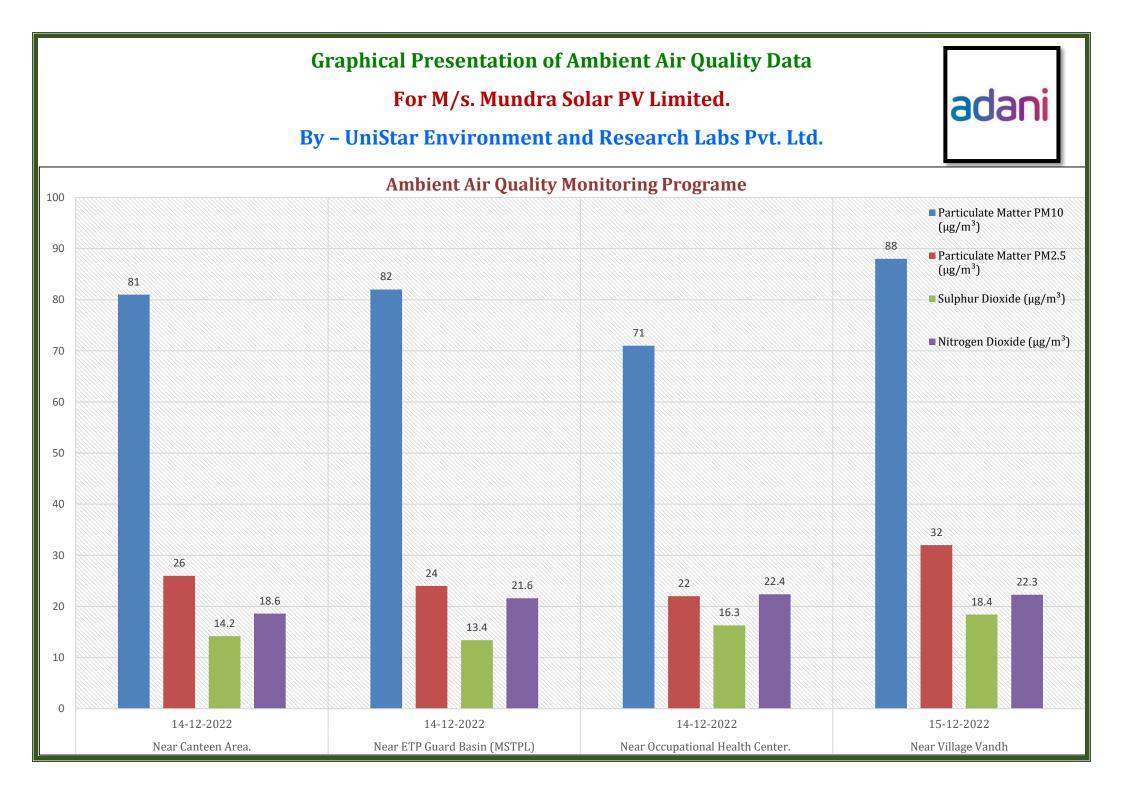
Nikunj D. Patel (Chemist)

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.



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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



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|           |   |   | TEST REPORT   |                               |                        |                |
|-----------|---|---|---|-------------------------------|------------------------|----------------|
| Report N  | lo.   | URC /   | 22/12/006   |                               |                        |                |
| -         |   | <b>Mundra Solar PV Limited</b><br>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<br>Desirable Limit | Unit of<br>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<br>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<br>4500-Cl, G DPD & Colorimetric Method | 4.0 Max                       | mg/L                   | BDL(MDL:0.1)   |

Page No.14

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**TEST REPORT** 

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| Report N   | lo.                         | URC /  | 22/12/006   |  |                        |                |  |
|------------|-----------------------------|--|---|--|------------------------|----------------|--|
|            |                             | M/s. Mundra Solar PV Limited<br>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.<br>No. | Parameters                  |  | Test Method   | As Per IS<br>10500:2012<br>Desirable Limit | Unit of<br>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<br>(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



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| 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,<br>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.<br>No.                 | Parameters              |                               | Test Method   | As Per IS<br>10500:2012<br>Desirable Limit | Unit of<br>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



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### TEST REPORT

### (Microbiology)

| Report No.                    | : | 2/12/MSPL-006   |                      |   |              |  |  |
|-------------------------------|---|---|----------------------|---|--------------|--|--|
| Name & Address of<br>Customer |   | M/s. Mundra Solar PV Limited  | Date Of Report       | : | : 26/12/2022 |  |  |
|                               |   | Village Vandh&Tunda, Taluka Mundra,<br>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.<br>No.                     | Test Parameter        | Test Method                          | Specified Limit<br>as per IS:10500-2012 | Unit of<br>Measurement | Results |  |
| 1                              | Total Bacterial Count | APHA 23 <sup>rd</sup> Ed.2017,9215-C | 100CFU/ml<br>(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)

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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,



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QCI-NABET Accredited EIA Consultant Organization

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**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.<br>No. | Location within company premises | Noise Le | evel dB(A) | Permissible<br>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 \*\*\*\*\*\*

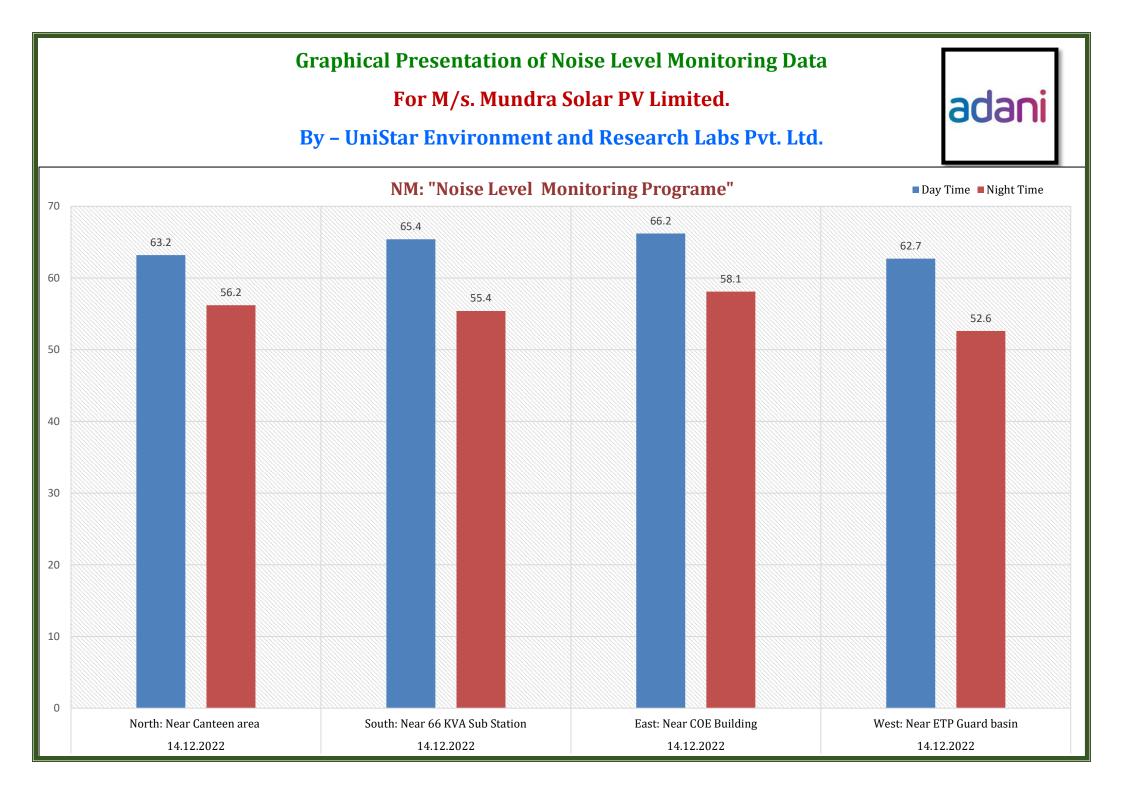
**Checked By:** 

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.



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# **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.



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### 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><br>a & Tunda, Taluka M<br>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<br>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.<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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### 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,<br>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.<br>No. | D   | escriptic           | n<br>Environm       | Unit of<br>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.<br>No. | Test Parame   | ter                 | Unit                | Result                          | Specific Value<br>(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.



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### **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><br>Village Vandh & Tunda, Taluka Mundra,<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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

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### 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<br>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.<br>No.                       |                   | Description   |                                       | Unit of<br>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.<br>No.                       | Test Para         | meter         | Unit                                  | Result                         | Specific Value<br>(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:** 

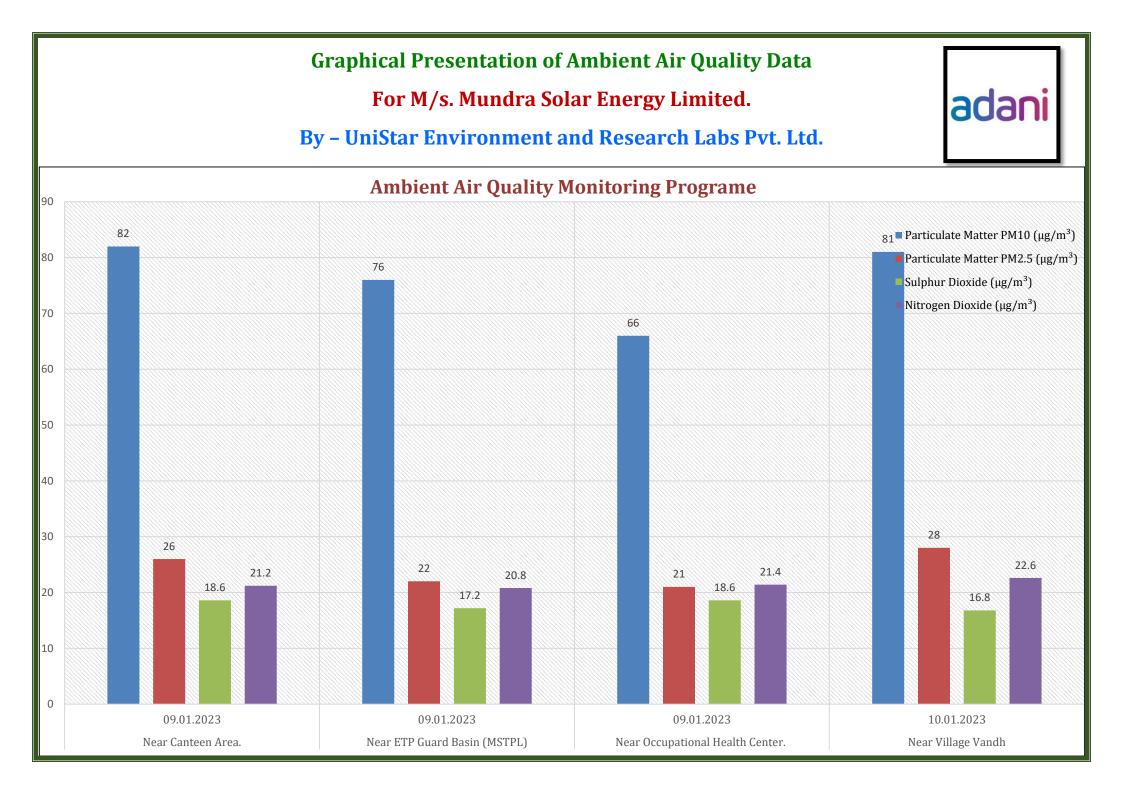
Nikunj D. Patel (Chemist)

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** 



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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.<br>No. | Location within company premises | Noise Le | evel dB(A) | Permissible<br>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 \*\*\*\*\*\*

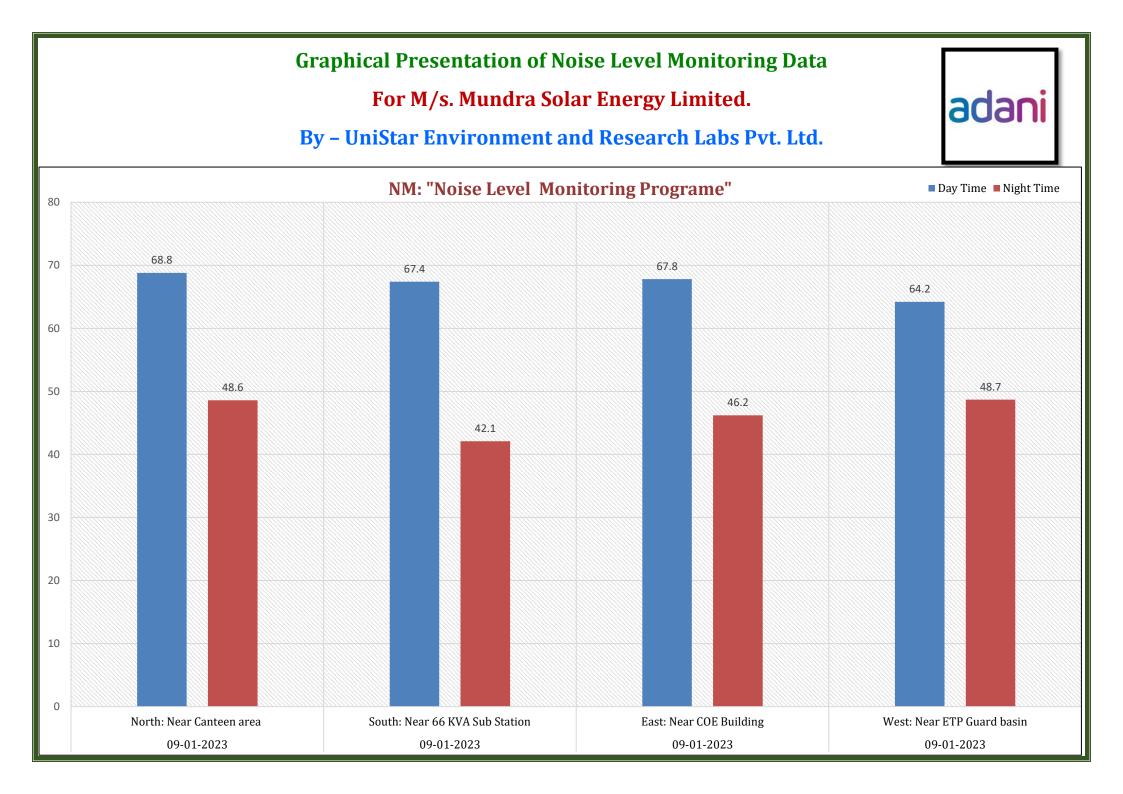
**Checked By:** 

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.



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

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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.



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### **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<br>Village Vandh & Tunda, Taluka Mundra,<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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### 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,<br>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.<br>No.                     | C                            | escriptio           | n<br>Environm       | Unit of<br>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.<br>No.                     | Test Parame                  | ter                 | Unit                | Result                          | Specific Value<br>(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.



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### **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,<br>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<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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



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### 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<br>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.<br>No.      |  | Description   |                   | Unit of<br>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.<br>No.      | Test Parar                                     | meter         | Unit              | Result                                 | Specific Value<br>(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:** 

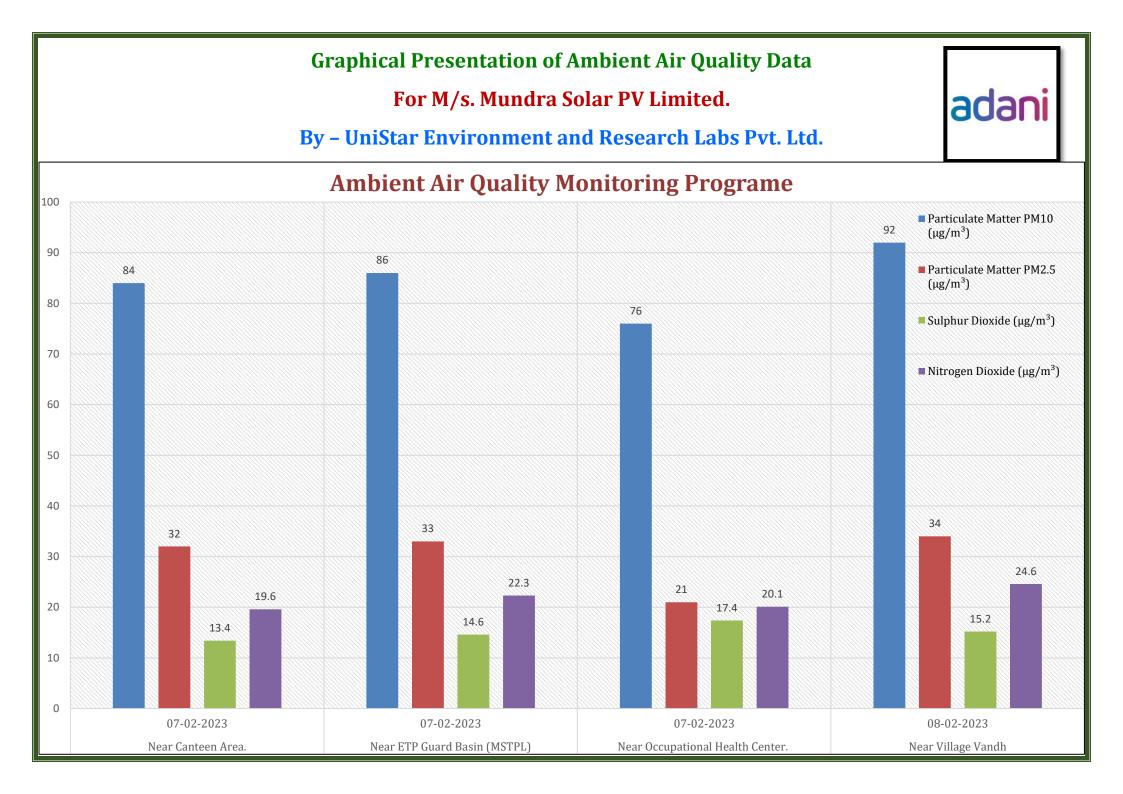
Nikunj D. Patel (Chemist)

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** 



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**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.<br>No. | Location within company premises | Noise Le | evel dB(A) | Permissible<br>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 \*\*\*\*\*\*

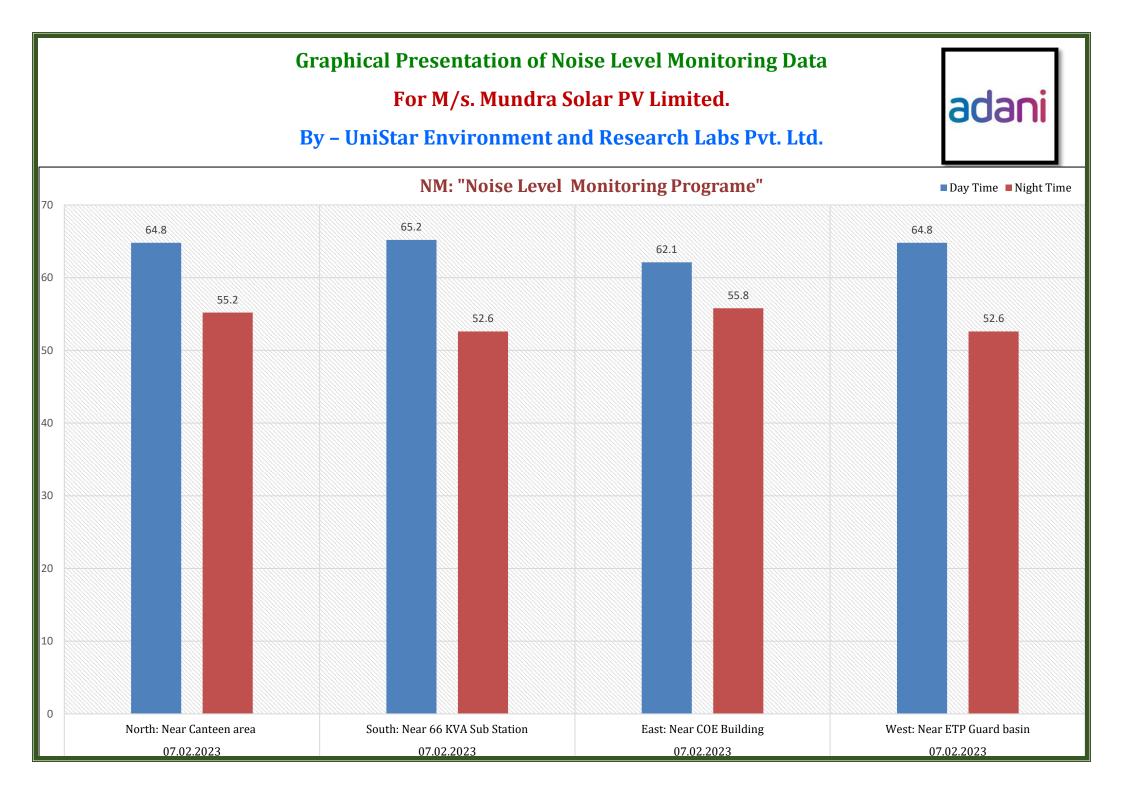
**Checked By:** 

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

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# **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.



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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,<br>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<br>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.<br>No.                 | Description   |   | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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><br><sup>-</sup> unda, Taluka Mundra<br>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.<br>No. | D                            | escriptio           | n<br>Environm   | Unit of<br>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.<br>No. | Test Parame                  | ter                 | Unit  | Result                                   | Specific Value<br>(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><br>lh & Tunda, Taluka M<br>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.<br>No. | Description                                 | Unit of<br>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.<br>No. | Test Parameter                       | Unit  | Result | Specific Value<br>(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<br>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.<br>No. |                                     | Description           |                   | Unit of<br>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.<br>No. | Test Para                           | meter                 | Unit              | Result                                 | Specific Value<br>(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:** 

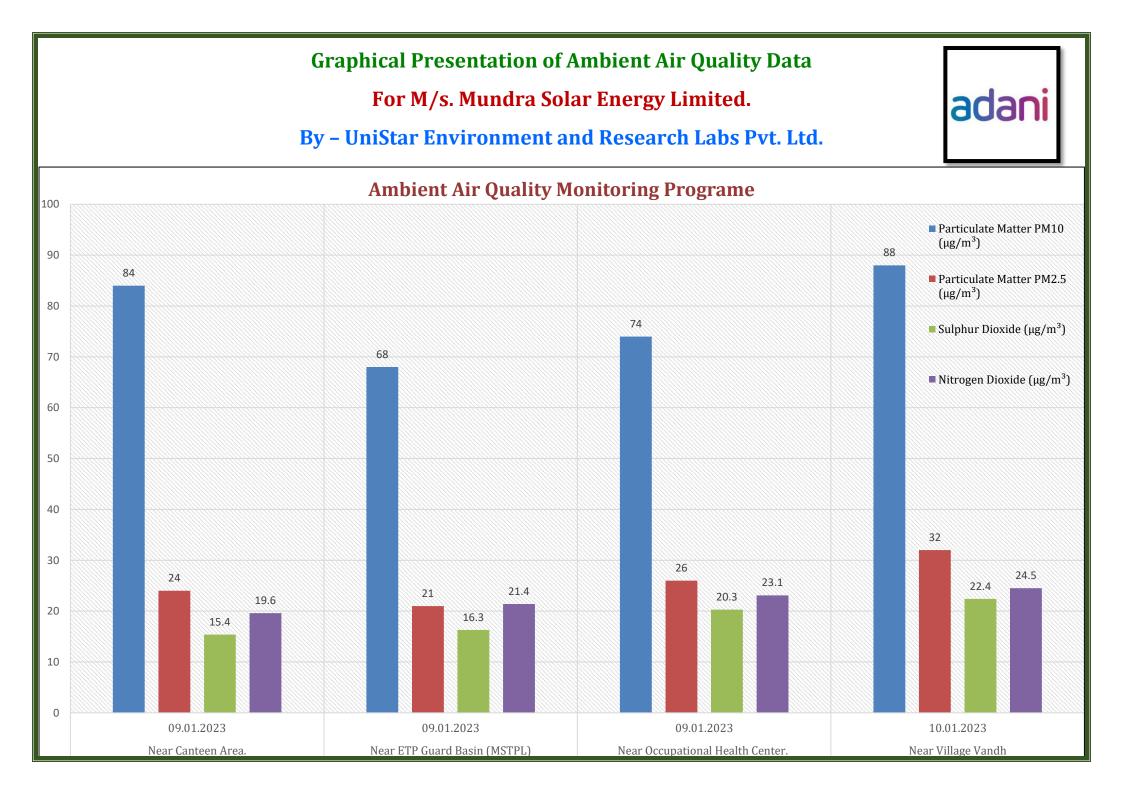
Jaivik S. Tandel (Manager - Operations)

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.<br>No. | Location within company premises | Noise Level dB(A) |            | Permissible<br>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 \*\*\*\*\*\*

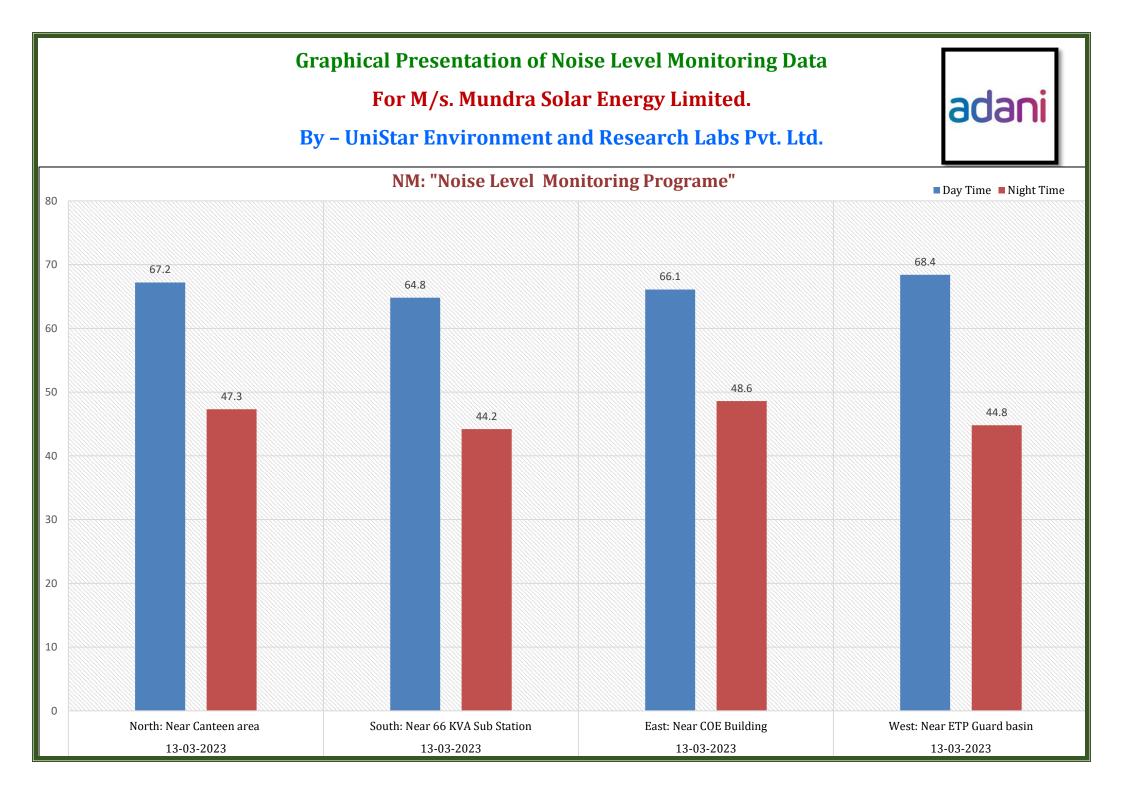
**Checked By:** 

Nikunj D. Patel (Chemist)

Authorized By:

Jaivik S. Tandel (Manager - Operations)

Page No. 26



|      | stipulated prior environmental clearance terms and<br>conditions in soft copies to the regulatory authority<br>concerned, on 1 <sup>st</sup> June and 1 <sup>st</sup> December of each<br>calendar year.   | regularly submitted to MoEF&CC, CPCB |
|------|--|--------------------------------------|
| 109. | Concealing factual data or submission of<br>false/fabricated data and failure to comply with any of<br>the conditions mentioned above may result in<br>withdrawal of this clearance and attract action under<br>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<br>these conditions. The SEIAA reserves the right to<br>stipulate additional conditions, if the same is found<br>necessary.   | Noted & Compliance assured           |
| 113. | The project authorities shall inform the GPCB, Regional<br>Office. MoEF and SEIAA about the date of financial<br>closure and final approval of the project by the<br>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<br>lie with the National Green tribunal, within a period of<br>30 days as prescribed under Section 16 of the National<br>Green Tribunal Act, 2010  | _                                    |
| 116. | Submission of any false or misleading information or<br>data which is material to screening or scoping or<br>appraisal or decision on the application makes this<br>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.



