



Environmental Research and Services (India) Pvt. Ltd.



(An ISO/ICE 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-TC7440180-00000272P

Test Report Format No.: ERSIPL/FM/37

TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

Date: 25 Mar 2019

Test Report No: ERSIPL/TR/AA/140

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	:	03-04.03.2019
Sample Received on	:	14.03.2019
Analysis Started on	:	14.03.2019
Analysis Completed on	:	21.03.2019
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	:	Cloudy/Rainy, Temp-29°C/19°C

Sample ID. No.

Locations (Core Zone)

1. ERSIPL/AA/1179
2. ERSIPL/AA/1180
3. ERSIPL/AA/1181
4. ERSIPL/AA/1182

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/1179	ERSIPL/AA/1180	ERSIPL/AA/1181	ERSIPL/AA/1182
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	µg/m ³	xx	201.98	194.63	178.62	238.45
2	Particulate Matter (size less than 10 µm) or PM 10	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	µg/m ³	100.0	71.52	66.50	67.24	81.67
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 ³	60.0	33.38	30.95	28.10	36.21
4	Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	µg/m ³	80.0	<6.0	7.85	8.66	<6.0
5	Oxides of Nitrogen (NO _x)	IS 5182 (Part 6): 2006, Reaffirmed -2017	µg/m ³	80.0	10.94	13.96	14.59	9.46
6	Carbon Monoxide (CO)	By CO Monitor	mg/m ³	2.0	<1.14	<1.14	<1.14	<1.14


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



GSTIN : 21AAACE6224D1ZE



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ULR-TC7440180-00000273P

Test Report Format No.: ERSIPL/FM/37

TEST REPORT (AMBIENT AIR)

Pg No: 1 of 1

Date: 25 Mar 2019

Test Report No: ERSIPL/TR/AA/141

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 : 04-05.03.2019
Sample Received on : 14.03.2019
Analysis Started on : 14.03.2019
Analysis Completed on : 21.03.2019
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 : Cloudy/Rainy, Temp-33⁰C/20⁰C

Sample ID. No.

1. ERSIPL/AA/1183
2. ERSIPL/AA/1184
3. ERSIPL/AA/1185
4. ERSIPL/AA/1186


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/1183	ERSIPL/AA/1184	ERSIPL/AA/1185	ERSIPL/AA/1186
1	Suspended Particulate Matter (SPM)	IS: 5182 (Part 4)- 1999, Reaffirmed 2014, Gravimetric Method	µg/m ³	xx	212.98	181.60	189.33	203.98
2	Particulate Matter (size less than 10 µm) or PM ₁₀	IS 5182 (Part 23): 2006, Reaffirmed -2017, Gravimetric Method	µg/m ³	100.0	69.51	76.55	65.23	83.62
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 ³	60.0	27.45	30.52	27.08	32.41
4	Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, Reaffirmed-2017, Improved West & Gaeke Method	µg/m ³	80.0	6.51	9.56	7.03	9.50
5	Oxides of Nitrogen (NO _x)	IS 5182 (Part 6): 2006, Reaffirmed -2017	µg/m ³	80.0	11.45	10.09	9.28	11.37
6	Carbon Monoxide (CO)	By CO Monitor	mg/m ³	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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Test Report Format No.: ERSIPL/FM/37

TEST REPORT (AMBIENT AIR)

Pg-1/1

Date: 25 Mar 2019

Test Report No: ERSIPL/TR/AA/140-141T

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 : 03-05.03.2019
Sample Received on : 14.03.2019
Analysis Started on : 14.03.2019
Analysis Completed on : 21.03.2019
Method of Sampling : IS 5182 : Part 5 : 1975, Reaffirmed 2014
Quantity of Sample : 01 sample for each parameter

Sample ID. No.

1. ERSIPL/AA/1179
2. ERSIPL/AA/1180
3. ERSIPL/AA/1181
4. ERSIPL/AA/1182
5. ERSIPL/AA/1183
6. ERSIPL/AA/1184
7. ERSIPL/AA/1185
8. ERSIPL/AA/1186

Locations


1. Near Site Office (NTPC), Kapurikachhar
2. Near Village Dulanga
3. Near Village Beldihi
4. Near Village Majhapara
5. Near Village Bendrichua
6. Near Village Rengalmunr
7. Near Village Khuntjharua
8. Near Village Kathfali

TEST FINDINGS:

Place of Monitoring	Result of Parameters Analyzed				
	Mercury (Hg) (in $\mu\text{g}/\text{m}^3$)	Arsenic (As) (in ng/m^3)	Nickel (Ni) (in ng/m^3)	Cadmium (Cd) (in $\mu\text{g}/\text{m}^3$)	Chromium (Cr) (in $\mu\text{g}/\text{m}^3$)
ERSIPL/AA/1179	ND	ND	ND	ND	ND
ERSIPL/AA/1180	ND	ND	ND	ND	ND
ERSIPL/AA/1181	ND	ND	ND	ND	ND
ERSIPL/AA/1182	ND	ND	ND	ND	ND
ERSIPL/AA/1183	ND	ND	ND	ND	ND
ERSIPL/AA/1184	ND	ND	ND	ND	ND
ERSIPL/AA/1185	ND	ND	ND	ND	ND
ERSIPL/AA/1186	ND	ND	ND	ND	ND
Permissible Limit	-	06	20.0	-	-

Note: ND = Not Detected

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


(Authorized Signatory)
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Tech. Manager

