

SAMPLE

QUANTITY/PACKING

HDD-272, Phase III - Near JP Chowk Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099 Ph: 0771 - 4027777 | Email: ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | REPORT I | | UES/TR/21-2 UES/21-22/A | | 262 210839-010846 |
|---|--------------------------------|---|--------------|--|-------|----------------------------------|
| | | DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 03/01/2022 to 31/01/2022 04/01/2022 to 01/02/2022 | | |
| | | | | | | |
| | | | | END: 02/02/2022 | | |
| | | | | | | SAMPLE D |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | | CUSTOMER RE | F. NO. & DATE | | /SRV/2122/0058, ::30-SEP-2021 |
| SAMPLING LOCATION | R & R COLONY, CHANDAN NA | AGAR (BUFFE | R ZONE) | | L | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE (| COLLECTED BY | LABORATORY CH | EMIST | • |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | - | | | - | |

FILTER PAPER (PM10): 1X1 NO., FILTER PAPER (PM2.5): 1X1 NO.

SO2: 30MLX1 NO. PVC BOTTLE, NO2: 30MLX1 NO. PVC BOTTLE

RUBBER BLADDER: 1X1 NO.

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|--|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM_{10}) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 . | | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m ³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 74 | 28 | 12 | 20 | 0.9 | N.D. |
| 07.01.2022 | 68 | 22 | 08 | 22 | 0.8 | N.D. |
| 11.01.2022 | 54 | 28 | 06 | 26 | 1.2 | N.D. |
| 14.01.2022 | 75 | 22 | 10 | 20 | 0.8 | N.D. |
| 17.01.2022 | 66 | 26 | 16 | 28 | 0.6 | N.D. |
| 24.01.2022 | 72 | 20 | 12 | 22 | 0.9 | N.D. |
| 28.01.2022 | 68 | 25 | 14 | 28 | 1.1 | N.D. |
| 31.01.2022 | 72 | 22 | 12 | 26 | 0.8 | N.D. |

The use of the report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer. This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02 **AUTHORIZED SIGNATORY**

02

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer TO, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST - NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT. - PALAMU (JH)

| REPORT NO | UES/TR/21-22/06263 | | | |
|------------------|------------------------------|-----------------|--|--|
| LAB REF NO | UES/21-22/AAQM/010847-010854 | | | |
| DATE OF SAMPLING | 03/01/2022 to 31 | /01/2022 | | |
| DATE OF RECEIPT | 04/01/2022 to 01 | /02/2022 | | |
| DATE OF REPORT | 02/02/2022 | | | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 | | |

| | | SAMPLE 1 | DETAILS | | | |
|----------------------------|---|---------------|--------------|---------------|--|---|
| MONITORING FOR | AMBIENT AIR QUALITY M | ONITORING | CUSTOMER RE | F. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 | |
| SAMPLING LOCATION | KATHAUTIYA VILLAGE (BU | FFER ZONE) | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE | COLLECTED BY | LABORATORY CI | HEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | CE | | • | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1 SO ₂ : 30MLX1 NO. PVC BO RUBBER BLADDER: 1X1 N | OTTLE, NO2: 3 | 7 77 | | N. | • |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|----------------------------|--------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ µg/m ³ | РМ _{2.5} µg/m³ | SO₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 78 | 22 | 12 | 28 | 0.9 | N.D. |
| 07.01.2022 | 70 | 28 | 10 | 22 | 0.4 | N.D. |
| 11.01.2022 | 76 | 24 | 08 | 24 | 0.8 | N.D. |
| 14.01.2022 | 62 | 30 | 14 | 20 | 0.2 | N.D. |
| 17.01.2022 | 78 | 34 | 12 | 26 | 0.9 | N.D. |
| 24.01.2022 | 70 | 30 | 16 | 22 | 0.4 | N.D. |
| 28.01.2022 | 68 | 28 | 12 | 24 | 0.8 | N.D. |
| 31.01.2022 | 64 | 24 | 18 | 28 | 0.6 | N.D. |

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer. This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02/02 **AUTHORIZED SIGNATORY**

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address of The Customer

TO,

HINDALCO INDUSTRIES LIMITED,

KATHAUTIA OPEN CAST COAL MINES,

POST – NAUDIHA, P.S. PANDWA,

DALTONGANJ, DISTT. - PALAMU (JH)

| REPORT NO | UES/TR/21-22/06264 | | | |
|------------------|------------------------------|-----------------|--|--|
| LAB REF NO | UES/21-22/AAQM/010855-010862 | | | |
| DATE OF SAMPLING | 03/01/2022 to 31 | /01/2022 | | |
| DATE OF RECEIPT | 04/01/2022 to 01/02/2022 | | | |
| DATE OF REPORT | 02/02/2022 | | | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 | | |

| | SI | AMPLE I | DETAILS | | |
|----------------------------|---|--|--------------|---------------|--|
| MONITORING FOR | AMBIENT AIR QUALITY MONITOR | RING | CUSTOMER REF | T. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 |
| SAMPLING LOCATION | BATSARA VILLAGE (BUFFER ZON | E) | | | - |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY LABORATORY CHE | | CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | K. | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 NO SO ₂ : 30MLX1 NO. PVC BOTTLE, RUBBER BLADDER: 1X1 NO. | The last of the state of the st | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|--|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM_{10}) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 68 | 28 | 10 | 20 | 1.2 | N.D. |
| 07.01.2022 | 74 | 25 | 14 | 28 | 1.1 | N.D. |
| 11.01.2022 | 68 | 34 | 18 | 22 | 1.0 | N.D. |
| 14.01.2022 | 72 | 22 | 12 | 24 | 0.9 | N.D. |
| 17.01.2022 | 68 | 28 | 06 | 28 | 0.5 | N.D. |
| 24.01.2022 | 56 | 30 | 08 | 22 | 0.8 | N.D. |
| 28.01.2022 | 52 | 26 | 14 | 26 | 0.7 | N.D. |
| 31.01.2022 | 68 | 32 | 10 | 28 | 0.9 | N.D. |

Terms & conditions

> The report for publication, arbitration or as legal dispute is forbidden.

The report for publication, arbitration or as legal dispute is forbidoen.
 Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

OF THE STATE OF TH

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02/02

AUTHORIZED SIGNATORY

REVIEWED BY -----End of the test report



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer TO, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST - NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT. - PALAMU (JH)

| REPORT NO | UES/TR/21-22/06265 | | | | |
|------------------|------------------------------|-----------------|--|--|--|
| LAB REF NO | UES/21-22/AAQM/010863-010870 | | | | |
| DATE OF SAMPLING | 03/01/2022 to 31/01/2022 | | | | |
| DATE OF RECEIPT | 04/01/2022 to 01/02/2022 | | | | |
| DATE OF REPORT | 02/02/2022 | | | | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 | | | |

| | | SAMPLE DET | AILS | | |
|----------------------------|--|-------------|------------|---------------|--|
| MONITORING FOR | AMBIENT AIR QUALITY MONIT | TORING CU | ISTOMER RE | F. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 |
| SAMPLING LOCATION | SIKKA VILLAGE (BUFFER ZONE | E) | | | • |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLL | ECTED BY | LABORATORY CI | HEMIST |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 I SO ₂ : 30MLX1 NO. PVC BOTTL RUBBER BLADDER: 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|--|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM10) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 . | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 70 | 22 | 18 | 28 | 1.0 | N.D. |
| 07.01.2022 | 74 | 26 | 12 | 22 | 0.9 | N.D. |
| 11.01.2022 | 68 | 24 | 08 | 26 | 0.2 | N.D. |
| 14.01.2022 | 58 | 28 | 16 | 25 | 0.8 | N.D. |
| 17.01.2022 | 74 | 32 | 08 | 24 | 1.5 | N.D. |
| 24.01.2022 | 62 | 20 | 12 | 28 | 1.2 | N.D. |
| 28.01.2022 | 58 | 26 | 18 | 22 | 0.9 | N.D. |
| 31.01.2022 | 64 | 28 | 12 | 26 | 0.4 | N.D. |

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02 **AUTHORIZED SIGNATORY**

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer TO, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST - NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT. - PALAMU (JH)

| REPORT NO | UES/TR/21-22/062 | 66 |
|------------------|-------------------|-----------------|
| LAB REF NO | UES/21-22/AAQM/0 | 10871-010878 |
| DATE OF SAMPLING | 03/01/2022 to 31 | /01/2022 |
| DATE OF RECEIPT | 04/01/2022 to 01 | /02/2022 |
| DATE OF REPORT | 02/02/2022 | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 |

| | | SAMPLE 1 | DETAILS | 4-712 1 16 | | |
|----------------------------|---|----------|--------------|---|--|--|
| MONITORING FOR | AMBIENT AIR QUALITY MONIT | ORING | CUSTOMER REI | F. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 | |
| SAMPLING LOCATION | MINES OFFICE NEAR VTC (CO | RE ZONE) | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE | COLLECTED BY | LABORATORY CI | HEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | ••••••••••••••••••••••••••••••••••••••• | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 N SO ₂ : 30MLX1 NO. PVC BOTTLI RUBBER BLADDER: 1X1 NO. | | | | 1, | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|--|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM10) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------|--------------------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO₂ μg/m³ | NO ₂ μg/m ³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 64 | 24 | 12 | 24 | 1.0 | N.D. |
| 07.01.2022 | 62 | 26 | 14 | 28 | 0.8 | N.D. |
| 11.01.2022 | 58 | 22 | 18 | 20 | 1.2 | N.D. |
| 14.01.2022 | 66 | 28 | 10 | 24 | 1.4 | N.D. |
| 17.01.2022 | 72 | 26 | 12 | 28 | 0.9 | N.D. |
| 24.01.2022 | 68 | 22 | 18 | 22 | 1.0 | N.D. |
| 28.01.2022 | 64 | 28 | 12 | 28 | 0.9 | N.D. |
| 31.01.2022 | 62 | 20 | 16 | 22 | 1.4 | N.D. |

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

TO,
HINDALCO INDUSTRIES LIMITED,
KATHAUTIA OPEN CAST COAL MINES,
POST – NAUDIHA, P.S. PANDWA,
DALTONGANJ, DISTT. - PALAMU (JH)

| REPORT NO | UES/TR/21-22/062 | 68 |
|------------------|-------------------|-----------------|
| LAB REF NO | UES/21-22/AAQM/0 | 10879-010886 |
| DATE OF SAMPLING | 03/01/2022 to 31 | /01/2022 |
| DATE OF RECEIPT | 04/01/2022 to 01 | /02/2022 |
| DATE OF REPORT | 02/02/2022 | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 |

| | | SAMPLE | DETAILS | | |
|----------------------------|--|--------|--------------|---------------|--|
| MONITORING FOR | AMBIENT AIR QUALITY MONI | TORING | CUSTOMER RE | F. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 |
| SAMPLING LOCATION | NEAR MAIN GATE (CORE ZONE |) | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE | COLLECTED BY | LABORATORY C | HEMIST |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 SO ₂ : 30MLX1 NO. PVC BOTTI RUBBER BLADDER: 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|--|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ μg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 72 | 28 | 16 | 22 | 0.7 | N.D. |
| 07.01.2022 | 68 | 26 | 12 | 28 | 0.8 | N.D. |
| 11.01.2022 | 76 | 30 | 18 | 26 | 1.0 | N.D. |
| 14.01.2022 | 64 | 34 | 12 | 20 | 1.2 | N.D. |
| 17.01.2022 | 60 | 28 | 16 | 28 | 0.8 | N.D. |
| 24.01.2022 | 78 | 34 | 10 | 25 | 1.4 | N.D. |
| 28.01.2022 | 66 | 22 | 18 | 24 | 1.6 | N.D. |
| 31.01.2022 | 72 | 36 | 14 | 22 | 0.8 | N.D. |

Terms & conditions

> The report for publication, arbitration or as legal dispute is forbidden.

> Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

Find of the test year



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer TO, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST - NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT.- PALAMU (JH)

| REPORT NO | UES/TR/21-22/062 | 68 |
|------------------|-------------------|-----------------|
| LAB REF NO | UES/21-22/AAQM/0 | 10887-010894 |
| DATE OF SAMPLING | 03/01/2022 to 31 | /01/2022 |
| DATE OF RECEIPT | 04/01/2022 to 01 | /02/2022 |
| DATE OF REPORT | 02/02/2022 | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 |

| | S | AMPLE D | ETAILS | | |
|----------------------------|--|---------------------|------------------------------|--------------------|--|
| MONITORING FOR | AMBIENT AIR QUALITY MONITO | ORING | CUSTOMER RE | F. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 |
| SAMPLING LOCATION | NEAR DG STACK(CORE ZONE) | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 NO SO ₂ : 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO. | | 317 AMMARYAN MARKA - MARKATA | | 1 |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|--|--|----------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM10) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------------------------------|--------------------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ μg/m ³ | NO ₂ μg/m ³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 74 | 22 | 12 | 24 | 0.9 | N.D. |
| 07.01.2022 | 60 | 26 | 14 | 22 | 0.8 | N.D. |
| 11.01.2022 | 64 | 28 | 18 | 24 | 1.2 | N.D. |
| 14.01.2022 | 78 | 22 | 16 | 20 | 0.9 | N.D. |
| 17.01.2022 | 64 | 24 | 12 | 26 | 1.4 | N.D. |
| 24.01.2022 | 60 | 28 | 10 | 22 | 0.7 | N.D. |
| 28.01.2022 | 58 | 22 | 16 | 28 | 0.6 | N.D. |
| 31.01.2022 | 66 | 30 | 18 | 30 | 0.4 | N.D. |

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Name & Address Of The Customer TO, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST - NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT. - PALAMU (JH)

| REPORT NO | UES/TR/21-22/062 | 69 |
|------------------|-------------------|-----------------|
| LAB REF NO | UES/21-22/AAQM/0 | 10895-010902 |
| DATE OF SAMPLING | 03/01/2022 to 31 | /01/2022 |
| DATE OF RECEIPT | 04/01/2022 to 01 | /02/2022 |
| DATE OF REPORT | 02/02/2022 | |
| DATE OF ANALYSIS | START: 05/01/2022 | END: 02/02/2022 |

| | | SAMPLE | DETAILS | reservation is a | and the second second | |
|----------------------------|--|--------------------------------|-------------|------------------|--|--|
| MONITORING FOR | AMBIENT AIR QUALITY MONI | TORING | CUSTOMER RE | F. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 | |
| SAMPLING LOCATION | NEAR SUBSTATION (CORE ZON | E) | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY LABORATORY | | LABORATORY CI | CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 SO ₂ : 30MLX1 NO. PVC BOTTI RUBBER BLADDER: 1X1 NO. | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 . | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
| 03.01.2022 | 76 | 22 | 12 | 24 | 0.6 | N.D. |
| 07.01.2022 | 62 | 38 | 10 | 22 | 0.8 | N.D. |
| 11.01.2022 | 68 | 26 | 14 | 26 | 0.9 | N.D. |
| 14.01.2022 | 64 | 28 | 10 | 20 | 0.7 | N.D. |
| 17.01.2022 | 76 | 34 | 18 | 26 | 1.2 | N.D. |
| 24.01.2022 | 62 | 30 | 14 | 24 | 0.8 | N.D. |
| 28.01.2022 | 88 | 36 | 12 | 22 | 0.6 | N.D. |
| 31.01.2022 | 60 | 30 | 10 | 24 | 0.2 | N.D. |

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden. Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Custon | nor | REPORT NO | UES/TR/21-22/06270 UES/21-22/FE/010903 | | |
|--|-------------------------|--------------------------|--|-----------------|--|
| To, | | LAB REF NO | | | |
| HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | DATE OF SAMPLING | 27/01/2022 | | |
| | | DATE OF RECEIPT | 28/01/2022 | | |
| | | DATE OF REPORT | 02/02/2022 | | |
| | | DATE OF ANALYSIS | START: 28/01/2022 | END: 02/02/2022 | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 | | |
| SAMPLING LOCATION | MINING PHASE PIT "A" | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | BY LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 1 | 0 INCH): 1X1 NO. | | | |

| | TEST REPORT | | | | | |
|------------|---|-------|--------|--|-------------------|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE | |
| 1 | Total Suspended Particulate Matter (as SPM) | µg/m³ | 316 | 500 | EPA Method IO-2.1 | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The use of the report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

REVIEWED BY

ForULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Custon | ner | REPORT NO | UES/TR/21-22/06271 | | | | |
|--|-------------------------|---|--------------------|--|-----------------|--|--|
| To, | | LAB REF NO | | UES/21-22/FE/010904 | | | |
| HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT | | /01/2022 | | | |
| | | | | 28/01/2022 | | | |
| | | | | 02/02/2022 | | | |
| | | DATE OF ANALYSIS | START: 28/01/ | | END: 02/02/2022 | | |
| | 1 - 1 - Pieus | SAMPLE DETAILS | | | | | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & | | & K/PO/SRV/2122/0058 DATE:30-SEP-2021 | | | |
| SAMPLING LOCATION | PIT "B" | | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LAE | BORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | *************************************** | | | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 1 | 0 INCH): 1X1 NO. | | | | | |

| | TEST REPORT | | | | |
|------------|---|-------|--------|--|-------------------|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE |
| 1 | Total Suspended Particulate Matter (as SPM) | μg/m³ | 288 | 500 | EPA Method IO-2.1 |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

THE ROLL TO SERVICE AND ADDRESS OF THE PARTY OF THE PARTY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Custon | ner | REPORT NO | UES/TR/21-22/06272 UES/21-22/FE/010905 | | |
|--|-------------------------|--------------------------|---|-----------------|--|
| To, | | LAB REF NO | | | |
| HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | DATE OF SAMPLING | 27/01/2022 | | |
| | | DATE OF RECEIPT | 28/01/2022 | | |
| | | DATE OF REPORT | 02/02/2022 | | |
| | | DATE OF ANALYSIS | START: 28/01/2022 | END: 02/02/2022 | |
| 70-20-0 | | SAMPLE DETAILS | | | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | & K/PO/SRV/2122/0058 DATE: 30-SEP-2021 | | |
| SAMPLING LOCATION | PIT "C" | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIS | 1 | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | 1 | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 1 | 0 INCH): 1X1 NO. | | | |

| | TEST REPORT | | | | | | | |
|------------|---|-------|--------|--|-------------------|--|--|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE | | | |
| 1 | Total Suspended Particulate Matter (as SPM) | μg/m³ | 416 | 500 | EPA Method IO-2.1 | | | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

CO SECTION OF THE PROPERTY OF

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | REPORT NO | UES/TR/21-22/06273 UES/21-22/FE/010906 | | | |
|---|---|---|--|----------------------------------|--|--|
| | | LAB REF NO | | | | |
| | | DATE OF SAMPLING | 27/ | 01/2022 | | |
| | | DATE OF RECEIPT | | 28/01/2022 | | |
| | | DATE OF REPORT | 02/02/2022 | | | |
| | | DATE OF ANALYSIS | STA | RT:28/01/2022 | END: 02/02/2022 | |
| | | SAMPLE DETAILS | | | The state of the s | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | | K/PO/SRV/2122/ DATE:30-SEP-20 | | |
| SAMPLING LOCATION | DUMP YARD EXTERNAL | | | | | |
| DURATION OF SAMPLING | 24 HOURS | 24 HOURS SAMPLE COLLECTED BY LABORATORY CHEMIST | | | 7 | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | A | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 10 INCH): 1X1 NO. | | | | | |

| | TEST REPORT | | | | | | |
|------------|---|-------|--------|--|-------------------|--|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE | | |
| 1 | Total Suspended Particulate Matter (as SPM) | μg/m³ | 386 | 500 | EPA Method IO-2.1 | | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-

AN ISO: 9001:2015 / ISO: 14001:2015 / ISO 45001:2018 CERTIFIED LABORATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Customer | | REPORT NO | | UES/TR/21-22/06273 | | | |
|--|--|---|---|--------------------|-----------------|--|--|
| To, | | LAB REF NO | UES | S/21-22/FE/010 | 907 | | |
| HINDALCO INDUST | and the same of th | DATE OF SAMPLING | 27, | /01/2022 | | | |
| KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 28/01/2022 | | | |
| | | | | 02/02/2022 | | | |
| | | | | ART: 28/01/2022 | END: 02/02/2022 | | |
| | | SAMPLE DETAILS | | | | | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | K/PO/SRV/2122/0058 DATE: 30-SEP-2021 | | | | |
| SAMPLING LOCATION | COAL STOCK YARD | | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LAE | BORATORY CHEMIST | ? | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | ************************************** | | | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 10 INCH): 1X1 NO. | | | | | | |

| | TEST REPORT | | | | | | | |
|------------|---|-------|--------|--|-------------------|--|--|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE | | | |
| 1 | Total Suspended Particulate Matter (as SPM) | µg/m³ | 428 | 500 | EPA Method IO-2.1 | | | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

REVIEWED BY

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Customer To, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | REPORT NO | | UES/TR/21-22/06274 | | |
|---|-------------------------|---------------------------------|--|--------------------|-----------------|--|
| | | LAB REF NO | UES/21-22/FE/010907 | | | |
| | | DATE OF SAMPLING | 27 | /01/2022 | | |
| | | DATE OF RECEIPT DATE OF REPORT | | 28/01/2022 | | |
| | | | | 02/02/2022 | | |
| | | DATE OF ANALYSIS | ST | ART:28/01/2022 | END: 02/02/2022 | |
| | | SAMPLE DETAILS | | | | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 | | | |
| SAMPLING LOCATION | HAUL ROAD | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | I | ··· | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 1 | 0 INCH): 1X1 NO. | | | | |

| | TEST REPORT | | | | | | | |
|------------|---|-------|--------|--|-------------------|--|--|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEFNotificat ion (350-1) | METHOD REFERENCE | | | |
| 1 | Total Suspended Particulate Matter (as SPM) | μg/m³ | 396 | 500 | EPA Method IO-2.1 | | | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-- End of the test report-----



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Customer | | REPORT NO | UES/TR/21-22/06275 | | | |
|---|--|--------------------------|--|-----------------|--|--|
| То, | | LAB REF NO | UES/21-22/FE/010908 | | | |
| HINDALCO INDUST | THE STATE OF THE S | DATE OF SAMPLING | 27/01/2022 | | | |
| KATHAUTIA OPEN (| Paradi Talan maganagan parada para | DATE OF RECEIPT | 28/01/2022 | | | |
| POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | DATE OF REPORT | 02/02/2022 | | | |
| | | DATE OF ANALYSIS | START: 28/01/2022 | END: 02/02/2022 | | |
| | | SAMPLE DETAILS | | | | |
| MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | K/PO/SRV/2122/0058 DATE:30-SEP-2021 | | | |
| SAMPLING LOCATION | RAJHARA RAILWAY SIDEING | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | <u> </u> | | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 1 | 0 INCH): 1X1 NO. | | | | |

| | TEST REPORT | | | | | | |
|------------|---|-------|--------|--|-------------------|--|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE | | |
| 1 | Total Suspended Particulate Matter (as SPM) | μg/m³ | 448 | 500 | EPA Method IO-2.1 | | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

REVIEWED BY

FORULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Customer To, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | REPORT NO LAB REF NO | | UES/TR/21-22/06276 UES/21-22/FE/010909 | | | |
|---|-------------------------|--|----------------------|--|------------------------------------|--|------------------|
| | | | | | | | |
| | | DATE OF RECEIPT DATE OF REPORT | | 28/01/2022 02/02/2022 | | | |
| | | | | | | | DATE OF ANALYSIS |
| | | Fight Profession | | SAMPLE DETAILS | | | |
| | | MONITORING FOR | WORK ZONE MONITORING | CUSTOMER REF. NO. & DATE | K/PO/SRV/2122/0 DATE:30-SEP-202 | | |
| SAMPLING LOCATION | TRUCK PARKING ZONE | | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY LABORATORY CHEMIST | | | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | - | | | | |
| SAMPLE QUANTITY/PACKING | GMF FILTER PAPER (8 X 1 | 0 INCH): 1X1 NO. | | | | | |

| | TEST REPORT | | | | | | | |
|------------|---|-------|--------|--|-------------------|--|--|--|
| SR. NO. | PARAMETER | UNIT | RESULT | As per MOEF Notification (350-1) | METHOD REFERENCE | | | |
| 1 | Total Suspended Particulate Matter (as SPM) | μg/m³ | 384 | 500 | EPA Method IO-2.1 | | | |

Note: All results are on the basis of 24-hour sampling.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

REVIEWED BY



SAMPLING PROCEDURE

HDD-272, Phase III - Near JP Chowk Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099 Ph: 0771 - 4027777 | Email: ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Customer To, HINDALCO INDUSTRIES LIMITED, KATHAUTIA OPEN CAST COAL MINES, POST – NAUDIHA, P.S. PANDWA, | | REPORT NO LAB REF NO DATE OF REPORT DATE OF SAMPLING | UES/TR/21-22/06277 UES/21-22/N/010910-010917 02/02/2022 . 27/01/2022 to 28/01/2022 | | | | |
|--|---------------------------|---|---|--|--|--|--|
| DALTONGANJ, DIS | TT PALAMU (JH) | SAMPLE DETAILS | 27/01/2022 to 28/01/2022 | | | | |
| MONITORING FOR | NOISE LEVEL MONITORING | | | | | | |
| CUSTOMER REF. NO. & DATE | K/PO/SRV/2122/0058, DATE: | K/PO/SRV/2122/0058, DATE:30-SEP-2021 | | | | | |
| SAMPLING LOCATION | INSIDE COAL MINE & OUTSIL | INSIDE COAL MINE & OUTSIDE COAL MINE (AS DESCRIBED BELOW) | | | | | |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | | | | |

| | T | ST REP | ORT | | | |
|-----------------------------|-------|-------------|---------------|--------------------------|------------|--|
| | UNIT | RESULT | | LIMIT (INDUSTRIAL ZONE) | | |
| LOCATION | | DAY TIME | NIGHT TIME | DAY TIME | NIGHT TIME | |
| Inside Plant | | | | | | |
| MINES OFFICE NEAR VTC | dB(A) | 62.6 | 54.0 | | | |
| NEAR MAIN GATE | dB(A) | 64.8 | 48.6 | 75 | 70 | |
| NEAR DG STACK | dB(A) | 58.2 | 52.2 | | | |
| NEAR SUBSTATION | dB(A) | 56.8 | 44.9 | | | |
| | | RESUL | | LIMIT (RESIDENTIAL ZONE) | | |
| LOCATION | UNIT | DAY TIME | NIGHT TIME | DAY TIME | NIGHT TIME | |
| Outside Plant | | | | | | |
| R & R COLONY, CHANDAN NAGAR | dB(A) | 52.8 | 38.6 | | | |
| KATHAUTIYA VILLAGE | dB(A) | 48.2 | 36.8 | 55 45 | | |
| BATSARA VILLAGE | dB(A) | 40.5 | 32.2 | | | |
| SIKKA VILLAGE | dB(A) | 46.8 | 38.4 | | | |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

> The report for publication, arbitration or as legal dispute is forbidden.

MANUFACTURER'S INSTRUCTION

> Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

22 AND STORY OF THE PARTY OF TH

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

REVIEWED BY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The | | | UES/TR/21-22/06278 UES/21-22/W/010918-010919 | | | |
|---|---|------------------------|---|------------------------------------|----------|--|
| HINDALCO INDU | DATE OF SAMPLING | 27/01/2022 | | | | |
| KATHAUTIA OPI | | | 28/01/2022 02/02/2022 | | | |
| POST – NAUDIHA, P.S. PANDWA, DALTONGANJ, DISTT PALAMU (JH) | | | | | | |
| | | DATE OF ANALYSIS | ST | START: 28/01/2022 END: 02/02, | | |
| | | SAMPLE DETAILS | | | 737, 173 | |
| Customer Sample ID | Sump Water Pit-D Workshop ETP Water | Customer Ref. No. & Da | te | K/PO/SRV/2122/0058, Date:30-Sep-20 | | |
| Sample Type | Effluent Water | Sample Condition At Re | ceipt Ok | | | |
| Packing Of Sample | Jerry Cane (3 ltr.*2) Glass bottle (300 ml.*2) | Sample Collected By | Laboratory Chemist | | t | |
| Other Details | Sealed | Quantity Received | | Approx. 3.3 Ltr. | | |

REPORT NO.- 06278

| TEST REPORT | | | | | | | |
|-------------|-------------------------------|---------------------|---|--|------------------|---------------------------|--|
| SR. NO. | PARAMETER | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | SUMP WATER PIT-D | WORKSHO P ETP WATER | |
| 1 | Colour | Hazen | АРНА 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annexure- | <1 | <1 | |
| 2 | Odour | | APHA 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | Agreeable | |
| 3 | Temperature | *c | АРНА 22 nd Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 24.6 | 28.4. | |
| 4 | рн | - | APHA 22 nd Ed.2012,4500-H ⁺ -B,4-92 | 5.5 to 9.0 | 7.18 | 7.22 | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-C1-G,4-69 | 1.0 | N.D. | N.D. | |
| 6 | Total Suspended Solids | mg/L | APHA 22 nd Ed.2012,2540- D, 2-66 | 100 | 86.0 | 102.0 | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 nd Ed.2012,4500-P-C, 4- 153 | 5.0 | N.D. | N.D. | |
| 8 | Fluoride (as F) | mg/L | APHA 22 nd Ed.2012,4500-F-B&D,4- 84 & 87 | 2.0 | 0.14 | 0.08 | |
| 9 | Lead (as Pb) | mg/L | АРНА 22 nd Ed.2012,3111-В, 3-18 | 0.1 | N.D. | N.D. | |
| 10 | Zinc (as Zn) | mg/L | АРНА 22 nd Ed.2012,3111-В, 3-18 | 5.0 | 0.18 | 0.25 | |
| 11 | Copper (as Cu) | mg/L | АРНА 22 nd Ed.2012,3111-В, 3-18 | 3.0 | N.D. | N.D. | |
| 12 | Cadmium (as Cd) | mg/L | АРНА 22 nd Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | N.D. | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | N.D. | |

AN ISO: 9001:2015 / ISO: 14001:2015 / ISO 45001:2018 CERTIFIED LABORATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

REPORT NO.- 06278

| TEST REPORT | | | | | | | |
|-------------|--|---------------------|--|--|---------------------|---------------------------|--|
| SR. NO. | PARAMETER | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | SUMP WATER PIT-D | WORKSHO P ETP WATER | |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | N.D. | |
| 15 | Selenium (as Se) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | N.D. | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | N.D. | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 134.0 | 94.0 | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 16.4 | 8.4 | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | N.D. | |
| 20 | Phenolic Compounds (as C ₆ H ₅ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | N.D. | |
| 21 | Total Dissolved Solids (as TDS) | mg/L | IS 3025(part-16):1984, RA 2006 | - | 256.0 | 328.4 | |

Note: mg/lit.: milligram per liter., N.D.: Not Detected

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

- > The use of the report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

--End of the test report-

AN ISO: 9001:2015 / ISO: 14001:2015 / ISO 45001:2018 CERTIFIED LABORATORY