



RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LTD.
(A Government of Rajasthan Undertaking)
Corporate identity Number(CIN) –U40102RJ2000SGC016484
OFFICE OF THE CHIEF ENGINEER(FUEL)
2nd Floor, Dreamax Plaza, Sahkar Marg, Jyoti Nagar, Jaipur – 302 005.
Tele Fax no. 0141-2744927,2740006, Email: fuel.rvun@gmail.com



No. RVUN/CE(Fuel)/SE (Fuel)/D. 1792

Dated: 21.9.2020

Member Secretary,
Chhattisgarh Environment Conservation Board,
ParyawasBhawan, Sector – 19,
Atal Nagar, Raipur, Chhattisgarh

Sub:- Submission of Environment Statement Form-(V) of financial year (2019-20) of Parsa East and KantaBasan Opencast Coal Mine and Pit Head coal Washery (15MTPA) atHasdeoArnand Coal Field Tehsil Udaipur, Dist- Surguja (C.G)

Ref:-

- 1) CTO Renewal Letter No.7802/TS/CECB/ 2019 dated 02.12.2019
- 2) Environmental Clearance Letter no J-11015/03/2008-IA.II(M) dated 10.08.2018

Dear Sir,

This is with reference to Submission of Environment Statement Form-(V) of financial year (2019-20) of Parsa East and KantaBasan Opencast Coal Mine.

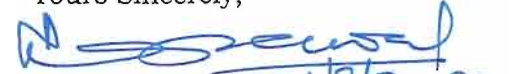
In this regards, please find enclosed herewith Environment Statement in Form-(V) as per Environmental Protection Act 1986 for financial year 2019-20 of Parsa East and KantaBasan Opencast Coal Mine and Pit Head coal Washery (15MTPA) atvillage-HasdeoArnand Coal Field Tehsil Udaipur, Dist- Surguja (C.G).

We hope you will find the same in order.

Thanking you,

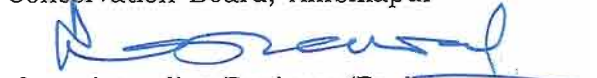
Encl : As above

Yours Sincerely,


(A.K. Agrawal) 21/9/2020

Superintending Engineer (Fuel)
RVUN, Jaipur

Copy to the Regional Officer, Chhattisgarh Environment Conservation Board, Ambikapur (CG)


Superintending Engineer (Fuel)

ENVIRONMENTAL STATEMENT

FORM – V
(See rule 14)

Environmental Statement for the financial year ending with 31st March 2020 of Parsa East & Kanta Basan Opencast Coal Mine & Pit Head Coal Washery

PART – A

| | | | | | |
|----|--|---|----------------------------|---------------------------------------|--------------------------------------|
| 1. | Name and address of the Owner / Occupier of the Industry operation or process | Mr. S.S. Meena (Designated Owner) RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LTD. (RRVUNL) 4 th Floor, C.R. Heights , Near Basant Talkies, Kharsiya Road, Ambikapur, Dist. Surguja (Chhattisgarh) – 497001 Tel- (094252-80889) | | | |
| 2. | Industry Category Primary (S.T.C. Code) : Secondary (S.T.C. Code) : | Scale : Large Category : Red | | | |
| 3 | Production Capacity | Name of Product | Production Capacity | Actual Production | |
| | | | | During previous financial year | During current financial year |
| | | Coal | 15 MTPA | 15000000 Metric Tons | 15000000 Metric Tons |
| 4. | Year of Establishment | Establishment December 2012 Operation February 2013 | | | |
| 5. | Date of the last Environmental Statement Report submitted | September 2019 | | | |

PART – B

WATER AND RAW MATERIAL CONSUMPTION:

(I) Water Consumption

Process: - 3340 KL/Day (Average basis)

Domestic: - 135 KL/Day (Average basis)

| Name of product | Process water consumption per unit of product output. | |
|------------------|--|--|
| | During the previous financial year | During the current financial year |
| 1 | 2 | 3 |
| Washery Division | Approx. 45 Ltr. /Ton of Raw Coal | Approx. 47 Ltr. /Ton of Raw Coal |
| Mining | Approx 130 Ltr / Ton of ROM (Coal) (dust suppression & Green belt irrigation except in rainy seasons) | Approx. 130 Ltr /Ton of ROM (Coal) (dust suppression & Green belt irrigation except in rainy seasons) |

(ii) Raw material consumption:

- 1- ROM produce from mine and raw coal used in beneficiation in Washery.
- 2- No raw material is used except mine seepage water to wash the coal.

Pollution industry may use codes if disclosing detail of raw material would violate contractual obligations, otherwise all industries have to name the raw material used.

PART –C

Discharged to environment / unit of output Specified if the consent issued

| Pollutants | | Quantity of Pollutants Discharged | Concentration of Pollutants in Discharges(mass/volume) | Percentage of variation from prescribed standard with |
|------------|---------------|---|--|---|
| (a) | Water: | Nil | Nil | Monitoring Report of FY 2019-20 attached – Annexure- I |
| (b) | Air | Ambient Air Quality Monitoring & Stack emission monitoring report is enclosed as Annexure-I | | Monitoring Report of FY 2019-20 attached Annexure. I |

PART –D

HAZARDOUS WASTES

{As specified under Hazardous Wastes (Management, Handling & Trans-boundary Movement) Rules,
2008)

| Hazardous Waste | Total Quantity (Ltrs.) | |
|--|---|--|
| | During Previous Financial Year (2018-19) | During Current Financial Year (2019-20) |
| a)From Process (Coal Mining is based on “Dry Process” No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipment’s) | 21.0 KL | 20.2 KL |
| (b) From Pollution Control Facilities | Nil | Nil |

PART –E

SOLID WASTE

| Sr. No. | Description | Total Quantity | |
|---------|---|---|--|
| | | During the previous financial year (2018-19) | During the current financial year (2019-20) |
| (a) | From Process Top Soil & Overburden from Mine, Coal rejects from Washery. | Top Soil – 370000 m3 Over Burden- 32813460 m3 Washery Reject -3020471 MT | Top Soil – 354800 m3 Over Burden- 39370466 m3 Washery Reject -3291170 MT |
| (b) | From Pollution control facility | Top Soil is being stacked at earmarked sites and scientifically conserved and is being used for reclamation and development of green belt by implementation of Engineering & Biological method. Overburden is being stacked at earmarked external dumpsites within the lease area and being also utilized to backfill the void area by production of coal. Coal Washery rejects is sold to consumer (power plants) and presently transported by rail. | |
| (c) | (1) Quantity recycled or reutilized within the unit. | <ul style="list-style-type: none">➤ Sequential mining & backfilling as per reclamation plan and internal dumping started in 3rd year itself i.e. no external dumping is being done now.➤ Washery reject is being utilized for power generation at end user Power plant. | |

PART –F

Please specify the characterization (in term of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both the categories of wastes.

Hazardous Wastes:

Used Oil Hazardous waste is generated from the process which is drained from Machineries / Equipment's. Spent oil /used oil which is sold to approved recycler.

Solid Wastes:

Top Soil is being stacked at earmarked sites with scientifically conserved and being used for reclamation and development of green belt by implementation of Engineering & Biological method.

Overburden is being stacked at earmarked dumpsites within the lease area and also utilized to backfill the void area by production of coal.

Coal Washery rejects is presently being sold to end use consumer (Power Plant) and transported through rail network only.

PART –G

THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION.

Cost estimation for pollution control: Rs. 445.09 Lakh

| S. No. | Description | Expenditure (Rs. in Lakh) | | | |
|--------|---|---------------------------|------------------------|-----------------------|--------|
| | | Previous Year 2018-19 | Current Year (2019-20) | | |
| | | | Capital Expenditure | Recurring Expenditure | Total |
| 1 | Water Pollution (Cost of water treatment, ground water recharge etc.) | 162.59 | 0 | 72.14 | 72.14 |
| 2 | Air Pollution (Cost of dust suppression, wind barrier etc.) | 105.61 | 0 | 41.81 | 41.81 |
| 3 | Noise Pollution (Cost of Ear plug, ear muffs, acoustic enclosures etc.) | | | | |
| 4 | Hazardous/Solid Waste Management (Used oil recycling, storage etc.) | | | | |
| 5 | Green Belt Development | 333 | - | 227.35 | 227.35 |

| | | | | | |
|---|-------------------------------|---------------|----------|---------------|---------------|
| 6 | House Keeping (Sweeping etc.) | 27.38 | - | 61.74 | 61.74 |
| 7 | Environmental Monitoring | 68.42 | - | 36.45 | 36.45 |
| 8 | Environment Awareness | 9.17 | - | 5.57 | 5.57 |
| | Total | 706.17 | 0 | 445.09 | 445.09 |

PART -H

ADDITIONAL MEASURES/ INVESTMENT PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION PREVENTION OF POLLUTION

Details of Additional Investment:

1. Up gradation of pollution control equipment's:

| Sr. No. | Description | Purpose | Estimated Cost (Rs. in lacs) | Year of Installation |
|---------|--|----------------------------------|------------------------------|----------------------|
| 1 | STP | Domestic sewage waste management | Nil | 2015 |
| 2 | ETP | Water Pollution prevention | Nil | Dec 2012 |
| 3 | Dust suppression system including bag filter | Air Pollution prevention | Nil | 2019 |
| | TOTAL | | | |

Note - Advanced upgraded pollution Equipment has been installed at our project site.

2. Greenbelt Development:

| Description | Previous Year (2018-19) | Current Year (2019-20) |
|------------------------------------|---------------------------|---------------------------|
| Area Covered under greenbelt (Ha.) | 140.98 (Cumulative) | 206.71 (Cumulative) |
| Area Covered under greenbelt (%) | - | - |
| No. of trees planted | 3,52,476 (Cumulative) | 4,93,689 (Cumulative) |
| Cost incurred (Rs in lacs.) | 333.00 (As per Part G) | 227.35 (As per Part G) |

PART -I

ANY OTHER PARTICULAR FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

1. We have a full-fledged Environment Management Cell for monitoring of pollution control equipment and Green Belt development.
2. Monitoring of stack emission, ambient air and water quality is being done regularly.
3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
4. Horticulture Section is taking care of forest tree transplantations, sapling tree plantation and green belt development in Block area. Phase wise (year) greenbelt development is being done.
5. Coal Washery unit is maintaining Zero discharge from premises.

On support of above, we are enclosing herewith following:-

Annexure-I : Air/ Water Monitoring Report (All Parameters)

Annexure-II : Reclamation Status

For - Rajasthan Rajya Vidyut Utpadan Nigam Limited



**Authorized Signatory
RRVUNL
(A. K. AGRAWAL)
Superintending Engineer (Fuel)
RVUN, JAIPUR**

Annexure-I

Monitoring Reports (1st April 2019 to 30th September 2019)

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Parsa (Near Coal Washery)

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Apr 2019 | 50.41 | 88.01 | 8.55 | 25.8 | 0.78 |
| May 2019 | 47.28 | 85.83 | 8.91 | 23.65 | 0.68 |
| Jun 2019 | 42.72 | 79.46 | 8.3 | 25.94 | 0.56 |
| July 2019 | 36.4 | 72.68 | 8.68 | 26.11 | 0.66 |
| Aug 2019 | 37.82 | 73.3 | 8.7 | 27.15 | 0.68 |
| Sep 2019 | 38.45 | 68.58 | 8.41 | 23.28 | 0.65 |
| Minimum | 36.4 | 68.58 | 8.3 | 23.28 | 0.56 |
| Maximum | 50.41 | 88.01 | 8.91 | 27.15 | 0.78 |
| Average | 42.18 | 77.98 | 8.59 | 25.32 | 0.67 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Salhi

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Apr 2019 | 43.71 | 83.63 | 10.16 | 27.55 | 0.73 |
| May 2019 | 45.15 | 83.41 | 8.81 | 24.8 | 0.73 |
| Jun 2019 | 42.9 | 78.88 | 7.72 | 26.74 | 0.696 |
| July 2019 | 37.46 | 76.36 | 9.03 | 26.96 | 0.63 |
| Aug 2019 | 39.21 | 78.26 | 8.47 | 29.32 | 0.66 |
| Sep 2019 | 37.95 | 69.46 | 8.41 | 24.71 | 0.67 |
| Minimum | 37.46 | 69.46 | 7.72 | 24.71 | 0.63 |
| Maximum | 45.15 | 83.63 | 10.16 | 29.32 | 0.73 |
| Average | 41.06 | 78.33 | 8.77 | 26.68 | 0.69 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Mines Admin Office

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Apr 2019 | 48.15 | 88.71 | 8.3 | 26.43 | 0.81 |
| May 2019 | 46.25 | 83.73 | 8.56 | 26.76 | 0.76 |
| Jun 2019 | 48.05 | 78.61 | 8.55 | 23.4 | 0.65 |
| July 2019 | 37.42 | 69.38 | 9.07 | 25.91 | 0.61 |
| Aug 2019 | 39.57 | 64.92 | 9.22 | 26.77 | 0.62 |
| Sep 2019 | 42.2 | 73.5 | 9.32 | 24.37 | 0.62 |
| Minimum | 37.42 | 64.92 | 8.3 | 23.4 | 0.61 |
| Maximum | 48.15 | 88.71 | 9.32 | 26.77 | 0.81 |
| Average | 43.61 | 76.48 | 8.84 | 25.61 | 0.68 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Near Washery Plant

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) | CO (mg/M^3) |
|----------------|--|---------------------------------------|---|---|----------------------------------|
| Apr 2019 | 48.9 | 88.96 | 7.63 | 26.81 | 0.73 |
| May 2019 | 48.45 | 84.96 | 9.1 | 26.31 | 0.7 |
| Jun 2019 | 43.43 | 76.66 | 8.05 | 31.33 | 0.61 |
| July 2019 | 39.27 | 74.74 | 8.86 | 25.41 | 0.62 |
| Aug 2019 | 38.55 | 68.47 | 8.73 | 23.28 | 0.64 |
| Sep 2019 | 40.49 | 79.52 | 8.79 | 29.32 | 0.66 |
| Minimum | 38.55 | 68.47 | 7.63 | 23.28 | 0.61 |
| Maximum | 48.9 | 88.96 | 9.1 | 31.33 | 0.73 |
| Average | 43.18 | 78.89 | 8.53 | 27.08 | 0.66 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Near Security Gate

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) | CO (mg/M^3) |
|----------------|--|---------------------------------------|---|---|----------------------------------|
| Apr 2019 | 47.1 | 85.31 | 8.51 | 24.88 | 0.76 |
| May 2019 | 47.8 | 82.91 | 8.9 | 24.66 | 0.78 |
| Jun 2019 | 39 | 76.04 | 8.78 | 27.04 | 0.64 |
| July 2019 | 37.22 | 66.76 | 9.05 | 25.21 | 0.53 |
| Aug 2019 | 40.45 | 71.3 | 8.47 | 25.6 | 0.61 |
| Sep 2019 | 47.92 | 84.37 | 8.6 | 30.37 | 0.63 |
| Minimum | 37.22 | 66.76 | 8.47 | 24.66 | 0.53 |
| Maximum | 47.92 | 85.31 | 9.05 | 30.37 | 0.78 |
| Average | 43.25 | 77.78 | 8.72 | 26.29 | 0.66 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Near Coal Mine Area

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) | CO (mg/M^3) |
|----------------|--|---------------------------------------|---|---|----------------------------------|
| Apr 2019 | 49.1 | 87.36 | 8.45 | 26.48 | 0.76 |
| May 2019 | 48.75 | 87.88 | 9 | 24.41 | 0.71 |
| Jun 2019 | 40.98 | 77.06 | 9.56 | 32.88 | 0.63 |
| July 2019 | 38.01 | 66.86 | 9.4 | 22.7 | 0.59 |
| Aug 2019 | 37.9 | 68.83 | 8.58 | 24.73 | 0.67 |
| Sep 2019 | 39.15 | 73.16 | 8.75 | 27.52 | 0.61 |
| Minimum | 37.9 | 66.86 | 8.45 | 22.7 | 0.59 |
| Maximum | 49.1 | 87.88 | 9.56 | 32.88 | 0.76 |
| Average | 42.32 | 76.86 | 8.96 | 26.45 | 0.66 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Basan Village

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Apr 2019 | 48.21 | 85.55 | 8.05 | 27 | 0.77 |
| May 2019 | 48.78 | 86.35 | 8.08 | 24.53 | 0.71 |
| Jun 2019 | 42.58 | 75.9 | 8.58 | 30.32 | 0.7 |
| July 2019 | 36.53 | 71.9 | 8.97 | 24.55 | 0.58 |
| Aug 2019 | 37.66 | 73.25 | 9 | 25.9 | 0.65 |
| Sep 2019 | 40.08 | 73.42 | 8.66 | 24.78 | 0.64 |
| Minimum | 36.53 | 71.9 | 8.05 | 24.53 | 0.58 |
| Maximum | 48.78 | 86.35 | 9 | 30.32 | 0.77 |
| Average | 42.31 | 77.73 | 8.56 | 26.18 | 0.68 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Parogiya Village

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Apr 2019 | 48.83 | 88.18 | 10.13 | 28.11 | 0.88 |
| May 2019 | 44.41 | 85.21 | 8.61 | 26.78 | 0.76 |
| Jun 2019 | 45.7 | 79.42 | 8.32 | 28.96 | 0.68 |
| July 2019 | 39.27 | 74.7 | 8.86 | 25.41 | 0.62 |
| Aug 2019 | 40.08 | 73.42 | 8.66 | 24.78 | ,0.63 |
| Sep 2019 | 38.12 | 73.52 | 8.59 | 26.96 | 0.67 |
| Minimum | 38.12 | 73.42 | 8.32 | 24.78 | 0.62 |
| Maximum | 48.83 | 88.18 | 10.13 | 28.96 | 0.88 |
| Average | 42.74 | 79.08 | 8.86 | 26.83 | 0.72 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Near CHP Area

WORK ZONE AIR QUALITY MONITORING RESULTS

| Month | SPM (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) |
|------------|----------------|------------------|----------------|----------------|
| Apr 2019 | 149.45 | 78.72 | 9.73 | 26.22 |
| May 2019 | 146.24 | 74.5 | 8.79 | 23.21 |
| Jun 2019 | 141.4 | 72.41 | 8.24 | 21.37 |
| July 2019 | 155.25 | 78.8 | 9.8 | 25.1 |
| Aug 2019 | 151.41 | 76.87 | 9.14 | 23.62 |
| Sep 2019 | 161.52 | 80.33 | 8.86 | 24.29 |
| Min | 141.4 | 72.41 | 8.24 | 21.37 |
| Max | 161.52 | 80.33 | 9.8 | 26.22 |
| Avg | 150.88 | 76.94 | 9.09 | 23.97 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Near Washery Area

WORK ZONE AIR QUALITY MONITORING RESULTS

| Month | SPM ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) |
|------------|-------------------------------------|---------------------------------------|---|---|
| Apr 2019 | 179.67 | 97.33 | 9.1 | 35.82 |
| May 2019 | 172.4 | 91.63 | 8.62 | 32.56 |
| Jun 2019 | 169.15 | 88.72 | 8.32 | 29.81 |
| July 2019 | 152.6 | 82.64 | 8.21 | 22.31 |
| Aug 2019 | 158.56 | 79.81 | 7.93 | 21.63 |
| Sep 2019 | 163.18 | 76.83 | 7.82 | 19.68 |
| Min | 152.6 | 76.83 | 7.82 | 19.68 |
| Max | 179.67 | 97.33 | 9.1 | 35.82 |
| Avg | 165.93 | 86.16 | 8.33 | 26.97 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Mine Pit area

Work Zone AIR QUALITY MONITORING RESULTS

| Month | SPM (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) |
|------------|----------------|------------------|----------------|----------------|
| Apr 2019 | 168.44 | 97.16 | 9.21 | 38.22 |
| May 2019 | 171.01 | 95.62 | 9.16 | 37.02 |
| Jun 2019 | 173.62 | 97.54 | 9.01 | 36.15 |
| July 2019 | 149.5 | 87.53 | 9.8 | 25.68 |
| Aug 2019 | 144.2 | 84.88 | 8.95 | 24.01 |
| Sep 2019 | 148.16 | 86.11 | 9.13 | 25.3 |
| Min | 144.2 | 84.88 | 8.95 | 24.01 |
| Max | 173.62 | 97.54 | 9.8 | 38.22 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : IS-3025, APHA 22nd Edition

Sampling Description : Workshop ETP Water

| Month | pH | COD | BOD (3 days at 27 Deg) | TSS | Oil & Grease | Copper as Cu | Nickel as Ni | Lead as Pb | Mercury as Hg | Hexavalent Chromium as Cr+6 |
|----------------|-------------|--------------|------------------------|--------------|--------------|--------------|--------------|-------------|---------------|-----------------------------|
| Apr 2019 | 7.72 | 86.62 | 24.81 | 40 | 0.7 | 0.68 | BDL | 0.9 | 0.23 | BDL |
| May 2019 | 7.81 | 88.5 | 26.1 | 41 | 0.76 | 0.71 | BDL | 0.93 | 0.26 | BDL |
| Jun 2019 | 7.86 | 85.42 | 24.15 | 38 | 0.71 | 0.67 | BDL | 0.89 | 0.23 | BDL |
| July 2019 | 7.51 | 81.06 | 23 | 37 | 0.8 | 0.62 | BDL | 0.53 | 0.27 | BDL |
| Aug 2019 | 7.56 | 83.2 | 24 | 40 | 0.67 | 0.57 | BDL | 0.57 | 0.29 | BDL |
| Sep 2019 | 7.61 | 87.26 | 27 | 43 | 0.9 | 0.69 | BDL | 0.6 | 0.3 | BDL |
| Minimum | 7.51 | 81.06 | 23 | 37 | 0.67 | 0.57 | BDL | 0.53 | 0.23 | BDL |
| Maximum | 7.86 | 88.5 | 27 | 43 | 0.9 | 0.71 | BDL | 0.93 | 0.3 | BDL |
| Average | 7.68 | 85.34 | 24.84 | 39.83 | 0.76 | 0.66 | BDL | 0.74 | 0.26 | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
 Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
 Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : IS-3025, APHA 22nd Edition

Sampling Description : Mix Drain Water at Settling Pond

| Month | pH | COD | BOD (3 days at 27 Deg) | TSS | Oil & Grease | Copper as Cu | Nickel as Ni | Lead as Pb | Mercury as Hg | Hexavalent Chromium as Cr+6 |
|----------------|-------------|--------------|------------------------|--------------|--------------|--------------|--------------|-------------|---------------|-----------------------------|
| Apr 2019 | 7.88 | 98.1 | 36.49 | 87 | 1.03 | 0.92 | BDL | 0.73 | 0.13 | BDL |
| May 2019 | 7.9 | 94.29 | 31.04 | 83 | 0.99 | 0.89 | BDL | 0.68 | 0.18 | BDL |
| Jun 2019 | 7.87 | 92.46 | 29.87 | 80 | 0.94 | 0.87 | BDL | 0.66 | 0.15 | BDL |
| July 2019 | 7.74 | 85.6 | 25 | 31 | 0.6 | 0.51 | BDL | 0.36 | 0.24 | BDL |
| Aug 2019 | 7.81 | 85.5 | 26 | 33 | 0.67 | 0.56 | BDL | 0.39 | 0.27 | BDL |
| Sep 2019 | 7.83 | 88.2 | 27 | 24 | 0.69 | 0.57 | BDL | 0.42 | 0.28 | BDL |
| Minimum | 7.74 | 85.5 | 25 | 24 | 0.6 | 0.51 | BDL | 0.36 | 0.13 | BDL |
| Maximum | 7.9 | 98.1 | 36.49 | 87 | 1.03 | 0.92 | BDL | 0.73 | 0.28 | BDL |
| Average | 7.84 | 90.69 | 29.23 | 56.33 | 0.82 | 0.72 | BDL | 0.54 | 0.21 | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
 Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
 Chhattisgarh

Monitoring Period : Apr 2019 to Sep 2019

Testing Protocol/ Method : IS-3025, APHA 22nd Edition

Sampling Description : STP Treated Water

| Month | pH | COD | BOD (3 days at 27 Deg) | TSS | Oil & Grease | Copper as Cu | Nickel as Ni | Lead as Pb | Mercury as Hg | Hexavalent Chromium as Cr+6 |
|----------------|-------------|--------------|------------------------|--------------|--------------|--------------|--------------|-------------|----------------|-----------------------------|
| Apr-19 | 7.98 | 68.39 | 24.01 | 29 | 0.2 | 0.54 | BDL | BDL | BDL | BDL |
| May-19 | 7.93 | 71.05 | 20.5 | 31 | 0.2 | 0.58 | BDL | BDL | BDL | BDL |
| Jun-19 | 7.91 | 68.45 | 19.74 | 29 | 0.2 | 0.55 | BDL | BDL | BDL | BDL |
| Jul-19 | 7.59 | 78.43 | 21 | 36 | 0.2 | 0.18 | BDL | 0.16 | BDL | BDL |
| Aug-19 | 7.63 | 80.24 | 23 | 39 | 0.2 | 0.18 | BDL | 0.16 | BDL | BDL |
| Sep-19 | 7.68 | 82.3 | 25 | 42 | 0.2 | 0.17 | BDL | 0.18 | BDL | BDL |
| Minimum | 7.59 | 68.39 | 19.74 | 29 | 0.2 | 0.17 | BDL | 0.16 | 0 | BDL |
| Maximum | 7.98 | 82.3 | 25 | 42 | 0.2 | 0.58 | BDL | 0.18 | 0 | BDL |
| Average | 7.79 | 74.81 | 22.21 | 34.33 | 0.20 | 0.37 | BDL | 0.17 | #DIV/0! | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : April 2019 (Pre-Monsoon)

Testing Protocol/ Method : IS-10500-2012/ APHA 22ND Edition 2012

Sampling Description : Groundwater/WTP sample

| Parameters | Unit | Maximum Permissible Limit | Location | Location | Location Vill- Parsa | Location – WTP |
|---------------------------------|-------|---------------------------|--------------|-----------------|----------------------|----------------|
| | | | Vill - Salhi | Vill- Baigapara | | |
| pH | -- | 6.5 – 8.5 | 7.38 | 7.52 | 7.81 | 7.78 |
| Colour | Hazen | 15 | BDL | BDL | BDL | BDL |
| Turbidity | NTU | 5 | BDL | BDL | BDL | BDL |
| Odour | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Taste | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Total Hardness | Mg/l | 600 | 101 | 119 | 95 | 49 |
| Calcium As Ca | Mg/l | 200 | 21.82 | 36.84 | 22.39 | 11.28 |
| Alkalinity as CaCO ₃ | Mg/l | 600 | 62.73 | 98.68 | 76.43 | 11.28 |
| Chloride as Cl | Mg/l | 1000 | 8.64 | 33.1 | 15.13 | 37.55 |
| Cyanide as CN | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Magnesium as Mg | Mg/l | 100 | 11.2 | 6.58 | 9.51 | 5.07 |
| TDS | Mg/l | 2000 | 148 | 227 | 197 | 88 |
| Sulphate as SO ₄ | Mg/l | 400 | 3.03 | 8.95 | 7.43 | 3.68 |
| Fluoride as F | Mg/l | 1.5 | 0.19 | 0.53 | 0.31 | 0.1 |
| Nitrate as NO ₃ | Mg/l | 45 | 1.26 | 6.9 | 4.93 | BDL |
| Iron as Fe | Mg/l | 0.3 | 0.15 | 0.4 | 0.22 | 0.07 |
| Aluminum as Al | Mg/l | 0.2 | BDL | BDL | BDL | BDL |
| Boron | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Total Chromium as Cr | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Phenolic Compound | Mg/l | 0.002 | BDL | BDL | BDL | BDL |
| Mineral Oil | Mg/l | 0.5 | BDL | BDL | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.26 | 0.21 | 0.15 | BDL |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL | BDL | BDL |
| Manganese as Mn | Mg/l | 0.3 | BDL | BDL | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.003 | BDL | BDL | BDL | BDL |
| Lead as Pb | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Selenium as Se | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Arsenic as As | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Mercury as Hg | Mg/l | 0.001 | BDL | BDL | BDL | BDL |

| | | | | | | |
|----------------|------------|---------------------------------|--------|--------|--------|--------|
| Total Coliform | MPN/100 MI | Not Detectable in 100 MI Sample | <2/100 | <2/100 | <2/100 | Absent |
|----------------|------------|---------------------------------|--------|--------|--------|--------|

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : August 2019 (Monsoon)

Testing Protocol/ Method : IS-10500-2012/ APHA 22ND Edition 2012

Sampling Description : Groundwater/WTP sample

| Parameters | Unit | Maximum Permissible Limit | Location Vill – Salhi | Location Vill- Baigapara | Location Vill- Parsa | Location – WTP |
|---------------------------|-------|---------------------------|-----------------------|--------------------------|----------------------|----------------|
| pH | -- | 6.5 – 8.5 | 7.46 | 7.61 | 7.68 | 7.56 |
| Colour | Hazen | 15 | BDL | BDL | BDL | BDL |
| Turbidity | NTU | 5 | BDL | BDL | BDL | BDL |
| Odour | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Taste | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Total Hardness | Mg/l | 600 | 98 | 148 | 125 | 53 |
| Calcium As Ca | Mg/l | 200 | 24.37 | 52.69 | 41.85 | 16.78 |
| Alkalinity as CaCO3 | Mg/l | 600 | 65.73 | 132.41 | 92.57 | 38.46 |
| Chloride as Cl | Mg/l | 1000 | 10.56 | 41.28 | 39.76 | 12.82 |
| Cyanide as CN | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Magnesium as Mg | Mg/l | 100 | 9.04 | 4.01 | 5 | 2.7 |
| TDS | Mg/l | 2000 | 152 | 291 | 201 | 92 |
| Sulphate as SO4 | Mg/l | 400 | 3.24 | 16.21 | 9.16 | 6.62 |
| Fluoride as F | Mg/l | 1.5 | 0.21 | 0.44 | 0.39 | 0.21 |
| Nitrate as NO3 | Mg/l | 45 | 1.3 | 7.39 | 5.68 | 1.16 |
| Iron as Fe | Mg/l | 0.3 | 0.18 | 0.34 | 0.25 | 0.12 |
| Aluminum as Al | Mg/l | 0.2 | BDL | BDL | BDL | BDL |
| Boron | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Total Chromium as Cr | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Phenolic Compound | Mg/l | 0.002 | BDL | BDL | BDL | BDL |
| Mineral Oil | Mg/l | 0.5 | BDL | BDL | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.32 | 0.13 | 0.15 | BDL |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL | BDL | BDL |
| Manganese as Mn | Mg/l | 0.3 | BDL | BDL | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.003 | BDL | BDL | BDL | BDL |
| Lead as Pb | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Selenium as Se | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Arsenic as As | Mg/l | 0.05 | BDL | BDL | BDL | BDL |

| | | | | | | |
|----------------|------------|---------------------------------|--------|--------|--------|--------|
| Mercury as Hg | Mg/l | 0.001 | BDL | BDL | BDL | BDL |
| Total Coliform | MPN/100 MI | Not Detectable in 100 MI Sample | <2/100 | Absent | <2/100 | <2/100 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : April/August 2019

Testing Protocol/ Method : IS-2296 Class-A

Sampling Description : Surface water sample – Atem River

| Parameters | Unit | Limits as per IS-2296 Class - A | Pre-Monsoon (April -2019) | Monsoon (August -2019) |
|---------------------------|-------|---------------------------------|---------------------------|------------------------|
| pH | -- | 6.5 – 8.5 | 7.45 | 7.57 |
| Colour | Hazen | 10 | BDL | BDL |
| Chloride | NTU | 250 | 21 | 29.00 |
| TDS | Mg/l | 500 | 193.2 | 181.00 |
| Dissolve Oxygen | Mg/l | 4 | 3.7 | 6.1 |
| Sulphate as SO4 | Mg/l | 400 | 19.0 | 26.00 |
| Fluoride as F | Mg/l | 1.5 | 0.29 | 0.37 |
| Iron as Fe | | 0.3 | 0.26 | 0.32 |
| Chromium as Cr+6 | Mg/l | 0.05 | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1.0 | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.42 | 0.55 |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL |
| Oil & Grease | Mg/l | -- | BDL | BDL |
| Nitrate as NO3 | Mg/l | 20 | 4.8 | 4.42 |
| Arsenic as As | | 0.2 | BDL | BDL |
| Lead as Pb | Mg/l | 0.1 | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.01 | BDL | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : April/August 2019

Testing Protocol/ Method : IS-2296 Class-A

Sampling Description : Surface water sample – Tara Nala

| Parameters | Unit | Limits as per IS-2296 Class - A | Pre-Monsoon (April -2019) | Monsoon (August -2019) |
|-----------------------------|-------|---------------------------------|---------------------------|------------------------|
| pH | -- | 6.5 – 8.5 | 7.21 | 7.51 |
| Colour | Hazen | 10 | BDL | BDL |
| Chloride | NTU | 250 | 28 | 42.67 |
| TDS | Mg/l | 500 | 201.5 | 195.00 |
| Dissolve Oxygen | Mg/l | 4 | 3.4 | 4.8 |
| Sulphate as SO ₄ | Mg/l | 400 | 19.0 | 36.15 |
| Fluoride as F | Mg/l | 1.5 | 0.28 | 0.43 |
| Iron as Fe | | 0.3 | 0.24 | 0.37 |
| Chromium as Cr+6 | Mg/l | 0.05 | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1.0 | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.31 | 0.36 |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL |
| Oil & Grease | Mg/l | -- | BDL | BDL |
| Nitrate as NO ₃ | Mg/l | 20 | 4.7 | 4.1 |
| Arsenic as As | | 0.2 | BDL | BDL |
| Lead as Pb | Mg/l | 0.1 | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.01 | BDL | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : April 2019 to September 2019

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-9989

NOISE LEVEL MONITORING RESULT

| Location | Apr-19 | | | May-19 | | | Jun-19 | | | July-19 | | | Aug-19 | | | Sep-19 | | | | | | | | |
|----------------|----------|------|------------|----------|------|------------|----------|------|------------|----------|------|------------|----------|-------|------------|----------|-------|------------|-------|-------|-------|-------|-------|-------|
| | Day Time | | Night Time | Day Time | | Night Time | Day Time | | Night Time | Day Time | | Night Time | Day Time | | Night Time | Day Time | | Night Time | | | | | | |
| | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | | | | | | |
| Vill Parsa | 47.9 | 57.5 | 31.9 | 47.3 | 41.2 | 56.6 | 35.2 | 47.4 | 48.1 | 52.6 | 35.9 | 43.7 | 44.4 | 58.0 | 35.0 | 47.4 | 45.6 | 57.5 | 34.6 | 47.5 | 44.8 | 58.5 | 35.7 | 46.4 |
| Vill Baigapara | 41.4 | 54.9 | 35.4 | 50.4 | 44.6 | 58.4 | 37.4 | 46.3 | 45.4 | 58.9 | 35.7 | 50.4 | 46.05 | 58.04 | 35.59 | 42.59 | 45.99 | 59.21 | 35.46 | 49.20 | 44.84 | 57.74 | 34.64 | 48.28 |
| Vill Parogiya | 42.4 | 63.8 | 37.8 | 54.3 | 42.6 | 57.2 | 34.6 | 49.8 | 44.6 | 56.2 | 33.5 | 47.7 | 45.49 | 52.61 | 36.39 | 49.45 | 45.20 | 58.36 | 34.25 | 49.70 | 45.56 | 58.96 | 34.09 | 50.05 |
| Vill Basan | 43.6 | 59.5 | 38.2 | 45.5 | 45.5 | 58.1 | 39.9 | 48.5 | 46.7 | 58.6 | 32.4 | 43.2 | 45.14 | 58.91 | 35.79 | 46.83 | 45.51 | 60.01 | 35.07 | 46.71 | 44.67 | 58.33 | 35.69 | 47.91 |

**Monitoring Reports
(1st October 2019 to 31st March 2020)**

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Parsa

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) | CO (mg/M ³) |
|----------------|--|---------------------------------------|---|---|----------------------------|
| Oct 2019 | 41.68 | 80.9 | 8.82 | 30.75 | 0.66 |
| Nov 2019 | 39.84 | 70.77 | 8.51 | 26.54 | 0.67 |
| Dec 2019 | 44.06 | 83.19 | 9.05 | 33.13 | 0.67 |
| Jan 2020 | 39.34 | 78.46 | 7.55 | 31.3 | 0.68 |
| Feb 2020 | 46.18 | 85.13 | 8.73 | 24.3 | 0.74 |
| Mar 2020 | 48.1 | 85.3 | 8.06 | 25.39 | 0.75 |
| Minimum | 39.34 | 70.77 | 7.55 | 24.3 | 0.66 |
| Maximum | 48.1 | 85.3 | 9.05 | 33.13 | 0.75 |
| Average | 43.20 | 80.63 | 8.45 | 28.57 | 0.70 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Salhi

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Oct 2019 | 40.05 | 75.27 | 8.5 | 29.56 | 0.69 |
| Nov 2019 | 40.56 | 72.99 | 8.87 | 25.52 | 0.67 |
| Dec 2019 | 41.55 | 79.28 | 8.2 | 32.44 | 0.73 |
| Jan 2020 | 38.68 | 73.24 | 8.74 | 21.44 | 0.72 |
| Feb 2020 | 50.39 | 87.66 | 10.04 | 28.1 | 0.87 |
| Mar 2020 | 47.4 | 85.61 | 8.3 | 24.53 | 0.74 |
| Minimum | 38.68 | 72.99 | 8.2 | 21.44 | 0.67 |
| Maximum | 50.39 | 87.66 | 10.04 | 32.44 | 0.87 |
| Average | 43.11 | 79.01 | 8.78 | 26.93 | 0.74 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Ghatabara

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Oct 2019 | 40.31 | 75.15 | 8.61 | 29.77 | 0.63 |
| Nov 2019 | 40.07 | 74.67 | 8.01 | 29.21 | 0.72 |
| Dec 2019 | 45.06 | 79.53 | 9.06 | 30.44 | 0.75 |
| Jan 2020 | 40.41 | 71.93 | 8.85 | 21.79 | 0.71 |
| Feb 2020 | 48.31 | 85.9 | 8.61 | 27.93 | 0.8 |
| Mar 2020 | 48.3 | 86.66 | 8.04 | 25.58 | 0.74 |
| Minimum | 40.07 | 71.93 | 8.01 | 21.79 | 0.63 |
| Maximum | 48.31 | 86.66 | 9.06 | 30.44 | 0.8 |
| Average | 43.74 | 78.97 | 8.53 | 27.45 | 0.73 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Parogiya

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Oct 2019 | 43.72 | 74.71 | 8.62 | 26.28 | 0.63 |
| Nov 2019 | 45 | 79.57 | 8.7 | 27.62 | 0.71 |
| Dec 2019 | 46.94 | 79.84 | 9.23 | 29.21 | 0.67 |
| Jan 2020 | 44.81 | 78.84 | 8.49 | 21.01 | 0.7 |
| Feb 2020 | 49.74 | 88.1 | 9.03 | 26.3 | 0.74 |
| Mar 2020 | 46.29 | 84.65 | 9.89 | 26.29 | 0.73 |
| Minimum | 43.72 | 74.71 | 8.49 | 21.01 | 0.63 |
| Maximum | 49.74 | 88.1 | 9.89 | 29.21 | 0.74 |
| Average | 46.08 | 80.95 | 8.99 | 26.12 | 0.70 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Baigapara

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Oct 2019 | 39.78 | 70.8 | 8.53 | 26.35 | 0.66 |
| Nov 2019 | 43.39 | 78.61 | 9.05 | 24.9 | 0.65 |
| Dec 2019 | 42.41 | 74.68 | 8.88 | 27.24 | 0.69 |
| Jan 2020 | 45.23 | 75.75 | 9.39 | 22.56 | 0.69 |
| Feb 2020 | 48.06 | 85.66 | 8.26 | 25.39 | 0.76 |
| Mar 2020 | 50.01 | 85.9 | 8.89 | 25.53 | 0.78 |
| Minimum | 39.78 | 70.8 | 8.26 | 22.56 | 0.65 |
| Maximum | 50.01 | 85.9 | 9.39 | 27.24 | 0.78 |
| Average | 44.81 | 78.57 | 8.83 | 25.33 | 0.71 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Near coal Washery area

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 (µg/M3) | PM 10 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) | CO (mg/M3) |
|----------------|-------------------|------------------|----------------|----------------|---------------|
| Oct 2019 | 38.66 | 71.2 | 8.53 | 27.12 | 0.69 |
| Nov 2019 | 45.19 | 83.4 | 8.87 | 26.5 | 0.77 |
| Dec 2019 | 42.68 | 74.36 | 8.74 | 30.56 | 30.56 |
| Jan 2020 | 42.33 | 76.99 | 8.91 | 23.53 | 0.77 |
| Feb 2020 | 48.31 | 89.46 | 7.63 | 25.98 | 0.75 |
| Mar 2020 | 48.4 | 87.3 | 8.96 | 30.53 | 0.83 |
| Minimum | 38.66 | 71.2 | 7.63 | 23.53 | 0.69 |
| Maximum | 48.4 | 89.46 | 8.96 | 30.56 | 30.56 |
| Average | 44.26 | 80.45 | 8.61 | 27.37 | 5.73 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Near Coal Mine area

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) | CO (mg/M ³) |
|----------------|--|---------------------------------------|---|---|----------------------------|
| Oct 2019 | 39.76 | 72.15 | 8.95 | 24.33 | 0.65 |
| Nov 2019 | 42.84 | 79.52 | 8.82 | 27.4 | 0.74 |
| Dec 2019 | 41.98 | 77.13 | 9.01 | 27.1 | 0.7 |
| Jan 2020 | 43.55 | 81.03 | 8.55 | 24.69 | 0.75 |
| Feb 2020 | 46.61 | 86.43 | 9.26 | 27.06 | 0.81 |
| Mar 2020 | 47.29 | 85.21 | 8.61 | 24.6 | 0.77 |
| Minimum | 39.76 | 72.15 | 8.55 | 24.33 | 0.65 |
| Maximum | 47.29 | 86.43 | 9.26 | 27.4 | 0.81 |
| Average | 43.67 | 80.25 | 8.87 | 25.86 | 0.74 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Village – Basan Village

AMBIENT AIR QUALITY MONITORING RESULTS

| Month | PM 2.5 ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) | CO (mg/M ³) |
|----------------|--|---------------------------------------|---|---|----------------------------|
| Oct 2019 | 39.51 | 73.77 | 8.62 | 26 | 0.7 |
| Nov 2019 | 43.72 | 74.71 | 8.62 | 26.29 | 0.63 |
| Dec 2019 | 42.95 | 76.74 | 9.1 | 30.28 | 0.74 |
| Jan 2020 | 44.65 | 81.28 | 8.48 | 23.69 | 0.77 |
| Feb 2020 | 48.46 | 86.11 | 9.1 | 26.91 | 0.75 |
| Mar 2020 | 47.59 | 84.38 | 8.9 | 27.13 | 0.69 |
| Minimum | 39.51 | 73.77 | 8.48 | 23.69 | 0.63 |
| Maximum | 48.46 | 86.11 | 9.1 | 30.28 | 0.77 |
| Average | 44.48 | 79.50 | 8.80 | 26.72 | 0.71 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Near CHP Area

WORK ZONE AIR QUALITY MONITORING RESULTS

| Month | SPM (µg/M3) | PM 10 (µg/M3) | PM 2.5 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) |
|------------|----------------|------------------|-------------------|----------------|----------------|
| Oct 2019 | 154.26 | 76.15 | 45.21 | 9.12 | 23.5 |
| Nov 2019 | 158.42 | 78.24 | 46.8 | 9.21 | 26.81 |
| Dec 2019 | 146.2 | 82.36 | 49.52 | 9.32 | 24.32 |
| Jan 2020 | 142.6 | 81.45 | 47.55 | 9.41 | 22.16 |
| Feb 2020 | 145.12 | 78.21 | 45.84 | 9.32 | 21.3 |
| Mar 2020 | 144.52 | 75.31 | 42.83 | 9.26 | 20.18 |
| Min | 142.6 | 75.31 | 42.83 | 9.12 | 20.18 |
| Max | 158.42 | 82.36 | 49.52 | 9.41 | 26.81 |
| Avg | 148.52 | 78.62 | 46.29 | 9.27 | 23.05 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Near Washery Area

WORK ZONE AIR QUALITY MONITORING RESULTS

| Month | SPM (µg/M3) | PM 10 (µg/M3) | PM 2.5 (µg/M3) | SO2 (µg/M3) | NOx (µg/M3) |
|------------|----------------|------------------|-------------------|----------------|----------------|
| Oct 2019 | 162.82 | 75.11 | 44.72 | 7.79 | 18.46 |
| Nov 2019 | 163.49 | 77.5 | 43.74 | 7.95 | 20.3 |
| Dec 2019 | 156.3 | 78.52 | 46.16 | 8.12 | 18.67 |
| Jan 2020 | 150.16 | 72.82 | 45.98 | 8.46 | 18.15 |
| Feb 2020 | 148.54 | 75.36 | 41.02 | 8.14 | 15.46 |
| Mar 2020 | 146.18 | 73.18 | 39.05 | 8.76 | 14.59 |
| Min | 146.18 | 72.82 | 39.05 | 7.79 | 14.59 |
| Max | 163.49 | 78.52 | 46.16 | 8.76 | 20.3 |
| Avg | 154.58 | 75.42 | 43.45 | 8.22 | 17.61 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-5182

Name of Monitoring Location : Mine Pit area

Work Zone AIR QUALITY MONITORING RESULTS

| Month | SPM ($\mu\text{g}/\text{M}^3$) | PM 10 ($\mu\text{g}/\text{M}^3$) | PM 2.5 ($\mu\text{g}/\text{M}^3$) | SO ₂ ($\mu\text{g}/\text{M}^3$) | NO _x ($\mu\text{g}/\text{M}^3$) |
|------------|-------------------------------------|---------------------------------------|--|---|---|
| Oct 2019 | 149.62 | 85.29 | 46.37 | 9.1 | 24.49 |
| Nov 2019 | 151.29 | 87.1 | 43.52 | 9.3 | 25.92 |
| Dec 2019 | 152.84 | 89.13 | 47.5 | 9.73 | 23.41 |
| Jan 2020 | 155.2 | 90.42 | 48.86 | 10.37 | 24.78 |
| Feb 2020 | 151.02 | 85.34 | 46.51 | 9.7 | 23.26 |
| Mar 2020 | 148.02 | 83.26 | 43.12 | 9.74 | 22.84 |
| Min | 148.02 | 83.26 | 43.12 | 9.1 | 22.84 |
| Max | 155.2 | 90.42 | 48.86 | 10.37 | 25.92 |
| Avg | 151.33 | 86.76 | 45.98 | 9.66 | 24.12 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : IS-3025, APHA 22nd Edition

Sampling Description : Workshop ETP Water

| Month | pH | COD | BOD (3 days at 27 Deg) | TSS | Oil & Grease | Copper as Cu | Nickel as Ni | Lead as Pb | Mercury as Hg | Hexavalent Chromium as Cr+6 |
|----------------|-------------|--------------|------------------------|--------------|--------------|--------------|--------------|-------------|---------------|-----------------------------|
| Oct 2019 | 7.64 | 84.56 | 23 | 39 | 0.86 | 0.65 | BDL | 0.55 | 0.28 | BDL |
| Nov 2019 | 7.76 | 86.5 | 24 | 41 | 0.88 | 0.67 | BDL | 0.52 | 0.25 | BDL |
| Dec 2019 | 7.69 | 88.6 | 25 | 43 | 0.89 | 0.7 | BDL | 0.56 | 0.24 | BDL |
| Jan 2020 | 7.72 | 90.5 | 26 | 45 | 0.92 | 0.75 | BDL | 0.59 | 0.29 | BDL |
| Feb 2020 | 7.67 | 87.5 | 22 | 43 | 0.88 | 0.72 | BDL | 0.54 | 0.26 | BDL |
| Mar 2020 | 7.71 | 86.7 | 21 | 41 | 0.86 | 0.69 | BDL | 0.53 | 0.24 | BDL |
| Minimum | 7.64 | 84.56 | 21 | 39 | 0.86 | 0.65 | BDL | 0.52 | 0.24 | BDL |
| Maximum | 7.76 | 90.5 | 26 | 45 | 0.92 | 0.75 | BDL | 0.59 | 0.29 | BDL |
| Average | 7.70 | 87.39 | 23.50 | 42.00 | 0.88 | 0.70 | BDL | 0.55 | 0.26 | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020

Testing Protocol/ Method : IS-3025, APHA 22nd Edition

Sampling Description : Mix Drain Water at Settling Pond

| Month | pH | COD | BOD (3 days at 27 Deg) | TSS | Oil & Grease | Copper as Cu | Nickel as Ni | Lead as Pb | Mercury as Hg | Hexavalent Chromium as Cr+6 |
|----------------|-------------|--------------|------------------------|--------------|--------------|--------------|--------------|-------------|---------------|-----------------------------|
| Oct 2019 | 7.79 | 86.46 | 25 | 32 | 0.66 | 0.55 | BDL | 0.4 | 0.26 | BDL |
| Nov 2019 | 7.74 | 89.4 | 26 | 38 | 0.69 | 0.58 | BDL | 0.44 | 0.32 | BDL |
| Dec 2019 | 7.78 | 90 | 27 | 40 | 0.73 | 0.61 | BDL | 0.47 | 0.35 | BDL |
| Jan 2020 | 7.81 | 87 | 22 | 36 | 0.65 | 0.55 | BDL | 0.41 | 0.32 | BDL |
| Feb 2020 | 7.73 | 81 | 19 | 38 | 0.61 | 0.48 | BDL | 0.39 | 0.3 | BDL |
| Mar 2020 | 7.66 | 79.2 | 16 | 32 | 0.58 | 0.45 | BDL | 0.37 | 0.29 | BDL |
| Minimum | 7.66 | 79.2 | 16 | 32 | 0.58 | 0.45 | BDL | 0.37 | 0.26 | BDL |
| Maximum | 7.81 | 90 | 27 | 40 | 0.73 | 0.61 | BDL | 0.47 | 0.35 | BDL |
| Average | 7.75 | 85.51 | 22.50 | 36.00 | 0.65 | 0.54 | BDL | 0.41 | 0.31 | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited

Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Oct 2019 to Mar 2020
Testing Protocol/ Method : IS-3025, APHA 22nd Edition
Sampling Description : STP Treated Water

| Month | pH | COD | BOD (3 days at 27 Deg) | TSS | Oil & Grease | Copper as Cu | Nickel as Ni | Lead as Pb | Mercury as Hg | Hexavalent Chromium as Cr+6 |
|----------------|-------------|--------------|------------------------|--------------|--------------|--------------|--------------|-------------|---------------|-----------------------------|
| Oct 2019 | 7.65 | 81.49 | 24 | 40 | 0.2 | 0.15 | BDL | 0.16 | BDL | BDL |
| Nov 2019 | 7.72 | 79.62 | 22 | 35 | 0.2 | 0.13 | BDL | 0.14 | BDL | BDL |
| Dec 2019 | 7.74 | 82.82 | 24 | 37 | 0.2 | 0.15 | BDL | 0.13 | BDL | BDL |
| Jan 2020 | 7.71 | 84.5 | 23 | 33 | 0.2 | 0.18 | BDL | 0.12 | BDL | BDL |
| Feb 2020 | 7.43 | 79.6 | 21 | 35 | 0.2 | 0.16 | BDL | 0.15 | BDL | BDL |
| Mar 2020 | 7.42 | 78.6 | 20 | 33 | 0.2 | 0.15 | BDL | 0.14 | BDL | BDL |
| Minimum | 7.42 | 78.6 | 20 | 33 | 0.2 | 0.13 | BDL | 0.12 | BDL | BDL |
| Maximum | 7.74 | 84.5 | 24 | 40 | 0.2 | 0.18 | BDL | 0.16 | BDL | BDL |
| Average | 7.61 | 81.11 | 22.33 | 35.50 | 0.20 | 0.15 | BDL | 0.14 | BDL | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Nov 2019 (Post-Monsoon), (Core Zone)

Testing Protocol/ Method : IS-10500-2012/ APHA 22ND Edition 2012

Sampling Description : Groundwater

| Parameters | Unit | Maximum Permissible Limit | Location | | | |
|---------------------------------|------------|---------------------------------|--------------------------|-------------|-------------|-------------|
| | | | Vill - Near Mango Garden | Vill- Salhi | Vill- Parsa | Vill- Basan |
| pH | -- | 6.5 – 8.5 | 7.49 | 7.5 | 7.69 | 7.52 |
| Colour | Hazen | 15 | BDL | BDL | BDL | BDL |
| Turbidity | NTU | 5 | BDL | BDL | BDL | BDL |
| Odour | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Taste | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Total Hardness | Mg/l | 600 | 76 | 94 | 115 | 97 |
| Calcium As Ca | Mg/l | 200 | 29.45 | 25.18 | 40.75 | 28.9 |
| Alkalinity as CaCO ₃ | Mg/l | 600 | 57.26 | 76.11 | 95.62 | 81.32 |
| Chloride as Cl | Mg/l | 1000 | 20.48 | 18.25 | 32.81 | 21.06 |
| Cyanide as CN | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Magnesium as Mg | Mg/l | 100 | 1.34 | 7.57 | 3.24 | 6.05 |
| TDS | Mg/l | 2000 | 151 | 166 | 221 | 172 |
| Sulphate as SO ₄ | Mg/l | 400 | 4.88 | 6.22 | 8.59 | 7.05 |
| Fluoride as F | Mg/l | 1.5 | 0.36 | 0.45 | 0.33 | 0.5 |
| Nitrate as NO ₃ | Mg/l | 45 | 9.68 | 3.56 | 5.41 | 3.89 |
| Iron as Fe | Mg/l | 0.3 | 0.29 | 0.25 | 0.21 | 0.26 |
| Aluminum as Al | Mg/l | 0.2 | BDL | BDL | BDL | BDL |
| Boron | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Total Chromium as Cr | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Phenolic Compound | Mg/l | 0.002 | BDL | BDL | BDL | BDL |
| Mineral Oil | Mg/l | 0.5 | BDL | BDL | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.31 | 0.31 | 0.17 | 0.31 |
| Copper as Cu | Mg/l | 1.5 | 0.12 | BDL | BDL | BDL |
| Manganese as Mn | Mg/l | 0.3 | BDL | BDL | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.003 | BDL | BDL | BDL | BDL |
| Lead as Pb | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Selenium as Se | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Arsenic as As | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Mercury as Hg | Mg/l | 0.001 | BDL | BDL | BDL | BDL |
| Total Coliform | MPN/100 MI | Not Detectable in 100 MI Sample | <2/100 | <2/100 | <2/100 | Absent |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Nov 2019 (Post-Monsoon), (Buffer Zone)

Testing Protocol/ Method : IS-10500-2012/ APHA 22ND Edition 2012

Sampling Description : Groundwater

| Parameters | Unit | Maximum Permissible Limit | Location | | | |
|---------------------------------|------------|---------------------------------|-------------------|----------------|-----------------|--------------|
| | | | Vill - Shiv Nagar | Vill - Gidmuri | Vill - Parogiya | Vill - Salba |
| pH | -- | 6.5 – 8.5 | 7.38 | 7.52 | 7.64 | 7.81 |
| Colour | Hazen | 15 | BDL | BDL | BDL | BDL |
| Turbidity | NTU | 5 | BDL | BDL | BDL | BDL |
| Odour | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Taste | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Total Hardness | Mg/l | 600 | 101 | 119 | 120 | 95 |
| Calcium As Ca | Mg/l | 200 | 21.82 | 36.84 | 32.48 | 22.39 |
| Alkalinity as CaCO ₃ | Mg/l | 600 | 62.73 | 98.68 | 93.52 | 76.43 |
| Chloride as Cl | Mg/l | 1000 | 8.64 | 33.1 | 31.49 | 15.13 |
| Cyanide as CN | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Magnesium as Mg | Mg/l | 100 | 11.31 | 6.58 | 9.47 | 9.51 |
| TDS | Mg/l | 2000 | 148 | 227 | 171 | 197 |
| Sulphate as SO ₄ | Mg/l | 400 | 3.03 | 8.95 | 7.1 | 7.43 |
| Fluoride as F | Mg/l | 1.5 | 0.19 | 0.53 | 0.43 | 0.31 |
| Nitrate as NO ₃ | Mg/l | 45 | 1.26 | 6.9 | 5.13 | 4.93 |
| Iron as Fe | Mg/l | 0.3 | 0.15 | 0.28 | 0.29 | 0.22 |
| Aluminum as Al | Mg/l | 0.2 | BDL | BDL | BDL | BDL |
| Boron | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Total Chromium as Cr | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Phenolic Compound | Mg/l | 0.002 | BDL | BDL | BDL | BDL |
| Mineral Oil | Mg/l | 0.5 | BDL | BDL | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.26 | 0.21 | BDL | 0.15 |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL | BDL | BDL |
| Manganese as Mn | Mg/l | 0.3 | BDL | BDL | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.003 | BDL | BDL | BDL | BDL |
| Lead as Pb | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Selenium as Se | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Arsenic as As | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Mercury as Hg | Mg/l | 0.001 | BDL | BDL | BDL | BDL |
| Total Coliform | MPN/100 MI | Not Detectable in 100 MI Sample | <2/100 | Absent | <2/100 | <2/100 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Jan 2020 (Winter), (Core Zone)

Testing Protocol/ Method : IS-10500-2012/ APHA 22ND Edition 2012

Sampling Description : Groundwater

| Parameters | Unit | Maximum Permissible Limit | Location | | | |
|---------------------------------|------------|---------------------------------|--------------------------|-------------|-------------|-------------|
| | | | Vill - Near Mango Garden | Vill- Salhi | Vill- Parsa | Vill- Basan |
| pH | -- | 6.5 – 8.5 | 7.38 | 7.52 | 7.81 | 7.78 |
| Colour | Hazen | 15 | BDL | BDL | BDL | BDL |
| Turbidity | NTU | 5 | BDL | BDL | BDL | BDL |
| Odour | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Taste | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Total Hardness | Mg/l | 600 | 101 | 119 | 95 | 49 |
| Calcium As Ca | Mg/l | 200 | 21.82 | 36.84 | 22.39 | 11.28 |
| Alkalinity as CaCO ₃ | Mg/l | 600 | 62.73 | 98.68 | 76.43 | 11.28 |
| Chloride as Cl | Mg/l | 1000 | 8.64 | 33.1 | 15.13 | 37.55 |
| Cyanide as CN | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Magnesium as Mg | Mg/l | 100 | 11.2 | 6.58 | 9.51 | 5.07 |
| TDS | Mg/l | 2000 | 148 | 227 | 197 | 88 |
| Sulphate as SO ₄ | Mg/l | 400 | 3.03 | 8.95 | 7.43 | 3.68 |
| Fluoride as F | Mg/l | 1.5 | 0.19 | 0.53 | 0.31 | 0.1 |
| Nitrate as NO ₃ | Mg/l | 45 | 1.26 | 6.9 | 4.93 | BDL |
| Iron as Fe | Mg/l | 0.3 | 0.15 | 0.21 | 0.22 | 0.07 |
| Aluminum as Al | Mg/l | 0.2 | BDL | BDL | BDL | BDL |
| Boron | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Total Chromium as Cr | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Phenolic Compound | Mg/l | 0.002 | BDL | BDL | BDL | BDL |
| Mineral Oil | Mg/l | 0.5 | BDL | BDL | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.26 | 0.21 | 0.15 | BDL |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL | BDL | BDL |
| Manganese as Mn | Mg/l | 0.3 | BDL | BDL | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.003 | BDL | BDL | BDL | BDL |
| Lead as Pb | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Selenium as Se | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Arsenic as As | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Mercury as Hg | Mg/l | 0.001 | BDL | BDL | BDL | BDL |
| Total Coliform | MPN/100 MI | Not Detectable in 100 MI Sample | <2/100 | <2/100 | <2/100 | Absent |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Jan 2020 (Winter), (Buffer Zone)

Testing Protocol/ Method : IS-10500-2012/ APHA 22ND Edition 2012

Sampling Description : Groundwater

| Parameters | Unit | Maximum Permissible Limit | Location | | | |
|---------------------------------|------------|---------------------------------|-------------------|----------------|-----------------|--------------|
| | | | Vill - Shiv Nagar | Vill - Gidmuri | Vill - Parogiya | Vill - Salba |
| pH | -- | 6.5 – 8.5 | 7.38 | 7.46 | 7.61 | 7.68 |
| Colour | Hazen | 15 | BDL | BDL | BDL | BDL |
| Turbidity | NTU | 5 | BDL | BDL | BDL | BDL |
| Odour | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Taste | -- | Agreeable | Agreeable | Agreeable | Agreeable | Agreeable |
| Total Hardness | Mg/l | 600 | 101 | 98 | 148 | 125 |
| Calcium As Ca | Mg/l | 200 | 21.82 | 24.37 | 52.69 | 41.85 |
| Alkalinity as CaCO ₃ | Mg/l | 600 | 62.73 | 65.73 | 132.41 | 92.57 |
| Chloride as Cl | Mg/l | 1000 | 8.64 | 10.56 | 41.28 | 39.76 |
| Cyanide as CN | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Magnesium as Mg | Mg/l | 100 | 11.31 | 9.04 | 4.01 | 5 |
| TDS | Mg/l | 2000 | 148 | 152 | 291 | 201 |
| Sulphate as SO ₄ | Mg/l | 400 | 3.03 | 3.24 | 16.21 | 9.16 |
| Fluoride as F | Mg/l | 1.5 | 0.19 | 0.21 | 0.44 | 0.39 |
| Nitrate as NO ₃ | Mg/l | 45 | 1.26 | 1.3 | 7.39 | 5.68 |
| Iron as Fe | Mg/l | 0.3 | 0.15 | 0.18 | 0.15 | 0.25 |
| Aluminum as Al | Mg/l | 0.2 | BDL | BDL | BDL | BDL |
| Boron | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Total Chromium as Cr | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Phenolic Compound | Mg/l | 0.002 | BDL | BDL | BDL | BDL |
| Mineral Oil | Mg/l | 0.5 | BDL | BDL | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1 | BDL | BDL | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.26 | 0.32 | 0.13 | 0.15 |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL | BDL | BDL |
| Manganese as Mn | Mg/l | 0.3 | BDL | BDL | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.003 | BDL | BDL | BDL | BDL |
| Lead as Pb | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Selenium as Se | Mg/l | 0.01 | BDL | BDL | BDL | BDL |
| Arsenic as As | Mg/l | 0.05 | BDL | BDL | BDL | BDL |
| Mercury as Hg | Mg/l | 0.001 | BDL | BDL | BDL | BDL |
| Total Coliform | MPN/100 MI | Not Detectable in 100 MI Sample | <2/100 | <2/100 | Absent | <2/100 |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
Chhattisgarh

Monitoring Period : Nov-19/Jan-20
 Testing Protocol/ Method : IS-2296 Class-A
 Sampling Description : Surface water sample – Atem River

| Parameters | Unit | Limits as per IS-2296 Class - A | Post-Monsoon (November-2019) | Winter (January -2020) |
|-----------------------------|-------|---------------------------------|------------------------------|------------------------|
| pH | -- | 6.5 – 8.5 | 7.68 | 7.06 |
| Colour | Hazen | 10 | BDL | BDL |
| Chloride | NTU | 250 | 37.5 | 16.44 |
| TDS | Mg/l | 500 | 186 | 135.00 |
| Dissolve Oxygen | Mg/l | 4 | 2.6 | 1.9 |
| Sulphate as SO ₄ | Mg/l | 400 | 28.0 | 14.00 |
| Fluoride as F | Mg/l | 1.5 | 0.38 | 0.26 |
| Iron as Fe | | 0.3 | 0.21 | 0.19 |
| Chromium as Cr+6 | Mg/l | 0.05 | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1.0 | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.59 | 0.45 |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL |
| Oil & Grease | Mg/l | -- | BDL | BDL |
| Nitrate as NO ₃ | Mg/l | 20 | 4.56 | 3.89 |
| Arsenic as As | | 0.2 | BDL | BDL |
| Lead as Pb | Mg/l | 0.1 | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.01 | BDL | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
 Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
 Chhattisgarh

Monitoring Period : Nov-19/Jan-20
 Testing Protocol/ Method : IS-2296 Class-A
 Sampling Description : Surface water sample – Tara Nala

| Parameters | Unit | Limits as per IS-2296 Class - A | Post-Monsoon (November-2019) | Winter (January -2020) |
|---------------------------|-------|---------------------------------|------------------------------|------------------------|
| pH | -- | 6.5 – 8.5 | 7.62 | 7.13 |
| Colour | Hazen | 10 | BDL | BDL |
| Chloride | NTU | 250 | 45.64 | 29.44 |
| TDS | Mg/l | 500 | 195 | 121.00 |
| Dissolve Oxygen | Mg/l | 4 | 3.2 | 2.3 |
| Sulphate as SO4 | Mg/l | 400 | 42.58 | 22.68 |
| Fluoride as F | Mg/l | 1.5 | 0.51 | 0.40 |
| Iron as Fe | | 0.3 | 0.24 | 0.18 |
| Chromium as Cr+6 | Mg/l | 0.05 | BDL | BDL |
| Anionic Detergent as MBAS | Mg/l | 1.0 | BDL | BDL |
| Zink as Zn | Mg/l | 15 | 0.42 | 0.32 |
| Copper as Cu | Mg/l | 1.5 | BDL | BDL |
| Oil & Grease | Mg/l | -- | BDL | BDL |
| Nitrate as NO3 | Mg/l | 20 | 5.93 | 4.1 |
| Arsenic as As | | 0.2 | BDL | BDL |
| Lead as Pb | Mg/l | 0.1 | BDL | BDL |
| Cadmium as Cd | Mg/l | 0.01 | BDL | BDL |

Project Name & Address : M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited
 Village – Parsa Kanta, Tehsil – Udaipur, District – Surguja
 Chhattisgarh

Monitoring Period : October 2019 to March 2020

Testing Protocol/ Method : As per CPCB/SPCB/MoEF&CC/IS-9989

NOISE LEVEL MONITORING RESULT

| Location | Oct-19 | | | | | | Nov-19 | | | | | | Dec-19 | | | | | | Jan-20 | | | | | | Feb-20 | | | | | | Mar-20 | | | | | |
|----------------|----------|-------|--|------------|-------|--|----------|-------|--|------------|-------|--|----------|-------|--|------------|-------|--|----------|-------|--|------------|-------|--|----------|-------|--|------------|-------|--|----------|-------|--|------------|-------|--|
| | Day Time | | | Night Time | | | Day Time | | | Night Time | | | Day Time | | | Night Time | | | Day Time | | | Night Time | | | Day Time | | | Night Time | | | Day Time | | | Night Time | | |
| | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | | Min | Max | |
| Vill Parsa | 45.34 | 59.18 | | 35.65 | 47.24 | | 44.33 | 55.50 | | 35.91 | 46.10 | | 45.06 | 58.09 | | 35.65 | 46.48 | | 44.84 | 57.74 | | 34.64 | 48.28 | | 45.85 | 56.18 | | 36.04 | 47.33 | | 46.45 | 56.54 | | 35.56 | 45.98 | |
| Vill Baigapara | 44.23 | 58.04 | | 34.96 | 47.73 | | 44.08 | 57.23 | | 35.34 | 46.89 | | 45.80 | 61.85 | | 35.81 | 51.26 | | 44.80 | 58.49 | | 35.69 | 46.39 | | 44.93 | 55.03 | | 36.96 | 48.45 | | 44.35 | 56.36 | | 35.60 | 47.74 | |
| Coal Mine Area | 46.20 | 61.30 | | 35.03 | 47.66 | | 43.87 | 59.26 | | 36.01 | 46.71 | | 46.24 | 62.36 | | 35.03 | 47.60 | | 45.09 | 58.30 | | 35.18 | 46.83 | | 46.80 | 59.53 | | 35.66 | 47.60 | | 45.35 | 57.54 | | 36.08 | 46.59 | |
| Vill Parogiya | 45.35 | 60.29 | | 34.49 | 48.96 | | 44.88 | 55.30 | | 35.44 | 45.64 | | 45.34 | 59.18 | | 35.68 | 47.24 | | 45.56 | 58.96 | | 34.09 | 50.05 | | 44.91 | 61.05 | | 34.49 | 50.24 | | 45.91 | 60.47 | | 34.87 | 51.66 | |
| Vill Basan | 44.18 | 59.19 | | 35.14 | 46.21 | | 45.13 | 57.44 | | 35.27 | 47.10 | | 44.56 | 58.16 | | 35.27 | 47.31 | | 45.24 | 58.93 | | 35.57 | 48.23 | | 46.71 | 59.50 | | 35.80 | 48.37 | | 45.80 | 58.23 | | 34.36 | 47.04 | |
| Vill Salhi | 44.77 | 57.39 | | 36.01 | 47.59 | | 45.17 | 58.41 | | 35.26 | 45.93 | | 46.16 | 59.90 | | 34.37 | 48.50 | | 46.00 | 57.83 | | 35.13 | 47.23 | | 45.78 | 57.83 | | 35.13 | 47.23 | | 44.20 | 57.80 | | 34.73 | 47.54 | |
| Vill Ghatabara | 45.19 | 57.73 | | 35.96 | 46.89 | | 45.59 | 59.24 | | 35.97 | 47.50 | | 45.87 | 63.07 | | 34.79 | 50.47 | | 45.41 | 60.33 | | 34.84 | 46.97 | | 45.41 | 60.33 | | 34.84 | 47.00 | | 44.57 | 58.39 | | 35.42 | 48.83 | |
| Coal Washery | 46.00 | 57.73 | | 36.06 | 47.94 | | 44.27 | 58.29 | | 35.36 | 46.79 | | 45.90 | 60.11 | | 35.37 | 45.74 | | 45.90 | 59.63 | | 35.94 | 49.21 | | 45.90 | 59.63 | | 35.94 | 49.21 | | 45.36 | 58.31 | | 34.74 | 48.96 | |

Annexure- -II

Year-wise reclamation and plantation details till 31st March 2020 of Parsa East & Kanta Basan Coal Mine Project

Details of year- wise reclamation along physical and biological reclamation and plantation has been given in the table -1 below-

Table-1: Year wise reclamation status till 31st March 2020

| Particulars | | YEAR 2012- 13 | YEAR 2013- 14 | YEAR 2014-15 | YEAR 2015- 16 | YEAR 2016-17 | YEAR 2017-18 | YEAR 2018- 2019 | YEAR 2019 - 2020 | Total |
|---|-------------------------|---------------------|---------------------|-----------------|---------------------|-----------------|-----------------|-----------------------|------------------------|---------------|
| Broken Area (Ha) | | 60 | 28 | 45 | 97.4 | 92.1 | 115.4 | 183.94 | 100.441 | 722.281 |
| Excavation Area (Coal) | | 4.8 | 13.2 | 26.2 | 52.5 | 75.8 | 81.9 | 137.7 | 47.12 | 439.22 |
| External dump area (Ha) | | 20 | 17.4 | 4.9 | 18.7 | 7 | 29.2 | 0 | 0 | 97.2 |
| Backfilled area (Ha) | | 0 | 14.4 | 16.7 | 29.4 | 33.8 | 21 | 150.5 | 97.61 | 363.41 |
| Physical Reclamation (Ha) | | 0 | 12.7 | 1.3 | 10.44 | 10.96 | 22 | 37.93 | 82.64 | 177.97 |
| Plantation/ Biological Reclamation (Ha) | Others Area (Ha) | 1.5 | 2.3 | 5.1 | 4.6 | 9.35 | 3.61 | 1.59 | 0 | 28.05 |
| | External dump area (Ha) | 0 | 0 | 0 | 0 | 21.65 | 14.49 | 26.59 | 9.63 | 72.36 |
| | Internal dump Area (Ha) | | | 0.8 | 3.1 | 8.2 | 10.2 | 27.9 | 56.1 | 106.3 |
| | Total Area | 1.5 | 2.3 | 5.9 | 7.7 | 39.2 | 28.3 | 56.08 | 65.73 | 206.71 |
| Total plantation (Nos.) | | 3732 | 5852 | 14799 | 19296 | 97903 | 70705 | 140189 | 141213 | 493689 |
| Coal produced (in Million Te) | | 0.292 | 1.197 | 3.443 | 6.21 | 8.267 | 8.328 | 15 | 15 | 57.737 |

About 4.93 Lakh plants of different native species (More than 80 % survival rate) has been planted over reclaimed land & infrastructure area including Sal, Shisham, shishoo, Teak, Neem, etc. Plant were generated in pit top nursery. A plan showing area wise reclamation & plantation is placed in figure-1

Additionally, about 8145 trees have been transplanted till 31st March 2020 with the survival rate more than 80 %

Species- wise plantation detail is mentioned in table -2 below-

| | | | | | | | | | | | |
|----|--------------|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|---------------|
| 28 | BAHERRA | Terminalia bellirica. | 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 219 |
| 29 | KOSHAM | Kosham tree | 561 | 0 | 0 | 0 | 0 | 0 | 0 | 990 | 1551 |
| 30 | CHAR | Buchanania cochinchinensis | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 31 | BAMBOO | Bambusa Vulgaris | 0 | 561 | 0 | 0 | 9710 | 5487 | 26047 | 30065 | 71870 |
| 32 | NEEM | Azadirachata Indica | 10 | 1 | 0 | 0 | 915 | 8148 | 3805 | 1615 | 14494 |
| 33 | SEMAL | Bombax ceiba | 0 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 70 |
| 34 | HALDU | Haldina Cordifolia | 0 | 0 | 0 | 0 | 0 | 3265 | 5601 | 190 | 9056 |
| 35 | MUNDI | Sphaeranthus indicus | 0 | 0 | 0 | 0 | 0 | 8475 | 6373 | 0 | 14848 |
| 36 | CHIKU | Achras sapota | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 0 | 200 |
| 37 | LICHI | Litchi chinensis | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 0 | 200 |
| 38 | KADAM | Neolamarckia cadamba | 0 | 0 | 0 | 0 | 0 | 151 | 0 | 460 | 611 |
| 39 | BIJA | Pterocarpus Marsupium | 0 | 0 | 0 | 0 | 0 | 4151 | 9416 | 11787 | 25354 |
| 40 | GULAR | Ficus racemosa | 0 | 0 | 0 | 0 | 0 | 0 | 2107 | 0 | 2107 |
| 41 | PAKAD | Ficus virens | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 18 |
| | TOTAL | | 3732 | 5852 | 1479 | 1929 | 9790 | 7070 | 14018 | 14121 | 493689 |

Species wise report of Tree Transplantation

| Sr. No. | Species | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | G. Total |
|---------|------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| 1 | SAL | 1341 | 993 | 118 | 668 | 1110 | 1476 | 811 | 208 | 6725 |
| 2 | MAHUWA | 45 | 0 | 215 | 330 | 455 | 40 | 75 | 44 | 1204 |
| 3 | CHAR | 20 | 0 | 0 | 45 | 35 | 0 | 5 | 0 | 105 |
| 4 | JACK FRUIT | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5 | AMALTAS | 4 | 0 | 0 | 0 | 1 | 0 | 12 | 0 | 17 |
| 6 | MANGO | 3 | 0 | 0 | 2 | 6 | 1 | 0 | 0 | 12 |
| 7 | GUAVA | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8 | BHELVA | 0 | 0 | 0 | 5 | 1 | 0 | 1 | 0 | 7 |
| 9 | HALDU | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 10 | KUMBHI | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 11 | TENDU | 0 | 0 | 0 | 20 | 12 | 0 | 7 | 0 | 39 |
| 12 | JAMUN | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 7 |
| 13 | KAHUWA | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 14 | SIDHA | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 16 |
| 15 | KASAE | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 16 | BEL | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 17 | SEMAL | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |

| | | | | | | | | | | |
|----|--------------|-------------|------------|------------|-------------|-------------|-------------|------------|------------|-------------|
| 18 | KORKOT | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 19 | BARGAD | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 20 | KUSUM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 21 | GULAR | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 22 | RUDRAKCHA | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| | TOTAL | 1415 | 993 | 333 | 1072 | 1627 | 1517 | 936 | 252 | 8145 |

FIG:1 Plan Showing Reclamation status for PEKB opencast Coal Mine project.

