



GSTIN : 21AAACE6224D1ZE



Environmental Research and Services (India) Pvt. Ltd.

(An ISO/IEC 17025 : 2005 (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: +91-9437021932, +91-9937690329, E-mail: ersibbsr@gmail.com

ULR-TC74402000000027P

Test Report Format No.: ERSIPL/FM/37

TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

Date: 21 Jan 2020

Test Report No: ERSIPL/TR/AA/014

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 : 04-05.01.2020
Sample Received on : 13.01.2020
Analysis Started on : 14.01.2020
Analysis Completed on : 20.01.2020
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 : Rainy/Cloudy

Sample ID. No.

Locations (Core Zone)

1. ERSIPL/AA/2446
2. ERSIPL/AA/2447
3. ERSIPL/AA/2448
4. ERSIPL/AA/2449

1. Near Site Office (NTPC), Kapurikachhar
2. Near Coal Lab
3. Near Work Shop
4. Near Village Dulanga

Sl. No	Test Parameters	Test method	Unit	Permissible Limit as per NAAQ Standards CPCB Nov-2009	Results			
					ERSIPL/AA/2446	ERSIPL/AA/2447	ERSIPL/AA/2448	ERSIPL/AA/2449
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	$\mu\text{g}/\text{m}^3$	xx	183.98	192.23	259.39	230.37
2	Particulate Matter (size less than 10 μm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	$\mu\text{g}/\text{m}^3$	100.0	69.21	74.52	69.62	65.53
3	Particulate Matter (size less than 2.5 μm) or PM 2.5	ERSIPL/SOP/01 Issue No:03, Revision Date: 01.02.2019	$\mu\text{g}/\text{m}^3$	60.0	29.57	35.21	34.65	27.66
4	Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	$\mu\text{g}/\text{m}^3$	80.0	<6.0	7.84	<6.0	7.78
5	Oxides of Nitrogen (NO _x)	IS 5182 (Part 6): 2006, Reaffirmed -2017	$\mu\text{g}/\text{m}^3$	80.0	10.11	12.27	9.99	13.96
6	Carbon Monoxide (CO)*	By CO Monitor	mg/m^3	2.0	<1.14	<1.14	<1.14	<1.14

*-Not covered under NABL Scope


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

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



Environmental Research and Services (India) Pvt. Ltd.

(An ISO/IEC 17025 : 2005 (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: +91-9437021932, +91-9937690329, E-mail: ersibbsr@gmail.com

ULR-TC744020000000028P

Test Report Format No.: ERSIPL/FM/37

TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

Date: 21 Jan 2020

Test Report No: ERSIPL/TR/AA/015

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 : 05-06.01.2020
 Sample Received on : 13.01.2020
 Analysis Started on : 14.01.2020
 Analysis Completed on : 20.01.2020
 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

Sample ID. No.

1. ERSIPL/AA/2450
2. ERSIPL/AA/2451
3. ERSIPL/AA/2452
4. ERSIPL/AA/2453

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/2450	ERSIPL/AA/2451	ERSIPL/AA/2452	ERSIPL/AA/2453
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	$\mu\text{g}/\text{m}^3$	xx	185.12	194.64	275.69	249.29
2	Particulate Matter (size less than 10 μm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	$\mu\text{g}/\text{m}^3$	100.0	73.80	68.44	76.47	64.81
3	Particulate Matter (size less than 2.5 μm) or PM 2.5	ERSIPL/SOP/01 Issue No:03, Revision Date: 01.02.2019	$\mu\text{g}/\text{m}^3$	60.0	24.83	28.79	26.81	33.84
4	Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	$\mu\text{g}/\text{m}^3$	80.0	6.33	7.77	6.41	6.02
5	Oxides of Nitrogen (NO _x)	IS 5182 (Part 6): 2006, Reaffirmed -2017	$\mu\text{g}/\text{m}^3$	80.0	12.54	14.64	11.28	12.16
6	Carbon Monoxide (CO)*	By CO Monitor	mg/m^3	2.0	<1.14	<1.14	<1.14	<1.14

*-Not covered under NABL Scope

(Authorized Signatory)
 Tech. Manager



GSTIN : 21AAACE6224D1ZE



Environmental Research and Services (India) Pvt. Ltd.

(An ISO/IEC 17025 : 2005 (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: +91-9437021932, +91-9937690329, E-mail: ersibbsr@gmail.com

ULR-TC74402000000029P

Test Report Format No.: ERSIPL/FM/37

TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

Date: 21 Jan 2020

Test Report No: ERSIPL/TR/AA/016

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 : 16-17.01.2020
Sample Received on : 20.01.2020
Analysis Started on : 20.01.2020
Analysis Completed on : 21.01.2020
Method of Sampling : IS 5182 : Part 5 : 1975, Reaffirmed 2014
Quantity of Sample : 01 sample for each parameter
Environment Condition : Sunny

Sample ID. No.

Locations (Core Zone)

1. ERSIPL/AA/2480
2. ERSIPL/AA/2481
3. ERSIPL/AA/2482
4. ERSIPL/AA/2483

1. Near Site Office (NTPC), Kapurikachhar
2. Near Coal Lab
3. Near Work Shop
4. Near Village Dulanga

Sl. No	Test Parameters	Test method	Unit	Permissible Limit as per NAAQ Standards CPCB Nov-2009	Results			
					ERSIPL/AA/2480	ERSIPL/AA/2481	ERSIPL/AA/2482	ERSIPL/AA/2483
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	$\mu\text{g}/\text{m}^3$	xx	171.83	223.25	177.50	218.09
2	Particulate Matter (size less than 10 μm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	$\mu\text{g}/\text{m}^3$	100.0	67.97	85.62	75.49	72.28
3	Particulate Matter (size less than 2.5 μm) or PM 2.5	ERSIPL/SOP/01 Issue No:03, Revision Date: 01.02.2019	$\mu\text{g}/\text{m}^3$	60.0	25.99	36.94	39.38	34.02
4	Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	$\mu\text{g}/\text{m}^3$	80.0	8.76	7.88	7.08	9.32
5	Oxides of Nitrogen (NO _x)	IS 5182 (Part 6): 2006, Reaffirmed -2017	$\mu\text{g}/\text{m}^3$	80.0	14.33	11.85	11.47	18.18
6	Carbon Monoxide (CO)*	By CO Monitor	mg/m^3	2.0	<1.14	<1.14	<1.14	<1.14

*-Not covered under NABL Scope

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

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

