



GSTIN : 21AAACE6224D1ZE



# Environmental Research and Services (India) Pvt. Ltd.



(An ISO/IEC 17025 : (NABL) Accredited Laboratory, OSPCB Empanelled Laboratory and ISO 9001 : 2015 Certified Company)

Plot No: B-22, Sector-B, Industrial Estate Chandaka, Infocity Road, Bhubaneswar-751024, Odisha  
Tel: +91-9437143248, +91-9937690329, E-mail: ersibbsr@gmail.com

ULR-TC7440180-00000315P

Test Report Format No.: ERSIPL/FM/37

## TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

**Date: 25 Apr 2019**

**Test Report No: ERSIPL/TR/AA/161**

Name and Address of the Customer	:	Dulanga Coal Mine of M/s NTPC Limited in Sundargarh district, Odisha.
Sample Collected by	:	Representative of ERS (I) Pvt. Ltd.
Sample Collected in presence of	:	Representative of Client.
Date of Sampling/Monitoring	:	02-03.04.2019
Sample Received on	:	11.04.2019
Analysis Started on	:	12.04.2019
Analysis Completed on	:	18.04.2019
Method of Sampling	:	As per guidelines for sampling & measurement of notified AAQ parameters (NAAQS 2009)-CPCB
Quantity of Sample	:	01 sample for each parameter
Environment Condition	:	Sunny, Temp-40 <sup>0</sup> C/24 <sup>0</sup> C

### Sample ID. No.

### Locations (Core Zone)

1. ERSIPL/AA/1350
2. ERSIPL/AA/1351
3. ERSIPL/AA/1352
4. ERSIPL/AA/1353

1. Near Site Office (NTPC), Kapurikachhar
2. Near Village Dulanga
3. Near Village Beldihi
4. Near Village Majhapara

Sl. No	Test Parameters	Test method	Unit	Permissible Limit as per NAAQ Standards CPCB Nov-2009	Results			
					ERSIPL/AA/1350	ERSIPL/AA/1351	ERSIPL/AA/1352	ERSIPL/AA/1353
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	µg/m <sup>3</sup>	xx	164.72	271.93	240.70	189.29
2	Particulate Matter (size less than 10 µm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	µg/m <sup>3</sup>	100.0	70.96	81.40	68.52	65.19
3	Particulate Matter (size less than 2.5 µm) or PM 2.5	ERSIPL/SOP/01 Issue No:03, Revision Date: 01.02.2019	µg/m <sup>3</sup>	60.0	27.58	33.73	35.99	34.22
4	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	µg/m <sup>3</sup>	80.0	<6.0	6.04	8.52	6.47
5	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 6): 2006, Reaffirmed -2017	µg/m <sup>3</sup>	80.0	10.38	11.92	14.96	10.67
6	Carbon Monoxide (CO)	By CO Monitor	mg/m <sup>3</sup>	2.0	<1.14	<1.14	<1.14	<1.14

.....END OF TEST REPORT.....

*(Handwritten Signature)*  
**(Authorized Signatory)**  
**S.P. Pattanayak**  
**Tech. Manager**



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Tel: +91-9437143248, +91-9937690329, E-mail: ersibbsr@gmail.com

ULR-TC7440180-00000316P

Test Report Format No.: ERSIPL/FM/37

## TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

Date: 25 Apr 2019

Test Report No: ERSIPL/TR/AA/162

Name and Address of the Customer : Dulanga Coal Mine of M/s NTPC Limited in Sundargarh district, Odisha.  
 Sample Collected by : Representative of ERS (I) Pvt. Ltd.  
 Sample Collected in presence of : Representative of Client.  
 Date of Sampling/Monitoring : 03-04.04.2019  
 Sample Received on : 11.04.2019  
 Analysis Started on : 12.04.2019  
 Analysis Completed on : 18.04.2019  
 Method of Sampling : As per guidelines for sampling & measurement of notified AAQ parameters (NAAQS 2009)-CPCB  
 Quantity of Sample : 01 sample for each parameter  
 Environment Condition : Sunny, Temp-40°C/25°C

### Sample ID. No.

1. ERSIPL/AA/1354
2. ERSIPL/AA/1355
3. ERSIPL/AA/1356
4. ERSIPL/AA/1357

### Locations (Buffer Zone)

1. Near Village Bendrichua
2. Near Village Rengalmunr
3. Near Village Khuntjharua
4. Near Village Kathfali

### TEST FINDINGS:

Sl. No	Test Parameters	Test method	Unit	Permissible Limit as per NAAQ Standards CPCB Nov-2009	Results			
					ERSIPL/AA/1354	ERSIPL/AA/1355	ERSIPL/AA/1356	ERSIPL/AA/1357
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	µg/m <sup>3</sup>	xx	192.73	266.71	181.58	245.90
2	Particulate Matter (size less than 10 µm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	µg/m <sup>3</sup>	100.0	74.60	75.85	69.25	67.34
3	Particulate Matter (size less than 2.5 µm) or PM 2.5	ERSIPL/SOP/01 Issue No:03, Revision Date: 01.02.2019	µg/m <sup>3</sup>	60.0	28.07	33.26	26.09	33.20
4	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	µg/m <sup>3</sup>	80.0	<6.0	7.20	<6.0	8.43
5	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 6): 2006, Reaffirmed -2017	µg/m <sup>3</sup>	80.0	13.76	12.01	9.64	10.09
6	Carbon Monoxide (CO)	By CO Monitor	mg/m <sup>3</sup>	2.0	<1.14	<1.14	<1.14	<1.14

.....END OF TEST REPORT.....

  
 (Authorized Signatory)  
**S.P. Pattanayak**  
 Tech. Manager



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ULR-TC7440180-00000317P

Test Report Format No.: ERSIPL/FM/37

## TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

**Date: 25 Apr 2019**

**Test Report No: ERSIPL/TR/AA/163**

Name and Address of the Customer	:	Dulanga Coal Mine of M/s NTPC Limited in Sundargarh district, Odisha.
Sample Collected by	:	Representative of ERS (I) Pvt. Ltd.
Sample Collected in presence of	:	Representative of Client.
Date of Sampling/Monitoring	:	19-20.04.2019
Sample Received on	:	22.04.2019
Analysis Started on	:	24.04.2019
Analysis Completed on	:	25.04.2019
Method of Sampling	:	IS 5182 : Part 5 : 1975, Reaffirmed 2014
Quantity of Sample	:	01 sample for each parameter
Environment Condition	:	Rainy/Sunny, Temp-38.0 <sup>o</sup> C/23.0 <sup>o</sup> C

### Sample ID. No.

### Locations (Core Zone)

1. ERSIPL/AA/1454
2. ERSIPL/AA/1455
3. ERSIPL/AA/1456
4. ERSIPL/AA/1457

1. Near Site Office (NTPC), Kapurikachhar
2. Near Village Dulanga
3. Near Village Beldihi
4. Near Village Majhapara

Sl. No	Test Parameters	Test method	Unit	Permissible Limit as per NAAQ Standards CPCB Nov-2009	Results			
					ERSIPL/AA/1454	ERSIPL/AA/1455	ERSIPL/AA/1456	ERSIPL/AA/1457
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	µg/m <sup>3</sup>	xx	202.69	210.61	187.67	190.04
2	Particulate Matter (size less than 10 µm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	µg/m <sup>3</sup>	100.0	73.73	79.50	68.97	70.63
3	Particulate Matter (size less than 2.5 µm) or PM 2.5	ERSIPL/SOP/01 Issue No:03, Revision Date: 01.02.2019	µg/m <sup>3</sup>	60.0	28.46	31.93	29.35	27.10
4	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	µg/m <sup>3</sup>	80.0	7.52	6.83	8.27	7.76
5	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part 6): 2006, Reaffirmed -2017	µg/m <sup>3</sup>	80.0	13.24	14.27	10.12	9.75
6	Carbon Monoxide (CO)	By CO Monitor	mg/m <sup>3</sup>	2.0	<1.14	<1.14	<1.14	<1.14

.....END OF TEST REPORT.....

  
(Authorized Signatory)  
**S.P. Pattanayak**  
Tech. Manager

