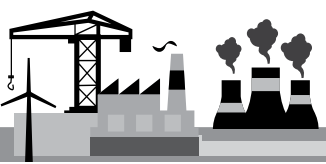


### 3 Plant Load Factor Details

#### 3.a Loss of PLF due to non-availability of fuel/schedule/backing down/any external factor Unforeseen factors

| 3.a.1 | Units   | Baseline Year  |                 |   |                 |  |                 | Assessment Year   |                 |  |                 |   |                 | Source of Data   |                 |   |                 |    |                 |
|-------|---------|--|-----------------|---|-----------------|--|-----------------|---|-----------------|--|-----------------|---|-----------------|--|-----------------|---|-----------------|----|-----------------|
|       |         | Average Operating Load (MW) caused by low ULF due to Coal Unavailability @ |                 | Average Operating Load (MW) caused by low ULF due to Scheduling @ |                 | Average Operating Load (MW) caused by low ULF due to backing down@ |                 | Average Operating Load (MW) caused by low ULF due to any other external factor@ |                 | Average Operating Load (MW) caused by low ULF due to Coal Unavailability @ |                 | Average Operating Load (MW) caused by low ULF due to Scheduling @ |                 | Average Operating Load (MW) caused by low ULF due to backing down@ |                 | Average Operating Load (MW) caused by low ULF due to any other external factor@ |                 |    |                 |
|       |         | MW   | Opera -ting Hrs | MW  | Opera -ting Hrs | MW   | Opera -ting Hrs | MW  | Opera -ting Hrs | MW   | Opera -ting Hrs | MW  | Opera -ting Hrs | MW   | Opera -ting Hrs | MW  | Opera -ting Hrs | MW | Opera -ting Hrs |
| i     | Unit-1  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| ii    | Unit-2  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| iii.  | Unit-3  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| iv.   | Unit-4  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| v     | Unit-5  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| vi    | Unit-6  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| vii   | Unit-7  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| viii  | Unit-8  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| ix    | Unit-9  |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| X     | Unit-10 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |
| 3.a.2 | Total   |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |  |                 |   |                 |    |                 |

@ External Factors: Non-Availability of fuel/schedule/backing down/any other external factor/Unforeseen factors



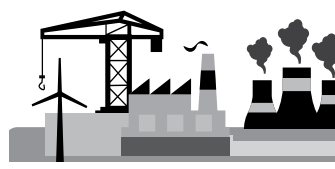
### 3.b Loss of PLF due to non-availability of fuel/schedule/backing down/any external factor/Unforeseen factors/Internal Factor

| 3.b.1 |  | Units   | Baseline Year(Average of Year 1 to Year 3) |                                   |  |                             |   |                  |                                     |             | Assessment/Current/Target Year    |  |                             |   |                  |   |                                     |  | Source of Data |
|-------|--|---------|--|-----------------------------------|--|-----------------------------|---|------------------|-------------------------------------|-------------|-----------------------------------|--|-----------------------------|---|------------------|---|-------------------------------------|--|----------------|
|       |  |         | Capa - city                                | Forced Outage / Unavai - lability | Planned Main - tenance Outage/ Planned Unavai - lability | Unit Avail - ability Factor | Average Opera - ting Load (MW) caused by low ULF due to Internal factor | Opera - ting Hrs | Average Opera - ting Hrs at Low ULF | Capa - city | Forced Outage / Unavai - lability | Planned Main - tenance Outage/ Planned Unavai - lability | Unit Avail - ability Factor | Average Opera - ting Load (MW) caused by low ULF due to Internal factor | Opera - ting Hrs | Average Opera - ting Load (MW) caused by low ULF due to external factor @ | Average Opera - ting Hrs at Low ULF |  |                |
|       |  |         | MW   | Hrs                               | Hrs  |                             | MW  | Hrs/ annum       | Hrs/ annum                          | MW          | Hrs                               | Hrs  |                             | MW  | Hrs/ annum       | MW  | Hrs/ annum                          |  |                |
| I     |  | Unit-1  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| ii    |  | Unit-2  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| iii.  |  | Unit-3  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| iv.   |  | Unit-4  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| V     |  | Unit-5  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| vi    |  | Unit-6  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| vii   |  | Unit-7  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| viii  |  | Unit-8  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| ix    |  | Unit-9  | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| x     |  | Unit-10 | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |
| 3.b.2 |  | Total   | 0.00                                       |                                   |  |                             |   |                  |                                     |             |                                   |  |                             |   |                  |   |                                     |  |                |

@ External Factors: Non-Availability of fuel/schedule/backing down/ any other external factor

#### Documents Required

- Characteristics Curve of Unit Turbine Heat Rate Vs Load, from Original Equipment Manufacturer (OEM)
- Unit wise HBD or Curve from Original Equipment Manufacturer (OEM) at various loads
- In case of non-availability of HBD or Curve, data from the similar Unit will be considered
- Design/PG Test Turbine Heat Rate documents



#### 4 Unit wise Fuel Analysis Details (As Fired Basis)@

| 4.a   | Unit    | Capa - city | Baseline Year (Average of Year 1 to Year 3) |                   |     |          |             |            | Assessment / Current / Target Year |                 |                   |     |          |             | Source of Data | Remarks     |  |
|-------|---------|-------------|---|-------------------|-----|----------|-------------|------------|------------------------------------|-----------------|-------------------|-----|----------|-------------|----------------|-------------|--|
|       |         |             | Volatile Matter                             | Total Mois - ture | Ash | GCV      | Hydro - gen | Sul - phur | Nitro - gen                        | Volatile Matter | Total Mois - ture | Ash | GCV      | Hydro - gen | Sul - phur     | Nitro - gen |  |
|       |         | MW          | %   | %                 | %   | kcal/ kg | %           | %          | %                                  | %               | %                 | %   | kcal/ kg | %           | %              | %           |  |
| i     | Unit-1  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| ii    | Unit-2  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| iii.  | Unit-3  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| iv.   | Unit-4  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| v.    | Unit-5  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| vi.   | Unit-6  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| vii.  | Unit-7  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| viii. | Unit-8  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| ix.   | Unit-9  |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |
| x.    | Unit-10 |             |   |                   |     |          |             |            |                                    |                 |                   |     |          |             |                |             |  |

**Note:** If Ultimate Analysis value is not available with DCs, Conversion from Proximate to Ultimate will be applied conversion formula.

$$\%C = 0.97C + 0.7(VM + 0.1A) - M(0.6 - 0.01M)$$

$$\%H2 = 0.036C + 0.086(VM - 0.1xA) - 0.0035M2(1 - 0.02M)$$

$$\%N2 = 2.10 - 0.020 VM$$

Where: C = % of fixed carbon , A = % of ash , VM = % of volatile matter, M = % of moisture

In case of difference in Design Coal Quality for different units, Coal analysis to be given unit wise

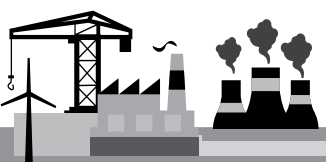
@ Attach all necessary Documents -

#### A. Coal Analysis:

- Operating Coal Quality- Monthly average of the lots (As Fired Basis), Test Certificate for Coal Analysis including Proximate and Ultimate analysis (Minimum of 4 Samples Test from Government Lab for cross verification- Quarterly)
- Performance Guarantee Test (PG Test) report from Original Equipment Manufacturer (OEM)
- Design Coal Analysis Document as per OEM

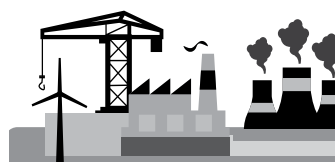
#### B. Boiler Efficiency

- Design Boiler Efficiency Document from Original Equipment Manufacturer (OEM)  
@@ For Weighted Average for the year, the sum of the tested coal of each lot as fired multiplied with the quantity of each lot, to be divided by the total fuel quantity during the year.



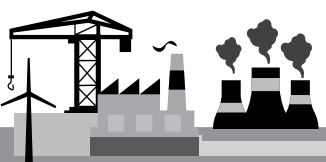
| List of additional Equipment installed due to Environmental Concern after baseline year   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
|---|------------------|-------------------|---------|------------------------|---------------------------|------------------------|--------------|-------------|-------------------------------|-----------------------------|---------|--|
|   | Name of the Unit |                   |         |                        | Assessment Year           |                        |              |             |                               | Source of Data              | Remarks |  |
| Sr No   | Equip -ment Name | Equip -ment Sr No | Section | Date of Commi-ssioning | Electrical Rated Capacity | Thermal Rated Capacity | Running Load | Running Hrs | Electricity Consum - ption \$ | Thermal Consum - ption \$\$ |         |  |
|   |                  |                   |         | Date                   | kW                        | Million kcal/ annum    | kW           | Hrs/ Annum  | Lakh kWh/ Annum               | Million kcal/ Annum         |         |  |
| 1   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| 2   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| 3   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| 4   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| 5   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| n   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| Total   |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| \$ Equipment wise Energy Meter Reading or Energy Management System Data required in support of the claim                          |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |
| \$\$ Equipment wise Document related to consumption of Liquid Fuel, Solid Fuel Alternate Fuel is required in support of the claim |                  |                   |         |                        |                           |                        |              |             |                               |                             |         |  |

| List of Equipment and Energy consumed during project activity up to commissioning during the Assessment year                      |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
|---|------------------|-------------------|------------|-----------------------------|--------------------------|---------------------------|------------------------|-----------------|----------------|-------------------------------|------------------------------|----------------|---------|
| Sr No   | Name of the Unit |                   |            | Project Activity Start Date | Date of Commi - ssioning | Electrical Rated Capacity | Thermal Rated Capacity | Run - ning Load | Run - ning Hrs | Assessment Year               |                              | Source of Data | Remarks |
|   | Equip -ment Name | Equip -ment Sr No | Sec - tion |                             |                          |                           |                        |                 |                | Electricity Consum - ption \$ | Thermal Consum - ption \$ \$ |                |         |
|   |                  |                   |            | Date                        | Date                     | kW                        | Million kcal/ annum    | kW              | Hrs / Annum    | Lakh kWh/ Annum               | Million kcal/ Annum          |                |         |
| 1   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| 2   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| 3   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| 4   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| 5   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| n   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| Total   |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| \$ Equipment wise Energy Meter Reading or Energy Management System Data required in support of the claim                          |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |
| \$\$ Equipment wise Document related to consumption of Liquid Fuel, Solid Fuel Alternate Fuel is required in support of the claim |                  |                   |            |                             |                          |                           |                        |                 |                |                               |                              |                |         |



## Supporting Pro-forma Sa<sub>2</sub>: Aluminium Sector (Aluminium Cold Sheet)

| Form-Sa <sub>2</sub> (General Information) |  |                  |                      |
|--|--|------------------|----------------------|
| Sector - Aluminium Sector                  |  |                  |                      |
| 1  | Name of the Unit                         |                  |                      |
| 2  | i) Year of Establishment                 |                  |                      |
|  | ii) Registration No (As provided by BEE) |                  |                      |
| 3  | Sub Sector                               |                  | Aluminium Cold Sheet |
| 4  | Plant Contact Details & Address          |                  |                      |
| a  | City/Town/Village                        |                  |                      |
|  | District                                 |                  |                      |
|  | State                                    |                  | Pin                  |
|  | Telephone                                |                  | Fax                  |
| b  | Plant's Chief Executive Name             |                  |                      |
|  | Designation                              |                  |                      |
|  | Telephone                                |                  | Fax                  |
|  | Mobile                                   | E-mail Id        |                      |
| 5  | Registered Office                        |                  |                      |
|  | Company's Chief Executive Name           |                  |                      |
|  | Designation                              |                  |                      |
|  | Address                                  |                  |                      |
|  | City/Town/Village                        |                  | P.O.                 |
|  | District                                 |                  |                      |
|  | State                                    |                  | Pin                  |
|  | Telephone                                |                  | Fax                  |
| 6  | Energy Manager Details                   |                  |                      |
|  | Name                                     |                  |                      |
|  | Designation                              | Whether EA or EM |                      |
|  | EA/EM Registration No.                   |                  |                      |
|  | Telephone                                |                  | Fax                  |
|  | Mobile                                   | E-mail Id        |                      |



| FORM-1 (Details of Production and Energy Consumption) |  |                                 |       |                              |                              |   |   |  |                   |
|---|--|---------------------------------|-------|------------------------------|------------------------------|---|---|--|-------------------|
| Sector: Aluminium Sector: Aluminium Cold Sheet        |  |                                 |       |                              |                              |   |   |  |                   |
| Name of the Unit                                      |  |                                 |       |                              |                              |   |   |  |                   |
| Sub Sector  |  |                                 |       |                              |                              |   |   |  |                   |
| Major Product   |  |                                 |       |                              |                              |   |   |  |                   |
| S. No   | Particulars  | Basis/<br>Calculation           | Unit  | Year1<br>(20.....<br>20....) | Year2<br>(20....<br>20.....) | Year 3/<br>Previous<br>Year<br>(20...<br>20.....) | Baseline<br>Year<br>(Average<br>of Year 1<br>, Year 2 &<br>Year3) | Current/<br>Assessment/<br>Target Year<br>(20.....<br>20.....) | Source<br>of Data |
| A   | Production and capacity utilization details                |                                 |       |                              |                              |   |   |  |                   |
| A.1   | Cold Sheet Process   |                                 |       |                              |                              |   |   |  |                   |
| (i)   | Production Capacity (Cold Rolled Coil & Sheets)            | Annual                          | Tonne |                              |                              |   |   |  |                   |
| (ii)  | Total Cold Rolled Coil & Sheets Production                 | Annual                          | Tonne |                              |                              |   |   |  |                   |
| (iii)   | Capacity Utilization (Cold Rolled Coil & Sheets)           | $\{A1(ii) / A1(i)\} \times 100$ | %     |                              |                              |   |   |  |                   |
| A2  | Process wise production and performance detail             |                                 |       |                              |                              |   |   |  |                   |
| A.2.1   | (Cast House- Recycling) Production and Performance details |                                 |       |                              |                              |   |   |  |                   |
| (i)   | Total Recycling output                                     | Annual                          | Tonne |                              |                              |   |   |  |                   |
| (ii)  | Alloy ingot Production                                     | Annual                          | Tonne |                              |                              |   |   |  |                   |
| (iii)   | Alloy ingot import   | Annual                          | Tonne |                              |                              |   |   |  |                   |
| (iv)  | Alloy ingot export   | Annual                          | Tonne |                              |                              |   |   |  |                   |



|        |  |                            |              |  |  |  |  |  |  |  |
|--------|--|----------------------------|--------------|--|--|--|--|--|--|--|
| (v)    | Opening stock of Alloy Ingot   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (vi)   | Closing stock of Alloy Ingot   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (vii)  | Thermal Energy consumption for producing Alloy Ingot (Recycling Furnace output)  | Annual                     | Million kcal |  |  |  |  |  |  |  |
| (viii) | Electrical Energy consumption for producing Alloy Ingot (Recycling Furnace)      | Annual                     | kWh          |  |  |  |  |  |  |  |
| (ix)   | Running Hrs  | Annual                     | Hrs          |  |  |  |  |  |  |  |
| (x)    | Thermal SEC  | (vii)×10 <sup>6</sup> /(i) | kcal/Tonne   |  |  |  |  |  |  |  |
| (xi)   | Electrical SEC   | (viii)/(i)                 | kWh/Tonne    |  |  |  |  |  |  |  |
| A.2.2  | (Cast-House-Re-Melting) Rolling Ingot Production and Process performance details |                            |              |  |  |  |  |  |  |  |
| (i)    | Total Rolling Ingot Production   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (ii)   | Rolling ingot import   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (iii)  | Rolling ingot export   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (iv)   | Opening stock of Rolling ingot   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (v)    | Closing stock of Rolling ingot   | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (vi)   | Thermal Energy consumption for producing Rolling Ingot (Re-Melting Furnace)      | Annual                     | Million kcal |  |  |  |  |  |  |  |



|         |   |                                    |              |  |  |  |  |  |  |
|---------|---|------------------------------------|--------------|--|--|--|--|--|--|
| (vii)   | Electrical Energy consumption for producing Rolling Ingot (Re-Melting Furnace )               | Annual                             | kWh          |  |  |  |  |  |  |
| (viii)  | Running Hrs   | Annual                             | Hrs          |  |  |  |  |  |  |
| (ix)    | Thermal SEC   | (vi) $\times 10^6 / (i)$           | kcal/Tonne   |  |  |  |  |  |  |
| (x)     | Electrical SEC  | (vii) / (i)                        | kWh/Tonne    |  |  |  |  |  |  |
| A.2.2.1 | (Cast-House- (Recycling+ Re-Melting) Rolling Ingot Production and Process performance details |                                    |              |  |  |  |  |  |  |
| (i)     | Thermal Energy consumption for producing Rolling Ingot (Re-Melting Furnace )                  | Annual                             | Million kcal |  |  |  |  |  |  |
| (ii)    | Electrical Energy consumption for producing Rolling Ingot (Re-Melting Furnace )               | Annual                             | kWh          |  |  |  |  |  |  |
| (iii)   | Thermal SEC   | $A2.2.1(i) \times 10^6 / A2.2.(i)$ | kcal/Tonne   |  |  |  |  |  |  |
| (iv)    | Electrical SEC  | $A2.2.1(ii) / A2.2.(i)$            | kWh/Tonne    |  |  |  |  |  |  |
| A.2.3   | Hot Rolled Coil Production and Performance details (Including Sculper)                        |                                    |              |  |  |  |  |  |  |
| (i)     | Total Hot Rolled Coil Production  | Annual                             | Tonne        |  |  |  |  |  |  |
| (ii)    | Total Hot Rolled Coil import  | Annual                             | Tonne        |  |  |  |  |  |  |





|              |   |                           |              |  |  |  |  |  |  |  |
|--------------|---|---------------------------|--------------|--|--|--|--|--|--|--|
| (iii)        | Total Hot rolled coil export  | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (iv)         | Opening stock of Hot rolled coil  | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (v)          | Closing stock of Hot rolled coil  | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (vi)         | Thermal Energy consumption for producing HRC (Preheating & Hot Rolling Mill)  | Annual                    | Million kcal |  |  |  |  |  |  |  |
| (vii)        | Electrical Energy consumption for producing HRC (Preheating & Hot Rolling Mill)   | Annual                    | kWh          |  |  |  |  |  |  |  |
| (viii)       | Running Hrs   | Annual                    | Hrs          |  |  |  |  |  |  |  |
| (ix)         | Thermal SEC   | (vi)×10 <sup>6</sup> /(i) | kcal/Tonne   |  |  |  |  |  |  |  |
| (x)          | Electrical SEC  | (vii)/(i)                 | kWh/Tonne    |  |  |  |  |  |  |  |
| <b>A.2.4</b> | <b>Finished Equivalent Cold rolling coil (CRM+ Annealing Furnace+ Finishing Equipment) Production and Performance details</b> |                           |              |  |  |  |  |  |  |  |
| (i)          | Total Equivalent Cold Rolled Coil Production  | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (ii)         | Total Cold Rolling coil import  | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (iii)        | Total Cold Rolling coil export  | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (iv)         | Opening stock of Cold rolled coil   | Annual                    | Tonne        |  |  |  |  |  |  |  |
| (v)          | Closing stock of Cold rolled coil   | Annual                    | Tonne        |  |  |  |  |  |  |  |

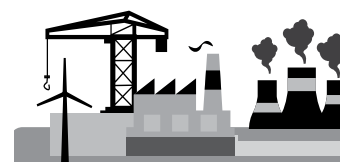


|            |  |                           |              |  |  |  |  |  |  |
|------------|--|---------------------------|--------------|--|--|--|--|--|--|
| (vi)       | Thermal Energy consumption for producing CRC (Annealing & Cold Rolling Mill)   | Annual                    | Million kcal |  |  |  |  |  |  |
| (vii)      | Electrical Energy consumption for producing CRC (Annealing & Cold Rolling Mill)  | Annual                    | kWh          |  |  |  |  |  |  |
| (viii)     | Running Hrs  | Annual                    | Hrs          |  |  |  |  |  |  |
| (ix)       | Thermal SEC  | (vi)x10 <sup>6</sup> /(i) | kcal/Tonne   |  |  |  |  |  |  |
| (x)        | Electrical SEC   | (vii)/(i)                 | kWh/Tonne    |  |  |  |  |  |  |
| <b>A.3</b> | <b>Note: Any New product added in the stream will be included in a separate sheet in same data entry format as above</b> |                           |              |  |  |  |  |  |  |
| <b>B</b>   | <b>Electricity Consumption</b>   |                           |              |  |  |  |  |  |  |
| <b>B.1</b> | <b>Electricity through Grid/ Other (Including colony and others)</b>   |                           |              |  |  |  |  |  |  |
| (i)        | Purchased Electricity from grid (SEB)  | Annual                    | Lakh kWh     |  |  |  |  |  |  |
| (ii)       | Renewable Electricity (Through Wheeling)   | Annual                    | Lakh kWh     |  |  |  |  |  |  |
| (iii)      | Electricity from CPP located outside from plant boundary (Through Wheeling)  | Annual                    | Lakh kWh     |  |  |  |  |  |  |



|        |   |        |             |  |  |  |  |  |  |  |
|--------|---|--------|-------------|--|--|--|--|--|--|--|
| (iv)   | Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)  | Annual | %           |  |  |  |  |  |  |  |
| (v)    | Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)  | Annual | Lakh kWh    |  |  |  |  |  |  |  |
| (vi)   | Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)  | Annual | MW          |  |  |  |  |  |  |  |
| (vii)  | Renewable Energy generator as approved by MNRE  | Annual | MW          |  |  |  |  |  |  |  |
| (viii) | Quantum of Renewable Energy Certificates (REC) obtained as a Renewable Energy Generator (Solar & Non-Solar) | Annual | MWh         |  |  |  |  |  |  |  |
| (ix)   | Quantum of Energy sold under preferential tariff  | Annual | MWh         |  |  |  |  |  |  |  |
| (x)    | Plant Connected Load  |        | kW          |  |  |  |  |  |  |  |
| (xi)   | Contract Demand with utility  |        | kVA         |  |  |  |  |  |  |  |
| (xii)  | Notified Specific Energy Consumption  |        | TOE/ Tonnes |  |  |  |  |  |  |  |
| (xiii) | Target Specific Energy Consumption  |        | TOE/ Tonnes |  |  |  |  |  |  |  |
| (xiv)  | Saving Target in TOE/ Tonne of product as per PAT scheme Notification                                       |        | TOE/ Tonnes |  |  |  |  |  |  |  |

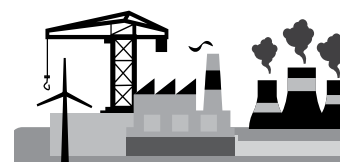




|              |   |        |           |  |  |  |  |  |  |  |
|--------------|---|--------|-----------|--|--|--|--|--|--|--|
| (ii)         | Install Capacity  |        | MW        |  |  |  |  |  |  |  |
| (iii)        | Gross Unit generation                                   | Annual | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)         | Auxiliary Power Consumption                             |        | %         |  |  |  |  |  |  |  |
| (v)          | Gross Design Heat Rate                                  |        | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)         | Operating Heat Rate                                     |        | kcal/ kWh |  |  |  |  |  |  |  |
| <b>b.2.3</b> | <b>Through Gas turbine</b>                              |        |           |  |  |  |  |  |  |  |
| (i)          | Grid Connected  |        | Yes/No    |  |  |  |  |  |  |  |
| (ii)         | Install Capacity  |        | MW        |  |  |  |  |  |  |  |
| (iii)        | Gross Unit generation                                   | Annual | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)         | Plant Load Factor (PLF)                                 |        | %         |  |  |  |  |  |  |  |
| (v)          | Auxiliary Power Consumption                             |        | %         |  |  |  |  |  |  |  |
| (vi)         | Gross Design Heat Rate                                  |        | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)         | Running Hrs   | Annual | Hrs       |  |  |  |  |  |  |  |
| <b>b.2.4</b> | <b>Through Waste Heat Recovery</b>                      |        |           |  |  |  |  |  |  |  |
| (i)          | WHR Installed Capacity                                  | Annual | MW        |  |  |  |  |  |  |  |
| (ii)         | Annual Generation                                       | Annual | Lakh kWh  |  |  |  |  |  |  |  |
| (iii)        | WHR Running Hrs   | Annual | Hrs       |  |  |  |  |  |  |  |
| <b>b.2.5</b> | <b>Through Co-Generation (Extraction/Back Pressure)</b> |        |           |  |  |  |  |  |  |  |
| (i)          | Grid Connected  |        | Yes/No    |  |  |  |  |  |  |  |
| (ii)         | Install Capacity  | Annual | MW        |  |  |  |  |  |  |  |
| (iii)        | Annual Gross Unit generation                            | Annual | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)         | Auxiliary Power Consumption                             | Annual | %         |  |  |  |  |  |  |  |



|              |  |        |                    |  |  |  |  |  |  |
|--------------|--|--------|--------------------|--|--|--|--|--|--|
| (v)          | Design Heat Rate   | Annual | kcal/ kWh          |  |  |  |  |  |  |
| (vi)         | Running Hrs  | Annual | Hrs                |  |  |  |  |  |  |
|              | <b>Input Steam</b>                                       |        |                    |  |  |  |  |  |  |
| (vii)        | Input Steam Enthalpy                                     | Annual | kcal/kg            |  |  |  |  |  |  |
| (viii)       | Input Steam Pressure                                     | Annual | kg/cm <sup>2</sup> |  |  |  |  |  |  |
| (ix)         | Input Steam Temperature                                  | Annual | °C                 |  |  |  |  |  |  |
| (x)          | Input Steam Flow   | Annual | Tonnes             |  |  |  |  |  |  |
|              | <b>Steam Extraction 1</b>                                |        |                    |  |  |  |  |  |  |
| (xi)         | Steam Pressure   | Annual | kg/cm <sup>2</sup> |  |  |  |  |  |  |
| (xii)        | Steam Temperature  | Annual | °C                 |  |  |  |  |  |  |
| (xiii)       | Steam Enthalpy   | Annual | kcal/kg            |  |  |  |  |  |  |
| (xiv)        | Mass Flow  | Annual | Tonnes             |  |  |  |  |  |  |
|              | <b>Steam Extraction 2</b>                                |        |                    |  |  |  |  |  |  |
| (xv)         | Steam Pressure   | Annual | kg/cm <sup>2</sup> |  |  |  |  |  |  |
| (xvii)       | Steam Temperature  | Annual | °C                 |  |  |  |  |  |  |
| (xviii)      | Steam Enthalpy   | Annual | kcal/kg            |  |  |  |  |  |  |
| (xix)        | Mass Flow  | Annual | Tonnes             |  |  |  |  |  |  |
| (xx)         | Thermal energy used in process                           | Annual | Million kcal       |  |  |  |  |  |  |
| (xxi)        | Thermal energy used in Power                             | Annual | Million kcal       |  |  |  |  |  |  |
| (xxii)       | % of thermal energy in Process                           | Annual | %                  |  |  |  |  |  |  |
| <b>b.2.6</b> | <b>Through Co-Generation (Extraction Cum Condensing)</b> |        |                    |  |  |  |  |  |  |
| (i)          | Grid Connected   |        | Yes/No             |  |  |  |  |  |  |
| (ii)         | Install Capacity   | Annual | MW                 |  |  |  |  |  |  |
| (iii)        | Annual Gross Unit generation                             | Annual | Lakh kWh           |  |  |  |  |  |  |
| (iv)         | Auxiliary Power Consumption                              | Annual | %                  |  |  |  |  |  |  |



|            |  |  |                    |  |  |  |  |  |  |
|------------|--|--|--------------------|--|--|--|--|--|--|
| (v)        | Design Heat Rate                                 | Annual   | kcal/ kWh          |  |  |  |  |  |  |
| (vi)       | Running Hrs                                      | Annual   | Hrs                |  |  |  |  |  |  |
|            | <b>Input Steam</b>                               |  |                    |  |  |  |  |  |  |
| (vii)      | Input Steam Enthalpy                             | Annual   | kcal/kg            |  |  |  |  |  |  |
| (viii)     | Input Steam Pressure                             | Annual   | kg/cm <sup>2</sup> |  |  |  |  |  |  |
| (ix)       | Input Steam Temperature                          | Annual   | °C                 |  |  |  |  |  |  |
| (x)        | Input Steam Flow                                 | Annual   | Tonnes             |  |  |  |  |  |  |
|            | <b>Steam Extraction 1</b>                        |  |                    |  |  |  |  |  |  |
| (xi)       | Steam Pressure                                   | Annual   | kg/cm <sup>2</sup> |  |  |  |  |  |  |
| (xii)      | Steam Temperature                                | Annual   | °C                 |  |  |  |  |  |  |
| (xiii)     | Steam Enthalpy                                   | Annual   | kcal/kg            |  |  |  |  |  |  |
| (xiv)      | Mass Flow  | Annual   | Tonnes             |  |  |  |  |  |  |
|            | <b>Steam Extraction 2</b>                        |  |                    |  |  |  |  |  |  |
| (xv)       | Steam Pressure                                   | Annual   | kg/cm <sup>2</sup> |  |  |  |  |  |  |
| (xvii)     | Steam Temperature                                | Annual   | °C                 |  |  |  |  |  |  |
| (xviii)    | Steam Enthalpy                                   | Annual   | kcal/kg            |  |  |  |  |  |  |
| (xix)      | Mass Flow  | Annual   | Tonnes             |  |  |  |  |  |  |
| (xx)       | Thermal energy used in process                   | Annual   | Million kcal       |  |  |  |  |  |  |
| (xxi)      | Thermal energy used in Power                     | Annual   | Million kcal       |  |  |  |  |  |  |
| (xxii)     | % of thermal energy in Process                   | Annual   | Factor             |  |  |  |  |  |  |
| (xxiii)    | Total % of thermal energy in Process from Co-Gen | Annual   | Factor             |  |  |  |  |  |  |
| <b>b.3</b> | <b>Total Own Generation of Electricity</b>       | <b>B.2.1.(iii)+B.2.2.(i ii)+B.2.3.(iii)+B.2 .4.(ii)+B.2.5(iii)+ B.2.6(iii)</b> | <b>Lakh kWh</b>    |  |  |  |  |  |  |
| <b>b.4</b> | <b>Electricity Supplied to Grid/others</b>       | <b>Annual</b>  | <b>Lakh kWh</b>    |  |  |  |  |  |  |



|               |  |   |                     |  |  |  |  |  |  |  |
|---------------|--|---|---------------------|--|--|--|--|--|--|--|
| <b>b.5</b>    | <b>Electricity Supplied to Colony/others</b>                   | <b>Annual</b>   | <b>Lakh kWh</b>     |  |  |  |  |  |  |  |
| <b>b.6</b>    | <b>Electricity Supplied to Grid/Colony/others</b>              | <b>b.4 + (IF(b.5 &gt; E86, (b.5 -b.1.(xvi)), (0)))</b>                                  | <b>Lakh kWh</b>     |  |  |  |  |  |  |  |
| <b>b.7</b>    | <b>Equivalent Thermal Energy supplied to grid/others</b>       | <b>B.6*2717/10</b>  | <b>Million kcal</b> |  |  |  |  |  |  |  |
| <b>b.8</b>    | <b>Total Electricity Consumed in Process &amp; Auxiliaries</b> | <b>IF (b.5 &gt; (b.1.(xvi)), ((Eb.3-b.4) - (b.5-b.1.(xvi))), (b.1.(xvi) + b.3-b.4))</b> | <b>Lakh kWh</b>     |  |  |  |  |  |  |  |
| <b>C</b>      | <b>Solid Fuel Consumption</b>                                  |   |                     |  |  |  |  |  |  |  |
| <b>C.1</b>    | <b>Coal (Indian)</b>   |   |                     |  |  |  |  |  |  |  |
| <b>(i)</b>    | <b>Landed Cost of fuel (Last purchase)</b>                     |   | <b>Rs/Tonne</b>     |  |  |  |  |  |  |  |
| <b>(ii)</b>   | <b>Average Gross calorific value (As Fired Basis)</b>          | <b>Annual</b>   | <b>kcal/ kg</b>     |  |  |  |  |  |  |  |
| <b>(iii)</b>  | <b>Average Total Moisture in coal (As received Basis)</b>      | <b>Annual</b>   | <b>%</b>            |  |  |  |  |  |  |  |
| <b>(iv)</b>   | <b>Quantity purchased</b>                                      | <b>Annual</b>   | <b>Tonne</b>        |  |  |  |  |  |  |  |
| <b>(v)</b>    | <b>Quantity used for power generation in CPP</b>               | <b>Annual</b>   | <b>Tonne</b>        |  |  |  |  |  |  |  |
| <b>(vi)</b>   | <b>Quantity used for power generation (Co-Gen)</b>             | <b>Annual</b>   | <b>Tonne</b>        |  |  |  |  |  |  |  |
| <b>(vii)</b>  | <b>Quantity used for process</b>                               | <b>Annual</b>   | <b>Tonne</b>        |  |  |  |  |  |  |  |
| <b>(viii)</b> | <b>Total Quantity Consumed</b>                                 | <b>C.1.(v) + C.1.(vi) + C.1.(viii)</b>  | <b>Tonne</b>        |  |  |  |  |  |  |  |





|            |  |                              |              |  |  |  |  |  |  |  |
|------------|--|------------------------------|--------------|--|--|--|--|--|--|--|
| (ix)       | Thermal Energy Used in Power Generation (CPP)      | C.1.(v)x(ii)/1000            | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Power Generation (co-gen )  | (C.1.(vi) * C.1.(ii)) / 1000 | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Process                     | C.1.(ii) * C.1.(vii) / 1000  | Million kcal |  |  |  |  |  |  |  |
| <b>C.2</b> | <b>Petcoke/Carbon</b>                              |                              |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)                | Basic Cost+ Taxes+ Freight   | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Average Gross calorific value (As fired basis)     | Annual                       | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Average Total Moisture in coal (As received Basis) | Annual                       | %            |  |  |  |  |  |  |  |
| (iv)       | Quantity purchased                                 | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (CPP)           | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (Co-Gen)        | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process                          | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                            | C.2.(v)+ C.2.(vi)+ C.2.(vii) | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation (CPP)      | C.2. (ii) xC.2.(v)/1000      | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Power Generation (co-gen )  | C.2.(vi)x C.2. (ii)/1000     | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Process                     | C.2.(vii) * C.2. (ii) /1000  | Million kcal |  |  |  |  |  |  |  |



| C.3    | Coal(Imported)   | Basic Cost+<br>Taxes+ Freight    | Rs/Tonne     |  |  |  |  |  |  |  |
|--------|--|----------------------------------|--------------|--|--|--|--|--|--|--|
| (i)    | Landed Cost of fuel<br>(Last purchase)                   |                                  |              |  |  |  |  |  |  |  |
| (ii)   | Average Gross calorific<br>value (As fired Basis)        |                                  | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)  | Average Total<br>Moisture in coal (As<br>received Basis) | Annual                           | %            |  |  |  |  |  |  |  |
| (iv)   | Quantity purchased                                       | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (v)    | Quantity used for<br>power generation<br>(CPP)           | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (vi)   | Quantity used for<br>power generation (Co-<br>Gen)       | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (vii)  | Quantity used for<br>process                             | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (viii) | Total Quantity<br>Consumed                               | C.3 (v) + C.3 (vii) +<br>C.3(vi) | Tonne        |  |  |  |  |  |  |  |
| (ix)   | Thermal Energy Used<br>in Power Generation<br>(CPP)      | C.3.(v) x C.3<br>(ii) / 1000     | Million kcal |  |  |  |  |  |  |  |
| (x)    | Thermal Energy Used<br>in Power Generation<br>(co-gen )  | C.3.(vi) x C.3<br>(ii) / 1000    | Million kcal |  |  |  |  |  |  |  |
| (xi)   | Thermal Energy Used<br>in Process                        | C.3.(vii) x C.3<br>(ii) / 1000   | Million kcal |  |  |  |  |  |  |  |
| C.4    | Coal(lignite)  |                                  |              |  |  |  |  |  |  |  |
| (i)    | Landed Cost of fuel<br>(Last purchase)                   | Basic Cost+<br>Taxes+ Freight    | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)   | Average Gross calorific<br>value (As fired Basis)        | Annual                           | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)  | Average Total<br>Moisture in coal (As<br>received Basis) | Annual                           | %            |  |  |  |  |  |  |  |



|            |  |                            |              |  |  |  |  |  |  |  |
|------------|--|----------------------------|--------------|--|--|--|--|--|--|--|
| (iv)       | Quantity purchased                                 | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (CPP)           | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (Co-Gen)        | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process                          | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                            | C.4.(v)+C.4.(vi)+C.4.(vii) | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation (CPP)      | C.4. (ii) x C.4.(v) / 1000 | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Power Generation (co-gen )  | C.4. (ii)x C.4 (vi) / 1000 | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Process                     | C.4.(ii)x C.4.(vii) / 1000 | Million kcal |  |  |  |  |  |  |  |
| <b>C.5</b> | <b>Other Solid Fuels</b>                           |                            |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)                | Basic Cost+ Taxes+ Freight | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Average Gross calorific value (As fired basis)     | Annual                     | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Average Total Moisture in coal (As received Basis) | Annual                     | %            |  |  |  |  |  |  |  |
| (iv)       | Quantity purchased                                 | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (CPP)           | Annual                     | Tonne        |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (Co-Gen)        | Annual                     | Tonne        |  |  |  |  |  |  |  |



|        |  |   |              |  |  |  |  |  |  |
|--------|--|---|--------------|--|--|--|--|--|--|
| (vii)  | Quantity used for process  | Annual  | Tonne        |  |  |  |  |  |  |
| (viii) | Total Quantity Consumed  | C.5.(v) + C.5.(vi) + C.4.(vii)                                    | Tonne        |  |  |  |  |  |  |
| (ix)   | Thermal Energy Used in Power Generation (CPP)  | C.5. (ii)× C.5. (v)/1000  | Million kcal |  |  |  |  |  |  |
| (x)    | Thermal Energy Used in Power Generation (co-gen )  | C.5. (ii)× C.5. (vi)/1000   | Million kcal |  |  |  |  |  |  |
| (xi)   | Thermal Energy Used in Process   | C.5. (ii)× C.5. (vii)/1000  | Million kcal |  |  |  |  |  |  |
| C.6    | Bio mass or Other purchased Renewable solid fuels (pl. specify) bagasse, rice husk, etc. | Thermal Energy Input through Biomass not to be taken into account |              |  |  |  |  |  |  |
| (i)    | Landed Cost of fuel (Last purchase)  | Basic Cost+ Taxes+ Freight  | Rs/Tonne     |  |  |  |  |  |  |
| (ii)   | Average Gross calorific value as fired   |   | kcal/ kg     |  |  |  |  |  |  |
| (iii)  | Average Total Moisture in coal (As received Basis)                                       | Annual  | %            |  |  |  |  |  |  |
| (iv)   | Quantity purchased   | Annual  | Tonne        |  |  |  |  |  |  |
| (v)    | Quantity used for power generation (CPP)   | Annual  | Tonne        |  |  |  |  |  |  |
| (vi)   | Quantity used for power generation (Co-Gen)  | Annual  | Tonne        |  |  |  |  |  |  |
| (vii)  | Quantity used for process  | Annual  | Tonne        |  |  |  |  |  |  |
| (viii) | Total Quantity Consumed  | C.6. (v)+C.6. (vi) + C.6. (vii)                                   | Tonne        |  |  |  |  |  |  |



|        |   |                                  |              |  |  |  |  |  |  |  |
|--------|---|----------------------------------|--------------|--|--|--|--|--|--|--|
| (ix)   | Thermal Energy Used in Power Generation (CPP)   | $C.6.(ii) \times C.6.(v)/1000$   | Million kcal |  |  |  |  |  |  |  |
| (x)    | Thermal Energy Used in Power Generation (co-gen)  | $C.6.(ii) \times C.6.(vi)/1000$  | Million kcal |  |  |  |  |  |  |  |
| (xi)   | Thermal Energy Used in Process  | $C.6.(ii) \times C.6.(vii)/1000$ | Million kcal |  |  |  |  |  |  |  |
| C.7    | <b>Solid Waste (pl. specify and refer CPCB guidelines) rubber tyres chips, Municipal Solid waste etc.</b> |                                  |              |  |  |  |  |  |  |  |
| (i)    | Landed Cost of fuel (Last purchase)   | Basic Cost+ Taxes+ Freight       | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)   | Average Gross calorific value as fired  | Annual                           | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)  | Average Total Moisture in coal (As received Basis)  | Annual                           | %            |  |  |  |  |  |  |  |
| (iv)   | Quantity purchased  | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (v)    | Quantity used for power generation (CPP)  | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (vi)   | Quantity used for power generation (Co-Gen)   | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (vii)  | Quantity used for process heating   | Annual                           | Tonne        |  |  |  |  |  |  |  |
| (viii) | Total Quantity Consumed   | $C.7.(v)+C.7.(vi) + C.7.(vii)$   | Tonne        |  |  |  |  |  |  |  |
| (ix)   | Thermal Energy Used in Power Generation (CPP)   | $C.7.(ii) \times C.7.(v)/1000$   | Million kcal |  |  |  |  |  |  |  |



|       |   |  |              |  |  |  |  |  |  |  |
|-------|---|--|--------------|--|--|--|--|--|--|--|
| (x)   | Thermal Energy Used in Power Generation (co-gen ) | $C.7.(ii) \times C.7.(vi)/1000$  | Million kcal |  |  |  |  |  |  |  |
| (xi)  | Thermal Energy Used in Process                    | $C.7.(ii) \times C.7.(vii)/1000$   | Million kcal |  |  |  |  |  |  |  |
| C.8   | Thermal Energy Used in Power Generation (CPP)     | IF(OR(b.2.2.(i) = "Yes"), C.1.(ix) + C.2.(ix) + C.3.(ix) + C.4.(ix) + C.5.(ix) + C.6.(ix) + C.7.(ix), C.1.(ix) + C.2.(ix) + C.3.(ix) + C.4.(ix) + C.5.(ix))                                      | Million kcal |  |  |  |  |  |  |  |
| C.9   | Thermal Energy Used in Power Generation (co-gen ) | IF(OR (b.2.6., b.2.5.(i) = "Yes"), C.1.(x) + C.2.(x) + C.3.(x) + C.4.(x) + C.5.(x) + C.6.(x) * (1-b.2.6.(xxiii)) + C.7.(x) * (1-b.2.6.(xxiii)), C.1.(x) + C.2.(x) + C.3.(x) + C.4.(x) + C.5.(x)) | Million kcal |  |  |  |  |  |  |  |
| C.10  | Total Thermal Energy Used in Process              | $C.1.(xi) + C.2.(xi) + C.3.(xi) + C.4.(xi) + C.5.(xi)$   | Million kcal |  |  |  |  |  |  |  |
| D     | Liquid Fuel Consumption                           |  |              |  |  |  |  |  |  |  |
| D.1   | Furnace Oil                                       |  |              |  |  |  |  |  |  |  |
| (i)   | Landed Cost of fuel (Last purchase)               | Basic Cost+ Taxes+ Freight   | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)  | Gross calorific value                             | Annual   | kcal/ kg     |  |  |  |  |  |  |  |
| (iii) | Quantity purchased                                | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (iv)  | Average Density                                   |  | kg/ Litre    |  |  |  |  |  |  |  |



|            |  |  |              |  |  |  |  |  |  |  |
|------------|--|--|--------------|--|--|--|--|--|--|--|
| (v)        | Quantity used for power generation (DG Set)      | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (CPP)         | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (vii)      | Quantity used for power generation (Co-Gen)      | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (viii)     | Quantity used for process                        | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (ix)       | Total F. Oil Consumption as fuel                 | $(D.1.(v) + D.1.(vi) + D.1.(vii) + D.1.(viii)) * D.1.(iv)$ | Tonne        |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Power Generation (DG Set) | $D.1.(v) * D.1.(ii) * D.1.(iv) / 1000$                     | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Power Generation (CPP)    | $D.1.(vi) * D.1.(iv) * D.1.(ii) / 1000$                    | Million kcal |  |  |  |  |  |  |  |
| (xii)      | Thermal Energy Used in Power Generation (co-gen) | $D.1.(vii) * D.1.(iv) * D.1.(ii) / 1000$                   | Million kcal |  |  |  |  |  |  |  |
| (xiii)     | Thermal Energy Used in Process                   | $D.1.(viii) * D.1.(iv) * D.1.(ii) / 1000$                  | Million kcal |  |  |  |  |  |  |  |
| <b>D.2</b> | <b>Low Sulphur Heavy Stock (LSHS)</b>            |  |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost+ Taxes+ Freight                                 | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Gross calorific value                            | Annual   | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                               | Annual   | Tonne        |  |  |  |  |  |  |  |
| (iv)       | Quantity used for power generation (DG Set)      | Annual   | Tonne        |  |  |  |  |  |  |  |



|            |   |  |              |  |  |  |  |  |  |  |
|------------|---|--|--------------|--|--|--|--|--|--|--|
| (v)        | Quantity used for power generation (CPP)          | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (Co-Gen)       | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process heating                 | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total LSHS Consumption as fuel                    | D.2.(iv)+ D.2.(v)+ D.2.(vi)+ D.2.(vii) | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation (DG Set)  | D.2.(iv) x D.2. (ii) /1000             | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Power Generation (CPP)     | D.2.(v) x D.2. (ii) /1000              | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Power Generation (co-gen ) | D.2.(vi) x D.2. (ii) /1000             | Million kcal |  |  |  |  |  |  |  |
| (xii)      | Thermal Energy Used in Process                    | D.2.(vii) x D.2. (ii) /1000            | Million kcal |  |  |  |  |  |  |  |
| <b>D.3</b> | <b>High Sulphur Heavy Stock (HSHS)</b>            |  |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)               | Basic Cost + Taxes+ Freight            | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Gross calorific value                             | Annual                                 | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                                | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (iv)       | Quantity used for power generation (DG Set)       | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (CPP)          | Annual                                 | Tonne        |  |  |  |  |  |  |  |





|            |   |  |              |  |  |  |  |  |  |  |
|------------|---|--|--------------|--|--|--|--|--|--|--|
| (vi)       | Quantity used for power generation (Co-Gen)       | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process heating                 | Annual                                 | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total HSHS Consumption as fuel                    | D.3.(iv)+ D.3.(v)+ D.3.(vi)+ D.3.(vii) | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation (DG Set)  | D.3.(iv) x D.3. (ii) /1000             | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Power Generation (CPP)     | D.3.(v) x D.3. (ii) /1000              | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Power Generation (co-gen ) | D.3.(vi) x D.3. (ii) /1000             | Million kcal |  |  |  |  |  |  |  |
| (xii)      | Thermal Energy Used in Process                    | D.3.(vii) x D.3. (ii) /1000            | Million kcal |  |  |  |  |  |  |  |
| <b>D.4</b> | <b>High Speed Diesel (HSD)</b>                    |  |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)               | Basic Cost+ Taxes+ Freight             | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value                             |  | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                                | Annual                                 | kilolitre    |  |  |  |  |  |  |  |
| (iv)       | Average Density                                   |  | kg/ Litre    |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (DG Set)       | Annual                                 | kilolitre    |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (CPP)          | Annual                                 | kilolitre    |  |  |  |  |  |  |  |
| (vii)      | Quantity used for power generation (Co-Gen)       | Annual                                 | kilolitre    |  |  |  |  |  |  |  |



|            |   |  |              |  |  |  |  |  |  |  |
|------------|---|--|--------------|--|--|--|--|--|--|--|
| (viii)     | Quantity used for material handling / Transportation (Raw material handling, Loco, etc) | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (ix)       | Quantity used for process heating   | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (x)        | Total HSD Consumption as fuel   | D.4. (v) + D.4. (vi) +<br>D.4. (vii) +<br>D.4. (ix)] x D.4. (iv) | Tonne        |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Power Generation (DG Set)  | D.4. (v) x D.4. (iv) x<br>D.4. (ii) / 1000                       | Million kcal |  |  |  |  |  |  |  |
| (xii)      | Thermal Energy Used in Power Generation (CPP)   | D.4. (vi) x D.4. (iv)<br>x D.4. (ii) / 1000                      | Million kcal |  |  |  |  |  |  |  |
| (xiii)     | Thermal Energy Used in Power Generation (Co-Gen)  | D.4. (vii) x D.4. (iv)<br>x D.4. (ii) / 1000                     | Million kcal |  |  |  |  |  |  |  |
| (xiv)      | Thermal Energy Used in Process  | D.4. (ix) x D.4. (iv)<br>x D.4. (ii) / 1000                      | Million kcal |  |  |  |  |  |  |  |
| <b>D.5</b> | <b>Light Diesel Oil (LDO)</b>   |  |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)   | Basic Cost +<br>Taxes + Freight                                  | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value   |  | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased  | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (iv)       | Average Density   |  | kg/ltr       |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (DG Set)   | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (CPP)  | Annual   | kilolitre    |  |  |  |  |  |  |  |



|            |   |  |              |  |  |  |  |  |  |  |
|------------|---|--|--------------|--|--|--|--|--|--|--|
| (vii)      | Quantity used for power generation (Co-Gen)                           | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (viii)     | Quantity used for Transportation, if any                              | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (ix)       | Quantity used for process heating                                     | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (x)        | Total LDO Consumption as fuel   | D.5.(v)+ D.5.(vi)+ D.5. (vii)+ D.5.(ix) x D.4.(iv)   | Tonne        |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy Used in Power Generation (DG Set)                      | D.5.(v)x D.5. (iv)x D.5. (ii)/1000   | Million kcal |  |  |  |  |  |  |  |
| (xii)      | Thermal Energy Used in Power Generation (CPP)                         | D.5.(vi)x D.5. (iv) x D.5. (ii)/1000   | Million kcal |  |  |  |  |  |  |  |
| (xiii)     | Thermal Energy Used in Power Generation (Co-Gen)                      | D.5.(vii)x D.5. (iv) x D.5. (ii)/1000  | Million kcal |  |  |  |  |  |  |  |
| (xiv)      | Thermal Energy Used in Process  | D.5.(ix)x D.5. (iv) x D.5. (ii)/1000   | Million kcal |  |  |  |  |  |  |  |
| <b>D.6</b> | <b>Liquid Waste (pl. specify and refer CPCB guidelines, enclosed)</b> | <b>Thermal Energy Input through Liquid waste, mentioned in CPCB guidelines, not to be taken into account</b> |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)                                   | Basic Cost+ Taxes+ Freight   | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Gross calorific value   |  | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased  | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (iv)       | Average Density   |  | kg/ Litre    |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (DG Set)                           | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (CPP)                              | Annual   | kilolitre    |  |  |  |  |  |  |  |



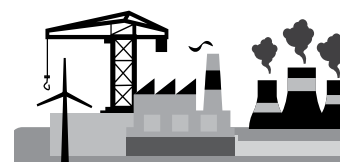
|        |   |   |              |  |  |  |  |  |  |  |
|--------|---|---|--------------|--|--|--|--|--|--|--|
| (vii)  | Quantity used for power generation (Co-Gen)           | Annual  | kilolitre    |  |  |  |  |  |  |  |
| (viii) | Quantity used for process                             | Annual  | kilolitre    |  |  |  |  |  |  |  |
| (ix)   | Total Liquid waste Consumption as fuel                | $[D.6.(v) + D.6.(vi) + D.6.(vii) + D.6.(viii)] \times D.6.(iv)$   | Tonne        |  |  |  |  |  |  |  |
| (x)    | Thermal Energy Used in Power Generation (DG Set)      | $D.6.(v) \times D.6.(iv) \times D.6.(ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |
| (xi)   | Thermal Energy Used in Power Generation (CPP)         | $D.6.(vi) \times D.6.(iv) \times D.6.(ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |
| (xii)  | Thermal Energy Used in Power Generation (Co-Gen)      | $D.6.(vii) \times D.6.(iv) \times D.6.(ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |
| (xiii) | Thermal Energy Used in Process                        | $D.6.(viii) \times D.6.(iv) \times D.6.(ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |
| D.7    | Total Liquid Energy Used in Power Generation (DG Set) | $IF(b.2.1.(i) = "Yes", (D.5.(xi) + D.4.(xi) + D.3.(ix) + D.2.(ix) + D.1.(x) + D.6.(x)), (D.5.(xi) + D.4.(xi) + D.3.(ix) + D.2.(ix) + D.1.(x)))$ | Million kcal |  |  |  |  |  |  |  |



|       |   |   |              |  |  |  |  |  |  |
|-------|---|---|--------------|--|--|--|--|--|--|
| D.8   | Total Liquid Energy Used in Power Generation (CPP)    | IF(OR(b.2.2.(i), b.2.3.(i) = "Yes"), D.5.(xii) + D.4.(xii) + D.3.(x) + D.2.(x) + D.1.(xi) + D.6.(xi)), (D.5.(xii) + D.4.(xii) + D.3.(x) + D.2.(x) + D.1.(xi))                               | Million kcal |  |  |  |  |  |  |
| D.9   | Total Liquid Energy Used in Power Generation (Co-Gen) | IF(OR(b.2.5.(i), b.2.5.(i) = "Yes"), D.5.(xiii) + D.4.(xiii) + D.3.(xi) + D.2.(xi) + D.1.(xii) + D.6.(xii) * (1-b.2.6.(xiii))), (D.5.(xiii) + D.4.(xiii) + D.3.(xi) + D.2.(xi) + D.1.(xii)) | Million kcal |  |  |  |  |  |  |
| D.10  | Total Liquid Energy Used in Process                   | D.5.(xiv) + D.4.(xiv) + D.3.(xii) + D.2.(xii) + D.1.(xiii)  | Million kcal |  |  |  |  |  |  |
| E     | Gaseous Fuel  |   |              |  |  |  |  |  |  |
| E.1   | Compressed Natural Gas (CNG/NG/PNG/LNG)               |   |              |  |  |  |  |  |  |
| (i)   | Landed Cost of fuel (Last purchase)                   | Basic Cost+ Taxes+ Freight  | Rs/SCM       |  |  |  |  |  |  |
| (ii)  | Gross calorific value                                 |   | kcal/SCM     |  |  |  |  |  |  |
| (iii) | Quantity purchased                                    | Annual  | Million SCM  |  |  |  |  |  |  |
| (iv)  | Quantity used for power generation                    | Annual  | Million SCM  |  |  |  |  |  |  |



|            |  |                             |                     |  |  |  |  |  |  |
|------------|--|-----------------------------|---------------------|--|--|--|--|--|--|
| (v)        | Quantity used for transportation, if any             | Annual                      | Million SCM         |  |  |  |  |  |  |
| (vi)       | Quantity used for process heating                    | Annual                      | Million SCM         |  |  |  |  |  |  |
| (vii)      | Total CNG Consumption as fuel                        | E.1. (iv) + E.1.(vi)        | Million SCM         |  |  |  |  |  |  |
| (viii)     | Thermal Energy Used in Power Generation              | E.1.(iv) x E.1.(ii)         | Million kcal        |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Process                       | E.1.(vi) x E.1.(ii)         | Million kcal        |  |  |  |  |  |  |
| <b>E.2</b> | <b>Liquefied Petroleum Gas (LPG)</b>                 |                             |                     |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)                  | Basic Cost + Taxes+ Freight | Rs/kg               |  |  |  |  |  |  |
| (ii)       | Gross calorific value                                |                             | kcal/kg             |  |  |  |  |  |  |
| (iii)      | Quantity purchased                                   | Annual                      | Tonnes              |  |  |  |  |  |  |
| (iv)       | Quantity used for power generation                   | Annual                      | Tonnes              |  |  |  |  |  |  |
| (v)        | Quantity used for process heating                    | Annual                      | Tonnes              |  |  |  |  |  |  |
| (vi)       | Total LPG Consumption as fuel                        | E.2.(iv) + E.2.(v)          | Tonnes              |  |  |  |  |  |  |
| (vii)      | Thermal Energy Used in Power Generation              | E.2.(iv)x E.2.(ii)/1000     | Million kcal        |  |  |  |  |  |  |
| (viii)     | Thermal Energy Used in Process                       | E.2.(v)x E.2.(ii)/1000      | Million kcal        |  |  |  |  |  |  |
| <b>E.3</b> | <b>Total Gaseous Energy Used in Power Generation</b> | <b>E.1.(viii)+E.2.(vii)</b> | <b>Million kcal</b> |  |  |  |  |  |  |
| <b>E.4</b> | <b>Total Gaseous Energy Used in Process</b>          | <b>E.1.(ix)+E.2.(viii)</b>  | <b>Million kcal</b> |  |  |  |  |  |  |
| <b>F</b>   | <b>Steam</b>   |                             |                     |  |  |  |  |  |  |
| (i)        | Total Steam Import                                   |                             | Tonne               |  |  |  |  |  |  |
| (ii)       | Energy of Steam                                      | Annual                      | kcal/kg             |  |  |  |  |  |  |



|       |   |  |                    |  |  |  |  |  |  |  |
|-------|---|--|--------------------|--|--|--|--|--|--|--|
| (iii) | Temperature of Steam                                  | Annual   | °C                 |  |  |  |  |  |  |  |
| (iv)  | Steam Pressure  | Annual   | kg/cm <sup>2</sup> |  |  |  |  |  |  |  |
| (v)   | Total Thermal energy input                            | F.(i) *F.(ii)*1000                                       | Million kcal       |  |  |  |  |  |  |  |
| G     | Total Thermal Energy                                  |  |                    |  |  |  |  |  |  |  |
| G1    | Total Thermal Energy Used in Power Generation         | C.8 + C.9 + D.7 + D.8 + D.9 + E.3                        | Million kcal       |  |  |  |  |  |  |  |
| G2    | Total Thermal Energy Used in Process                  | D.10. + C.10. + E.4. + F.(v)                             | Million kcal       |  |  |  |  |  |  |  |
| G3    | Total Thermal Energy Input through all Fuels          | G.1+G.2  | Million kcal       |  |  |  |  |  |  |  |
| H     | Gross Heat Rate                                       |  |                    |  |  |  |  |  |  |  |
| H1    | Gross Heat Rate of DG Set                             | IF(b.2.1.(iii)=0, (0), (D.7.*10/b.2.1.(iii))             | kcal/kWh           |  |  |  |  |  |  |  |
| H2    | Gross Heat Rate of CPP (Steam Turbine)                | IF (b.2.2.(iii) = 0, (0), ((D.8. + C.8.)*10/b.2.2.(iii)) | kcal/kWh           |  |  |  |  |  |  |  |
| H3    | Gross Heat Rate of CPP (Gas Turbine)                  | IF (b.2.3. (iii)=0, (0), (E.3. *10/b.2.3.(iii))          | kcal/kWh           |  |  |  |  |  |  |  |
| H4    | Gross Heat Rate of Co-Gen (Extraction cum condensing) | Heat Rate with enthalpy                                  | kcal/kWh           |  |  |  |  |  |  |  |
| H5    | Gross Heat Rate of Co-Gen(Extraction/ Back Pressure)  | Heat Rate with enthalpy                                  | kcal/kWh           |  |  |  |  |  |  |  |
| H6    | Weighted Average Heat Rate                            | Heat Rate with generation                                | kcal/kWh           |  |  |  |  |  |  |  |
| I     | Coal Analysis in Co-Gen (As Fired Basis)              |  |                    |  |  |  |  |  |  |  |
| i     | Gross Calorific Value                                 | Annual   | kcal/kg            |  |  |  |  |  |  |  |



|            |   |        |              |  |  |  |  |  |  |  |
|------------|---|--------|--------------|--|--|--|--|--|--|--|
| ii         | Ash   | Annual | %            |  |  |  |  |  |  |  |
| iii        | Hydrogen  | Annual | %            |  |  |  |  |  |  |  |
| iv         | Moisture  | Annual | %            |  |  |  |  |  |  |  |
| <b>K</b>   | <b>Miscellaneous Data \$</b>  |        |              |  |  |  |  |  |  |  |
| <b>K.1</b> | <b>Additional Equipment installation after baseline year due to Environmental Concern</b>                             |        |              |  |  |  |  |  |  |  |
| (i)        | Additional Electrical Energy Consumed   | Annual | Lakh kWh     |  |  |  |  |  |  |  |
| (ii)       | Additional Thermal Energy Consumed  | Annual | Million kcal |  |  |  |  |  |  |  |
| <b>K.2</b> | <b>Biomass/ Alternate Fuel availability (as per Sr. No C.5/C.6/D.6)</b>   |        |              |  |  |  |  |  |  |  |
| (i)        | Biomass replacement with Fossil fuel due to Biomass un-availability (used in the process)                             | Annual | Tonne        |  |  |  |  |  |  |  |
| (ii)       | Alternate Solid Fuel replacement with Fossil fuel due to Alternate Solid Fuel un-availability (used in the process)   | Annual | Tonne        |  |  |  |  |  |  |  |
| (iii)      | Alternate Liquid Fuel replacement with Fossil fuel due to Alternate Liquid Fuel un-availability (used in the process) | Annual | Tonne        |  |  |  |  |  |  |  |

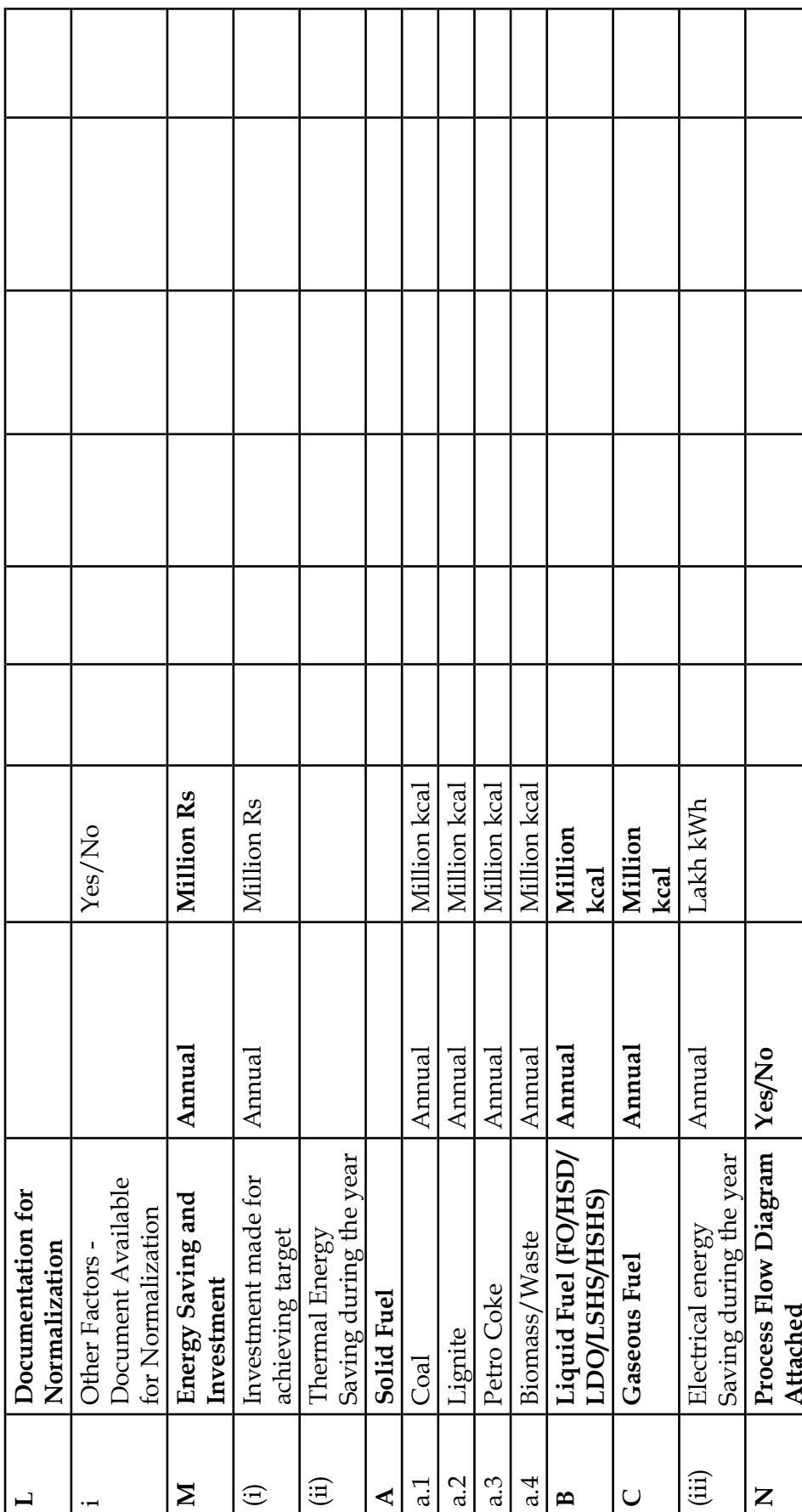




|            |  |        |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|--------|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>K.3</b> | <b>Project Activities<br/>(Construction Phase)</b>   |        |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)        | Electrical Energy Consumed due to commissioning of Equipment   | Annual | Lakh kWh     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)       | Thermal Energy Consumed due to commissioning of Equipment  | Annual | Million kcal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>K.4</b> | <b>New Line/Unit Commissioning</b>   |        |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)        | Electrical Energy Consumed due to commissioning of New process Line/Unit till it attains 70% of Capacity Utilization | Annual | Lakh kWh     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)       | Thermal Energy Consumed due to commissioning of New Process Line/Unit till it attains 70% of Capacity Utilization    | Annual | Million kcal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii)      | Rolling Ingot till new line attains 70% of Capacity Utilization  | Annual | Tonne        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)       | HRC Production till new line attains 70% of Capacity Utilization   | Annual | Tonne        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)        | Date of Commissioning (70% Capacity Utilization)   | Date   |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



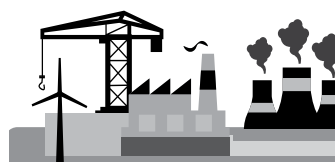
|   |   |        |              |  |  |  |  |  |  |
|---|---|--------|--------------|--|--|--|--|--|--|
| (vi)  | Electrical Energy Consumed from external source due to commissioning of New Line/Unit till it attains 70% of Capacity Utilization in Power generation | Annual | Lakh kWh     |  |  |  |  |  |  |
| (vii)   | Thermal Energy Consumed due to commissioning of New Line/Unit till it attains 70% of Capacity Utilization in Power generation                         | Annual | Million kcal |  |  |  |  |  |  |
| (viii)  | Net Electricity Generation till new Line/Unit attains 70% Capacity Utilization in Power Generation/Co-Gen   | Annual | Lakh kWh     |  |  |  |  |  |  |
| (ix)  | Steam Generation till new Line/Unit attains 70% Capacity Utilization in Power Generation/Co-Gen   | Annual | Tonne        |  |  |  |  |  |  |
| (x)   | Date of Commissioning (70% Capacity Utilization)  | Date   |              |  |  |  |  |  |  |
| <b>K.5</b>  | <b>Unforeseen Circumstances</b>   |        |              |  |  |  |  |  |  |
| (i)   | Electrical Energy to be Normalized  | Annual | Lakh kWh     |  |  |  |  |  |  |
| (ii)  | Thermal Energy to be Normalized   | Annual | Million kWh  |  |  |  |  |  |  |
| \$ Authentic documents in support of claim in Thermal and Electrical Energy is required |   |        |              |  |  |  |  |  |  |





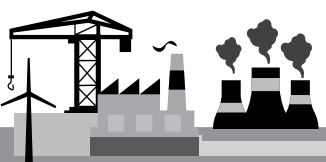
| List of additional Equipment installed due to Environmental Concern after baseline year   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
|---|-------------------|--------------------|-------------------------------|--------------------------|------------------------------|--|-----------------|----------------|---|---|--|
| Name of the Unit  |                   |                    | Assessment Year (20__ - 20__) |                          |                              |  |                 | Source of Data |   | Remarks                                       |  |
| Sr No   | Equip - ment Name | Equip - ment Sr No | Section                       | Date of Commi - ssioning | Electrical Rated Capacity kW | Thermal Rated Capacity Million kcal/ annum | Running Load kW | Running Hrs    | Electricity Consum - ption \$ Lakh kWh/ Annum | Thermal Consum - ption \$ Million kcal/ Annum |  |
| 1   |                   |                    |                               | Date                     |                              |  |                 | Hrs/ Annum     |   |   |  |
| 2   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| 3   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| 4   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| 5   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| n   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| Total   |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| \$ Equipment wise Energy Meter Reading or Energy Management System Data required in support of the claim                          |                   |                    |                               |                          |                              |  |                 |                |   |   |  |
| \$\$ Equipment wise Document related to consumption of Liquid Fuel, Solid Fuel Alternate Fuel is required in support of the claim |                   |                    |                               |                          |                              |  |                 |                |   |   |  |

| List of Equipment and Energy consumed during project activity up to commissioning during the Assessment year |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |
|--|-------------------|--------------------|-------------------------------|-----------------------------|--------------------------|------------------------------|--|--------------------|----------------|---|---|
| Name of the Unit   |                   |                    | Assessment Year (20__ - 20__) |                             |                          |                              |  | Source of Data     |                | Remarks                                       |   |
| Sr No  | Equip - ment Name | Equip - ment Sr No | Sec - tion                    | Project Activity Start Date | Date of Commi - ssioning | Electrical Rated Capacity kW | Thermal Rated Capacity Million kcal/ annum | Run - ning Load kW | Run - ning Hrs | Electricity Consum - ption \$ Lakh kWh/ Annum | Thermal Consum - ption \$ Million kcal/ Annum |
| 1  |                   |                    |                               | Date                        | Date                     |                              |  |                    |                |   |   |
| 2  |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |
| 3  |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |
| 4  |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |
| 5  |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |
| n  |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |
| Total  |                   |                    |                               |                             |                          |                              |  |                    |                |   |   |



## Supporting Pro-forma Sb: Cement

| Form-Sb (General Information) |  |  |  |  |  |  |                  |  |  |
|-------------------------------|--|--|--|--|--|--|------------------|--|--|
| Sector - Cement Sector        |  |  |  |  |  |  |                  |  |  |
| 1                             | Name of the Unit                         |  |  |  |  |  |                  |  |  |
| 2                             | i) Year of Establishment                 |  |  |  |  |  |                  |  |  |
|                               | ii) Registration No (As provided by BEE) |  |  |  |  |  |                  |  |  |
| 3                             | Sub Sector                               |  |  |  |  |  |                  |  |  |
| 4                             | Plant Contact Details & Address          |  |  |  |  |  |                  |  |  |
| a                             | City/Town/Village                        |  |  |  |  |  |                  |  |  |
|                               | District                                 |  |  |  |  |  |                  |  |  |
|                               | State                                    |  |  |  |  |  | Pin              |  |  |
|                               | Telephone                                |  |  |  |  |  | Fax              |  |  |
| b                             | Plant's Chief Executive Name             |  |  |  |  |  |                  |  |  |
|                               | Designation                              |  |  |  |  |  |                  |  |  |
|                               | Telephone with STD Code                  |  |  |  |  |  | Fax              |  |  |
|                               | Mobile                                   |  |  |  |  |  | E-mail           |  |  |
| 5                             | Registered Office                        |  |  |  |  |  |                  |  |  |
| a                             | Company's Chief Executive Name           |  |  |  |  |  |                  |  |  |
|                               | Designation                              |  |  |  |  |  |                  |  |  |
|                               | Address                                  |  |  |  |  |  |                  |  |  |
|                               | City/Town/Village                        |  |  |  |  |  |                  |  |  |
|                               | Post Office                              |  |  |  |  |  |                  |  |  |
|                               | District                                 |  |  |  |  |  |                  |  |  |
|                               | State                                    |  |  |  |  |  | Pin              |  |  |
|                               | Telephone with STD Code                  |  |  |  |  |  | Fax              |  |  |
| 6                             | Energy Manager Details                   |  |  |  |  |  |                  |  |  |
| a                             | Name                                     |  |  |  |  |  |                  |  |  |
|                               | Designation                              |  |  |  |  |  | Whether EA or EM |  |  |
|                               | EA/EM Registration No.                   |  |  |  |  |  |                  |  |  |
|                               | Telephone                                |  |  |  |  |  | Fax              |  |  |
|                               | Mobile                                   |  |  |  |  |  | E-mail           |  |  |



## FORM-Sb (Details of Production and Energy Consumption)

| Sector :- Cement Sector |  |                           |       |                                      |                                 |   |  |   |                   |
|-------------------------|--|---------------------------|-------|--------------------------------------|---------------------------------|---|--|---|-------------------|
| Name of the Unit        |  |                           |       |                                      |                                 |   |  |   |                   |
| S. No                   | Particulars  | Basis/<br>Formulae        | Unit  | Year 1<br>(20.....<br>-20...<br>...) | Year 2<br>(20.....<br>-20.....) | Year 3/<br>Previous<br>Year (20.....<br>-20.....) | Baseline<br>Year<br>(Average<br>of Year<br>1 to Year<br>3) (20.....<br>-20.....) | Current/<br>Assessment/<br>Target<br>Year (20.....<br>-20.....) | Source<br>of Data |
| <b>A</b>                | <b>Production and Capacity Utilization details</b> |                           |       |                                      |                                 |   |  |   |                   |
| A1                      | Production Capacity (Clinker)                      | Annual Installed Capacity | Tonne |                                      |                                 |   |  |   |                   |
| A2                      | Production Capacity (Cement)                       | Annual Installed Capacity | Tonne |                                      |                                 |   |  |   |                   |
| A3                      | Total Clinker Production                           | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A4                      | Total Cement Production (All verities)             | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A5                      | Opening Clinker Stock                              | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A6                      | Closing Clinker Stock                              | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A7                      | Opening Cement Stock                               | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A8                      | Closing Cement Stock                               | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A9                      | Capacity Utilization (Clinker)*                    | A3x100/A1                 | %     |                                      |                                 |   |  |   |                   |
| A10                     | Capacity Utilization (Cement)*                     | A4x100/A2                 | %     |                                      |                                 |   |  |   |                   |
| A11                     | OPC Production                                     | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A12                     | PPC Production                                     | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A13                     | PSC/any other Cement Production                    | Annual                    | Tonne |                                      |                                 |   |  |   |                   |
| A14                     | Clinker Exported                                   | Annual                    | Tonne |                                      |                                 |   |  |   |                   |





|        |  |        |                 |  |  |  |  |  |  |  |
|--------|--|--------|-----------------|--|--|--|--|--|--|--|
| (i)k   | Kiln-1 Cold to Hot start due to external factors (Electrical Energy Consumption) | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (i)l   | Kiln-1 Cold to Hot start due to internal factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (ii)a  | Kiln-2 Production  | Annual | Tonne           |  |  |  |  |  |  |  |
| (ii)b  | Kiln-2 Operating Thermal SEC   | Annual | kcal/kg clinker |  |  |  |  |  |  |  |
| (ii)c  | Kiln-2 Operating Electrical SEC  | Annual | kWh/t clinker   |  |  |  |  |  |  |  |
| (ii)d  | Kiln-2 Running Hrs   | Annual | Hrs             |  |  |  |  |  |  |  |
| (ii)e  | Kiln-2 Hot to Hot start (Internal & External)                                    | Annual | Hrs             |  |  |  |  |  |  |  |
| (ii)f  | Kiln-2 Hot to Cold stop due to external factor                                   | Annual | Hrs             |  |  |  |  |  |  |  |
| (ii)g  | Kiln-2 Hot to Cold stop due to external factor                                   | Annual | Nos             |  |  |  |  |  |  |  |
| (ii)h  | Kiln-2 Hot to Cold stop due to external factor (Electrical Energy Consumption)   | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (ii)i  | Kiln-2 Cold to Hot start due to external factors                                 | Annual | Hrs             |  |  |  |  |  |  |  |
| (ii)j  | Kiln-2 Cold to Hot start due to external factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (ii)k  | Kiln-2 Cold to Hot start due to external factors (Electrical Energy Consumption) | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (ii)l  | Kiln-2 Cold to Hot start due to internal factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (iii)a | Kiln-3 Production  | Annual | Tonne           |  |  |  |  |  |  |  |
| (iii)b | Kiln-3 Operating Thermal SEC   | Annual | kcal/kg clinker |  |  |  |  |  |  |  |





|        |  |        |                 |  |  |  |  |  |  |  |
|--------|--|--------|-----------------|--|--|--|--|--|--|--|
| (iii)c | Kiln-3 Operating Electrical SEC  | Annual | kWh/t clinker   |  |  |  |  |  |  |  |
| (iii)d | Kiln-3 Running Hrs   | Annual | Hrs             |  |  |  |  |  |  |  |
| (iii)e | Kiln-3 Hot to Hot start (Internal & External)                                    | Annual | Hrs             |  |  |  |  |  |  |  |
| (iii)f | Kiln-3 Hot to Cold stop due to external factor                                   | Annual | Hrs             |  |  |  |  |  |  |  |
| (iii)g | Kiln-3 Hot to Cold stop due to external factor                                   | Annual | Nos             |  |  |  |  |  |  |  |
| (iii)h | Kiln-3 Hot to Cold stop due to external factor (Electrical Energy Consumption)   | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (iii)i | Kiln-3 Cold to Hot start due to external factors                                 | Annual | Hrs             |  |  |  |  |  |  |  |
| (iii)j | Kiln-3 Cold to Hot start due to external factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (iii)k | Kiln-3 Cold to Hot start due to external factors (Electrical Energy Consumption) | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (iii)l | Kiln-3 Cold to Hot start due to internal factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (iv)a  | Kiln-4 Production  | Annual | Tonne           |  |  |  |  |  |  |  |
| (iv)b  | Kiln-4 Operating Thermal SEC   | Annual | kcal/kg clinker |  |  |  |  |  |  |  |
| (iv)c  | Kiln-4 Operating Electrical SEC  | Annual | kWh/t clinker   |  |  |  |  |  |  |  |
| (iv)d  | Kiln-4 Running Hrs   | Annual | Hrs             |  |  |  |  |  |  |  |
| (iv)e  | Kiln-4 Hot to Hot start (Internal & External)                                    | Annual | Hrs             |  |  |  |  |  |  |  |
| (iv)f  | Kiln-4 Hot to Cold stop due to external factor                                   | Annual | Hrs             |  |  |  |  |  |  |  |
| (iv)g  | Kiln-4 Hot to Cold stop due to external factor                                   | Annual | Nos             |  |  |  |  |  |  |  |



|       |  |        |                 |  |  |  |  |  |  |  |
|-------|--|--------|-----------------|--|--|--|--|--|--|--|
| (iv)h | Kiln-4 Hot to Cold stop due to external factor (Electrical Energy Consumption)   | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (iv)i | Kiln-4 Cold to Hot start due to external factors                                 | Annual | Hrs             |  |  |  |  |  |  |  |
| (iv)j | Kiln-4 Cold to Hot start due to external factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (iv)k | Kiln-4 Cold to Hot start due to external factors (Electrical Energy Consumption) | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (iv)l | Kiln-4 Cold to Hot start due to internal factors                                 | Annual | Nos             |  |  |  |  |  |  |  |
| (v)a  | Kiln-5 production  | Annual | Tonne           |  |  |  |  |  |  |  |
| (v)b  | Kiln-5 Operating Thermal SEC   | Annual | kcal/kg clinker |  |  |  |  |  |  |  |
| (v)c  | Kiln-5 Operating Electrical SEC  | Annual | kWh/t clinker   |  |  |  |  |  |  |  |
| (v)d  | Kiln-5 Running Hrs   | Annual | Hrs             |  |  |  |  |  |  |  |
| (v)e  | Kiln-5 Hot to Hot start (Internal & External)                                    | Annual | Hrs             |  |  |  |  |  |  |  |
| (v)f  | Kiln-5 Hot to Cold stop due to external factor                                   | Annual | Hrs             |  |  |  |  |  |  |  |
| (v)g  | Kiln-5 Hot to Cold stop due to external factor                                   | Annual | Nos             |  |  |  |  |  |  |  |
| (v)h  | Kiln-5 Hot to Cold stop due to external factor (Electrical Energy Consumption)   | Annual | Lakh kWh        |  |  |  |  |  |  |  |
| (v)i  | Kiln-5 Cold to Hot start due to external factors                                 | Annual | Hrs             |  |  |  |  |  |  |  |
| (v)j  | Kiln-5 Cold to Hot start due to external factors                                 | Annual | Nos             |  |  |  |  |  |  |  |



|       |   |        |          |  |  |  |  |  |  |  |
|-------|---|--------|----------|--|--|--|--|--|--|--|
| (v)k  | Kiln-5 Cold to Hot start due to external factors (Electrical Energy Consumption)                        | Annual | Lakh kWh |  |  |  |  |  |  |  |
| (v)l  | Kiln-4 Cold to Hot start due to internal factors  | Annual | Nos      |  |  |  |  |  |  |  |
| Note: | For Additional Kiln data, DC need to submit the information in separate excel sheet as per above format |        |          |  |  |  |  |  |  |  |
| C     | <b>Electricity Consumption</b>  |        |          |  |  |  |  |  |  |  |
| C.1   | <b>Electricity through Grid / Other (Including colony and others)</b>                                   |        |          |  |  |  |  |  |  |  |
| (i)   | Purchased Electricity from grid (SEB)   | Annual | Lakh kWh |  |  |  |  |  |  |  |
| (ii)  | Renewable Electricity (Through Wheeling)  | Annual | Lakh kWh |  |  |  |  |  |  |  |
| (iii) | Electricity from CPP located outside from plant boundary (Through Wheeling)                             | Annual | Lakh kWh |  |  |  |  |  |  |  |
| (iv)  | Renewable Purchase Obligation of plant (RPO) (Solar & Non-Solar)  | Annual | %        |  |  |  |  |  |  |  |
| (v)   | Renewable Purchase Obligation of plant (RPO) (Solar & Non-Solar)  | Annual | Lakh kWh |  |  |  |  |  |  |  |
| (vi)  | Renewable Purchase Obligation of plant (RPO) (Solar & Non-Solar)  | Annual | MW       |  |  |  |  |  |  |  |
| (vii) | Renewable Energy Generator as approved by MNRE  | Annual | MW       |  |  |  |  |  |  |  |



|              |   |   |                 |  |  |  |  |  |  |
|--------------|---|---|-----------------|--|--|--|--|--|--|
| (viii)       | Quantum of Renewable Energy Certificates (REC) obtained as a Renewable Energy Generator (Solar & Non-Solar)       | Annual  | MWh             |  |  |  |  |  |  |
| (ix)         | Quantum of Energy sold under preferential tariff  | Annual  | MWh             |  |  |  |  |  |  |
| (x)          | Plant Connected Load  |   | kW              |  |  |  |  |  |  |
| (xi)         | Contract Demand with utility  |   | kVA             |  |  |  |  |  |  |
| (xii)        | Notified Specific Energy Consumption  |   | TOE/<br>Tonnes  |  |  |  |  |  |  |
| (xiii)       | Target Specific Energy Consumption  |   | TOE/<br>Tonnes  |  |  |  |  |  |  |
| (xiv)        | Saving Target in TOE/ Tonne of product as per PAT scheme Notification   | C.1.1.(xii)-<br>C.1.1.(xiii)                              | TOE/<br>Tonnes  |  |  |  |  |  |  |
| (xv)         | Equivalent Major Product Output in Tonnes as per PAT Scheme Notification  |   | Tonnes          |  |  |  |  |  |  |
| (xvi)        | Total Electricity Purchased from grid/<br>Other   | C.1 (i)+<br>C.1(ii)+<br>C.1(iii)                          | Lakh kWh        |  |  |  |  |  |  |
| (xvii)       | Total Electricity Purchased from grid/<br>Other without colony/<br>construction power etc                         | if(C.1 (xvi)><br>C.5 then C.1<br>(xvi)-C.5<br>otherwise 0 | Lakh kWh        |  |  |  |  |  |  |
| (xviii)      | Equivalent Thermal Energy of Purchased Electricity from Grid /<br>Other without colony/<br>construction power etc | (vii)x860/10  | Million<br>kcal |  |  |  |  |  |  |
| <b>C.2</b>   | <b>Own Generation</b>   |   |                 |  |  |  |  |  |  |
| <b>C.2.1</b> | <b>Through DG sets</b>  |   |                 |  |  |  |  |  |  |
| (i)          | Grid Connected  |   | Yes/No          |  |  |  |  |  |  |
| (ii)         | Installed Capacity  |   | MW              |  |  |  |  |  |  |



|                |   |                              |           |  |  |  |  |  |  |  |
|----------------|---|------------------------------|-----------|--|--|--|--|--|--|--|
| (iii)          | Annual Gross Unit Generation  | Annual                       | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)           | Designed Gross Heat Rate  |                              | kcal/kWh  |  |  |  |  |  |  |  |
| (v)            | Running Hrs   | Annual                       | Hrs       |  |  |  |  |  |  |  |
| <b>C.2.2</b>   | <b>Through Steam Turbine/Generator</b>  |                              |           |  |  |  |  |  |  |  |
| <b>C.2.2.1</b> | <b>STG 1</b>  |                              |           |  |  |  |  |  |  |  |
| (i)            | Grid Connected  |                              | Yes/No    |  |  |  |  |  |  |  |
| (ii)           | Installed Capacity  |                              | MW        |  |  |  |  |  |  |  |
| (iii)          | Annual Gross Unit Generation  | Annual                       | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)           | Auxiliary Power Consumption   | Annual                       | %         |  |  |  |  |  |  |  |
| (v)            | Design Gross Heat Rate  |                              | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)           | Running Hrs   | Annual                       | Hrs       |  |  |  |  |  |  |  |
| (vii)          | Total Plant Available Hrs per year  | Annual                       | Hrs       |  |  |  |  |  |  |  |
| (viii)         | Plant Unavailability hrs due to Planned shutdown, Break down due to internal & external factor        | Annual                       | Hrs       |  |  |  |  |  |  |  |
| (ix)           | Plant low load hrs due to Internal Factors/ Breakdown in Plant  | Annual                       | Hrs       |  |  |  |  |  |  |  |
| (x)            | Plant low load hrs due to External Factors like Fuel Unavailability/ Market demand/External Condition | Annual                       | Hrs       |  |  |  |  |  |  |  |
| (xi)           | Average Running Load  | C.2.2.1 (iii)/ VC.2.2.1 (vi) | MW        |  |  |  |  |  |  |  |



|                |  |  |           |  |  |  |  |  |  |  |  |
|----------------|--|--|-----------|--|--|--|--|--|--|--|--|
| (xi)           | Plant Availability Factor (PAF)  | {C.2.2.1 (vii) - C.2.2.1(viii)} / C.2.2.1(vii)                           |           |  |  |  |  |  |  |  |  |
| (xii)          | Plant Loading Factor (PLF)   | C.2.2.1 X 100 / X 100(iii) / (C.2.2.1(ii) * C.2.2.1(vii) * C.2.2.1(xii)) | %         |  |  |  |  |  |  |  |  |
| (xiii)         | % of loss due to external Factors  | C.2.2.1(x) / [C.2.2.1(ix) + C.2.2.1(x)]                                  | %         |  |  |  |  |  |  |  |  |
| <b>C.2.2.2</b> | <b>STG2</b>  |  |           |  |  |  |  |  |  |  |  |
| (i)            | Grid Connected   |  | Yes/No    |  |  |  |  |  |  |  |  |
| (ii)           | Installed Capacity   |  | MW        |  |  |  |  |  |  |  |  |
| (iii)          | Annual Gross Unit Generation   | Annual   | Lakh kWh  |  |  |  |  |  |  |  |  |
| (iv)           | Auxiliary Power Consumption  | Annual   | %         |  |  |  |  |  |  |  |  |
| (v)            | Design Gross Heat Rate   |  | kcal/ kWh |  |  |  |  |  |  |  |  |
| (vi)           | Running Hrs  | Annual   | Hrs       |  |  |  |  |  |  |  |  |
| (vii)          | Total Plant Available Hrs per year   | Annual   | Hrs       |  |  |  |  |  |  |  |  |
| (viii)         | Plant Unavailability hrs due to Planned shutdown, Break down due to internal & external factor         | Annual   | Hrs       |  |  |  |  |  |  |  |  |
| (ix)           | Plant low load hrs due to Internal Factors/ Breakdown in Plant   | Annual   | Hrs       |  |  |  |  |  |  |  |  |
| (x)            | Plant low load hrs due to External Factors like Fuel Unavailability/ Market demand/ External Condition | Annual   | Hrs       |  |  |  |  |  |  |  |  |



|                |  |  |           |  |  |  |  |  |  |  |
|----------------|--|--|-----------|--|--|--|--|--|--|--|
| (xi)           | Average Running Load   | C.2.2.2 (iii) / VC.2.2.2 (vi)                                    | MW        |  |  |  |  |  |  |  |
| (xii)          | Plant Availability Factor (PAF)  | {C.2.2.2 (vii) - C.2.2.2(viii)} / C.2.2.2 (vii)                  |           |  |  |  |  |  |  |  |
| (xiii)         | Plant Loading Factor (PLF)   | C.2.2.2.(iii) X 100 / (C.2.2.2(ii) *C.2.2.2(vii) *C.2.2.2 (xii)) | %         |  |  |  |  |  |  |  |
| (xiv)          | % of loss due to external Factors  | C.2.2.2(x) / [C.2.2.2(ix) + C.2.2.2(x)]                          | %         |  |  |  |  |  |  |  |
| <b>C.2.2.3</b> | <b>STG3</b>  |  |           |  |  |  |  |  |  |  |
| (i)            | Grid Connected   |  | Yes/No    |  |  |  |  |  |  |  |
| (ii)           | Installed Capacity   |  | MW        |  |  |  |  |  |  |  |
| (iii)          | Annual Gross Unit Generation   | Annual   | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)           | Auxiliary Power Consumption  | Annual   | %         |  |  |  |  |  |  |  |
| (v)            | Design Gross Heat Rate   |  | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)           | Running Hrs  | Annual   | Hrs       |  |  |  |  |  |  |  |
| (vii)          | Total Plant Available Hrs per year   | Annual   | Hrs       |  |  |  |  |  |  |  |
| (viii)         | Plant Unavailability hrs due to Planned shutdown, Break down due to internal & external factor | Annual   | Hrs       |  |  |  |  |  |  |  |
| (ix)           | Plant low load hrs due to Internal Factors/ Breakdown in Plant                                 | Annual   | Hrs       |  |  |  |  |  |  |  |



|                |   |   |           |  |  |  |  |  |  |  |
|----------------|---|---|-----------|--|--|--|--|--|--|--|
| (x)            | Plant low load hrs due to External Factors like Fuel Unavailability/ Market demand/External Condition | Annual  | Hrs       |  |  |  |  |  |  |  |
| (xi)           | Average Running Load  | C.2.2.3(iii) / VC.2.2.3(vi)   | MW        |  |  |  |  |  |  |  |
| (xi)           | Plant Availability Factor (PAF)   | {C.2.2.3 (vii) - C.2.2.3(viii)} / C.2.2.3(vii)                          |           |  |  |  |  |  |  |  |
| (xii)          | Plant Loading Factor (PLF)  | C.2.2.3.(iii) X 100 X 100 / (C.2.2.3 (ii) *C.2.2.3.(vii) *C.2.2.3(xii)) | %         |  |  |  |  |  |  |  |
| (xiii)         | % of loss due to external Factors   | C.2.2.3(x) / [C.2.2.3(ix) + C.2.2.3(x)]                                 | %         |  |  |  |  |  |  |  |
| <b>C.2.2.4</b> | <b>STG4</b>   |   |           |  |  |  |  |  |  |  |
| (i)            | Grid Connected  |   | Yes/No    |  |  |  |  |  |  |  |
| (ii)           | Installed Capacity  |   | MW        |  |  |  |  |  |  |  |
| (iii)          | Annual Gross Unit Generation  | Annual  | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)           | Auxiliary Power Consumption   | Annual  | %         |  |  |  |  |  |  |  |
| (v)            | Design Gross Heat Rate  |   | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)           | Running Hrs   | Annual  | Hrs       |  |  |  |  |  |  |  |
| (vii)          | Total Plant Available Hrs per year  | Annual  | Hrs       |  |  |  |  |  |  |  |
| (viii)         | Plant Unavailability hrs due to Planned shutdown, Break down due to internal & external factor        | Annual  | Hrs       |  |  |  |  |  |  |  |





|                |  |   |           |  |  |  |  |  |  |  |
|----------------|--|---|-----------|--|--|--|--|--|--|--|
| (ix)           | Plant low load hrs due to Internal Factors/ Breakdown in Plant   | Annual  | Hrs       |  |  |  |  |  |  |  |
| (x)            | Plant low load hrs due to External Factors like Fuel Unavailability/ Market demand/ External Condition | Annual  | Hrs       |  |  |  |  |  |  |  |
| (xi)           | Average Running Load   | C.2.2.4 (iii)/ VC.2.2.4(vi)   | MW        |  |  |  |  |  |  |  |
| (xi)           | Plant Availability Factor (PAF)  | {C.2.2.4(vii) - C.2.2.4(viii)} / C.2.2.4(vii)                           |           |  |  |  |  |  |  |  |
| (xii)          | Plant Loading Factor (PLF)   | C.2.2.4(iii) X 100 X 100 / (C.2.2.4(ii) * C.2.2.4(vii) * C.2.2.4 (xii)) | %         |  |  |  |  |  |  |  |
| (xiii)         | % of loss due to external Factors  | C.2.2.4(x) / [C.2.2.4(ix) + C.2.2.4(x)]                                 | %         |  |  |  |  |  |  |  |
| <b>C.2.2.5</b> | <b>STG5</b>  |   |           |  |  |  |  |  |  |  |
| (i)            | Grid Connected   |   | Yes/No    |  |  |  |  |  |  |  |
| (ii)           | Installed Capacity   |   | MW        |  |  |  |  |  |  |  |
| (iii)          | Annual Gross Unit Generation   | Annual  | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)           | Auxiliary Power Consumption  | Annual  | %         |  |  |  |  |  |  |  |
| (v)            | Design Gross Heat Rate   |   | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)           | Running Hrs  | Annual  | Hrs       |  |  |  |  |  |  |  |
| (vii)          | Total Plant Available Hrs per year   | Annual  | Hrs       |  |  |  |  |  |  |  |



|                |  |  |           |  |  |  |  |  |  |  |
|----------------|--|--|-----------|--|--|--|--|--|--|--|
| (viii)         | Plant Unavailability hrs due to Planned shutdown, Break down due to internal & external factor         | Annual   | Hrs       |  |  |  |  |  |  |  |
| (ix)           | Plant low load hrs due to Internal Factors/ Breakdown in Plant   | Annual   | Hrs       |  |  |  |  |  |  |  |
| (x)            | Plant low load hrs due to External Factors like Fuel Unavailability/ Market demand/ External Condition | Annual   | Hrs       |  |  |  |  |  |  |  |
| (xi)           | Average Running Load   | C.2.2.5 (iii) / VC.2.2.5(vi)   | MW        |  |  |  |  |  |  |  |
| (xi)           | Plant Availability Factor (PAF)  | {C.2.2.5(vii) - C.2.2.5(viii)} / C.2.2.5(vii)                          |           |  |  |  |  |  |  |  |
| (xii)          | Plant Loading Factor (PLF)   | C.2.2.5(iii) X 100 X 100 / (C.2.2.5(ii) * C.2.2.5(vii) * C.2.2.5(xii)) | %         |  |  |  |  |  |  |  |
| (xiii)         | % of loss due to external Factors  | C.2.2.5(x) / [C.2.2.5(ix) + C.2.2.5(x)]                                | %         |  |  |  |  |  |  |  |
| <b>C.2.2.6</b> | <b>STG</b>   |  |           |  |  |  |  |  |  |  |
| (i)            | Grid Connected   |  | Yes/No    |  |  |  |  |  |  |  |
| (ii)           | Installed Capacity   |  | MW        |  |  |  |  |  |  |  |
| (iii)          | Annual Gross Unit Generation   | Annual   | Lakh kWh  |  |  |  |  |  |  |  |
| (iv)           | Auxiliary Power Consumption  | Annual   | %         |  |  |  |  |  |  |  |
| (v)            | Design Gross Heat Rate   |  | kcal/ kWh |  |  |  |  |  |  |  |
| (vi)           | Running Hrs  | Annual   | Hrs       |  |  |  |  |  |  |  |



|              |  |   |           |  |  |  |  |  |  |  |
|--------------|--|---|-----------|--|--|--|--|--|--|--|
| (vii)        | Plant Unavailability hrs due to Planned shutdown, Break down due to internal & external factor         | Annual  | Hrs       |  |  |  |  |  |  |  |
| (viii)       | Plant low load hrs due to Internal Factors/ Breakdown in Plant   | Annual  | Hrs       |  |  |  |  |  |  |  |
| (ix)         | Plant low load hrs due to External Factors like Fuel Unavailability/ Market demand/ External Condition | Annual  | Hrs       |  |  |  |  |  |  |  |
| (x)          | Average Running Load   | C.2.2.6 (iii)/ VC.2.2.6(vi)                     | MW        |  |  |  |  |  |  |  |
| (xi)         | Plant Availability Factor (PAF)  | Weighted Average of PAF w.r.t. Gross Generation |           |  |  |  |  |  |  |  |
| (xii)        | Plant Load Factor (PLF)  | Weighted Average of PLF w.r.t. Gross Generation | %         |  |  |  |  |  |  |  |
| (xiii)       | % of loss due to external Factors  | $C.2.2.6(x) / [C.2.2.6(ix) + C.2.2.6(x)]$       | %         |  |  |  |  |  |  |  |
| <b>C.2.3</b> | <b>Through Gas turbine</b>   |   |           |  |  |  |  |  |  |  |
| (i)          | Installed Capacity   |   | MW        |  |  |  |  |  |  |  |
| (ii)         | Annual Gross Unit Generation   | Annual  | Lakh kWh  |  |  |  |  |  |  |  |
| (iii)        | Auxiliary Power Consumption  | Annual  | %         |  |  |  |  |  |  |  |
| (iv)         | Design Heat Rate   | Annual  | kcal/ kWh |  |  |  |  |  |  |  |



|              |  |   |              |  |  |  |  |  |  |  |
|--------------|--|---|--------------|--|--|--|--|--|--|--|
| (v)          | Plant Load Factor (PLF)                                    | Annual  | %            |  |  |  |  |  |  |  |
| (vi)         | Running Hrs  | Annual  | Hrs          |  |  |  |  |  |  |  |
| <b>C.2.4</b> | <b>Through Waste Heat Recovery</b>                         |   |              |  |  |  |  |  |  |  |
| (i)          | WHR Installed Capacity                                     |   | MW           |  |  |  |  |  |  |  |
| (ii)         | Annual Generation  | Annual  | Lakh kWh     |  |  |  |  |  |  |  |
| (iii)        | WHR Running Hrs  | Annual  | Hrs          |  |  |  |  |  |  |  |
| <b>C.2.5</b> | <b>Power From Dedicated Line</b>                           |   |              |  |  |  |  |  |  |  |
| (i)          | Power Wheeled through dedicated Line                       | Annual  | MW           |  |  |  |  |  |  |  |
| (ii)         | Annual Wheeled Electricity                                 | Annual  | Lakh kWh     |  |  |  |  |  |  |  |
| (iii)        | Heat Rate of Wheeled Electricity from dedicated Line       | Annual  | kcal/kWh     |  |  |  |  |  |  |  |
| (iv)         | Total Energy Consumed                                      | (C.2.5. (ii) X C.2.5. (iii))/10                         | Million kcal |  |  |  |  |  |  |  |
| <b>C.3</b>   | <b>Total Own Generation of Electricity</b>                 | C.2.1.(iii) + C.2.26.(iii) + C.2.3.(ii) + C.2.4.(ii)    | Lakh kWh     |  |  |  |  |  |  |  |
| <b>C.4</b>   | <b>Electricity Exported to Grid/others</b>                 |   | Lakh kWh     |  |  |  |  |  |  |  |
| <b>C.5</b>   | <b>Electricity Supplied to Colony/others</b>               |   | Lakh kWh     |  |  |  |  |  |  |  |
| <b>C.6</b>   | <b>Electricity Supplied to Grid/Colony/others from CPP</b> | C.4+[If C.5 > C.1(xvi) then (C.5-C.1(xvi))] otherwise 0 | Lakh kWh     |  |  |  |  |  |  |  |
| <b>C.7</b>   | <b>Equivalent Thermal Energy supplied to grid/others</b>   | C.6*2717/10   | Million kcal |  |  |  |  |  |  |  |



| C.8        | Total Electricity Consumed                       | if C.5 > C.1.(xvii), C.3-C.4-C.5-C.1.(xvi) otherwise C.1 (xvii) +C.3 -C.4 | Lakh kWh     |  |  |  |  |  |  |
|------------|--|---|--------------|--|--|--|--|--|--|
| <b>D</b>   | <b>Solid Fuel Consumption</b>                    |   |              |  |  |  |  |  |  |
| <b>D.1</b> | <b>Coal (Indian)</b>                             |   |              |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power Generation) | Annual (As Fired Basis)   | kcal/ kg     |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)   | kcal/ kg     |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual  | Tonne        |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)   | %            |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual  | Tonne        |  |  |  |  |  |  |
| (vii)      | Quantity used for process (Pyro)                 | Pyro-processing   | Tonne        |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)  | Tonne        |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii)x(vi)/1000  | Million kcal |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (iii)x(vii)/1000  | Million kcal |  |  |  |  |  |  |
| <b>D.2</b> | <b>Petcoke</b>                                   |   |              |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power Generation) | Annual (As Fired Basis)   | kcal/ kg     |  |  |  |  |  |  |



|            |  |                              |              |  |  |  |  |  |  |
|------------|--|------------------------------|--------------|--|--|--|--|--|--|
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)    | %            |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual                       | Tonne        |  |  |  |  |  |  |
| (vii)      | Quantity used for process (Pyro)                 | Pyro-processing              | Tonne        |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                   | Tonne        |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii)x(vi)/1000               | Million kcal |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (iii)x(vii)/1000             | Million kcal |  |  |  |  |  |  |
| <b>D.3</b> | <b>Coal(Imported)</b>                            |                              |              |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight | Rs/Tonne     |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power generation) | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)    | %            |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual                       | Tonne        |  |  |  |  |  |  |
| (vii)      | Quantity used for process                        | Pyro-processing              | Tonne        |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                   | Tonne        |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii)x(vi)/1000               | Million kcal |  |  |  |  |  |  |



| (x)        | Thermal Energy Used in Process                   | (iii)<br>$\times(vii)/1000$  | Million kcal |  |  |  |  |  |  |
|------------|--|------------------------------|--------------|--|--|--|--|--|--|
| <b>D.4</b> | <b>Coal(lignite)</b>                             |                              |              |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight | Rs/Tonne     |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power generation) | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)    | %            |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual                       | Tonne        |  |  |  |  |  |  |
| (vii)      | Quantity used for process                        | Pyro-processing              | Tonne        |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                   | Tonne        |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii) $\times(vi)/1000$       | Million kcal |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (iii)<br>$\times(vii)/1000$  | Million kcal |  |  |  |  |  |  |
| <b>D.5</b> | <b>Coal 1</b>                                    |                              |              |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight | Rs/Tonne     |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power generation) | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)    | %            |  |  |  |  |  |  |



|            |  |                               |              |  |  |  |  |  |  |  |
|------------|--|-------------------------------|--------------|--|--|--|--|--|--|--|
| (vi)       | Quantity used for power generation               | Annual                        | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process                        | Pyro-processing<br>(vi)+(vii) | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                    | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii)x(vi)/1000                | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (iii)<br>x(vii)/1000          | Million kcal |  |  |  |  |  |  |  |
| <b>D.6</b> | <b>Coal 2</b>                                    |                               |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power Generation) | Annual (As Fired Basis)       | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)       | kcal/ kg     |  |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                        | Tonne        |  |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)     | %            |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual                        | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process                        | Pyro-processing<br>(vi)+(vii) | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                    | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii)x(vi)/1000                | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (iii)<br>x(vii)/1000          | Million kcal |  |  |  |  |  |  |  |
| <b>D.7</b> | <b>Coal 3</b>                                    |                               |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |  |





|            |  |                              |              |  |  |  |  |  |  |  |
|------------|--|------------------------------|--------------|--|--|--|--|--|--|--|
| (ii)       | Average Gross Calorific Value (Power Generation) | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)    | %            |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process                        | Pyro-processing              | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                   | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation          | (ii)x(vi)/1000               | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (iii)x(vii)/1000             | Million kcal |  |  |  |  |  |  |  |
| <b>D.8</b> | <b>Coal 4 (Other Solid Fuel)</b>                 |                              |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value (Power Generation) | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Average Gross Calorific Value (Kiln)             | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |  |
| (iv)       | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (v)        | Average Moisture in Fuel                         | Annual(As Received Basis)    | %            |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation               | Annual                       | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Quantity used for process                        | Pyro-processing              | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Total Quantity Consumed                          | (vi)+(vii)                   | Tonne        |  |  |  |  |  |  |  |



|            |   |   |              |  |  |  |  |  |  |  |
|------------|---|---|--------------|--|--|--|--|--|--|--|
| (ix)       | Thermal Energy Used in Power Generation   | (ii)x(vi)/1000  | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process  | (iii) x(vii)/1000   | Million kcal |  |  |  |  |  |  |  |
| <b>D.9</b> | <b>Bio mass or Other purchased Renewable solid fuels (pl. specify) bagasse, rice husk, etc.</b> | <b>Thermal Energy Input used for process through Biomass not to be taken into account</b> |              |  |  |  |  |  |  |  |
|            |   |   |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)   | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Average Gross Calorific Value as fired  | Annual (As Fired Basis)   | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased  | Annual  | Tonne        |  |  |  |  |  |  |  |
| (iv)       | Average Moisture in Fuel  | Annual(As Fired Basis)  | %            |  |  |  |  |  |  |  |
| (v)        | Quantity used power generation  | Annual  | Tonne        |  |  |  |  |  |  |  |
| (vi)       | Quantity used for process heating   | Annual  | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Total Quantity Consumed   | (v) + (vi)  | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Thermal Energy Used in Power Generation   | (ii) x (v) / 1000   | Million kcal |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Process  | (ii) x (vi) / 1000  | Million kcal |  |  |  |  |  |  |  |

|        |  |   |              |  |  |  |  |  |  |  |  |  |
|--------|--|---|--------------|--|--|--|--|--|--|--|--|--|
| D.10   | Solid Waste (pl. specify and refer CPCB guidelines, enclosed) rubber tyres chips, Municipal Solid waste etc. | Thermal Energy Input used for process through solid waste, mentioned in CPCB guidelines, not to be taken into account |              |  |  |  |  |  |  |  |  |  |
| (i)    | Landed Cost of fuel (Last purchase)  | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |  |  |  |
| (ii)   | Average Gross Calorific Value as fired   | Annual (As Fired Basis)   | kcal/ kg     |  |  |  |  |  |  |  |  |  |
| (iii)  | Quantity purchased   | Annual  | Tonne        |  |  |  |  |  |  |  |  |  |
| (iv)   | Average Moisture in Fuel   | Annual(As Fired Basis)  | %            |  |  |  |  |  |  |  |  |  |
| (v)    | Quantity used power generation   | Annual  | Tonne        |  |  |  |  |  |  |  |  |  |
| (vi)   | Quantity used for process heating  | Annual  | Tonne        |  |  |  |  |  |  |  |  |  |
| (vii)  | Total Quantity Consumed  | (v)+(vi)  | Tonne        |  |  |  |  |  |  |  |  |  |
| (viii) | Thermal Energy Used in Power Generation  | (ii)x(v)/1000   | Million kcal |  |  |  |  |  |  |  |  |  |
| (ix)   | Thermal Energy Used in Process   | (ii)x(vi)/1000  | Million kcal |  |  |  |  |  |  |  |  |  |



|       |  |   |                 |  |  |  |  |  |  |  |
|-------|--|---|-----------------|--|--|--|--|--|--|--|
| D.11  | Total Solid Fuel Energy Used in Power Generation | D.1.(ix) +<br>D.2.(ix) +<br>D.3.(ix) +<br>D.4.(ix) +<br>D.5.(ix) +<br>D.6.(ix) +<br>D.7.(ix) +<br>D.8.(ix) +<br>D.9.(viii) +<br>+ D.10.(viii)<br>otherwise<br>D.9(viii)<br>and D.10<br>(viii) are not<br>considered | Million<br>kcal |  |  |  |  |  |  |  |
| D.12  | Total Solid Fuel Energy Used in Process          | D.1.(x) +<br>D.2.(x) +<br>D.3.(x) +<br>D.4.(x) +<br>D.5.(x) +<br>D.6.(x) +<br>D.7.(x) +<br>D.8.(x)  | Million<br>kcal |  |  |  |  |  |  |  |
| E     | Liquid Fuel Consumption                          |   |                 |  |  |  |  |  |  |  |
| E.1   | Furnace Oil                                      |   |                 |  |  |  |  |  |  |  |
| (i)   | Landed Cost of fuel (Last purchase)              | Basic Cost<br>+ Taxes +<br>Freight  | Rs/Tonne        |  |  |  |  |  |  |  |
| (ii)  | Gross Calorific Value                            | Annual (As<br>Fired Basis)  | kcal/ kg        |  |  |  |  |  |  |  |
| (iii) | Quantity purchased                               | Annual  | kilolitre       |  |  |  |  |  |  |  |
| (iv)  | Average Density                                  | Annual  | kg/ltr          |  |  |  |  |  |  |  |
| (v)   | Quantity used for power generation (DG Set)      | Annual  | kilolitre       |  |  |  |  |  |  |  |
| (vi)  | Quantity used for power generation (CPP)         | Annual  | kilolitre       |  |  |  |  |  |  |  |



|            |  |   |              |  |  |  |  |  |  |  |
|------------|--|---|--------------|--|--|--|--|--|--|--|
| (vii)      | Quantity used for process heating                | (including Pyro-processing and cement mill Hot Air Generator) | kilolitre    |  |  |  |  |  |  |  |
| (viii)     | Total Furnace Oil Consumption as fuel            | $((v) + (vi) + (vii)) \times (iii)$                           | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy used in Power Generation (DG Set) | $[((v)) \times (iv)] \times (ii) / 1000$                      | Million kcal |  |  |  |  |  |  |  |
| (x)        | Thermal Energy used in Power Generation (CPP)    | $[((vi)) \times (iv)] \times (ii) / 1000$                     | Million kcal |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy used in Process                   | $(ii) \times (vii) \times (iv) / 1000$                        | Million kcal |  |  |  |  |  |  |  |
| <b>E.2</b> | <b>Low Sulphur Heavy Stock (LSHS)</b>            |   |              |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight                                  | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value                            | Annual (As Fired Basis)                                       | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                               | Annual  | Tonne        |  |  |  |  |  |  |  |
| (iv)       | Quantity used for power generation (DG Set)      | Annual  | Tonne        |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (CPP)         | Annual  | Tonne        |  |  |  |  |  |  |  |
| (vi)       | Quantity used for process heating                | Annual  | Tonne        |  |  |  |  |  |  |  |
| (vii)      | Total LSHS Consumption as fuel                   | $(iv) + (v) + (vi)$   | Tonne        |  |  |  |  |  |  |  |
| (viii)     | Thermal Energy Used in Power Generation (DG Set) | $(iv) \times (ii) / 1000$                                     | Million kcal |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation (CPP)    | $(v) \times (ii) / 1000$                                      | Million kcal |  |  |  |  |  |  |  |



| (x)        | Thermal Energy Used in Process                   | (vi)x(ii)/1000               | Million kcal |  |  |  |  |  |  |  |  |
|------------|--|------------------------------|--------------|--|--|--|--|--|--|--|--|
| <b>E.3</b> | <b>High Sulphur Heavy Stock (HSHS)</b>           |                              |              |  |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight | Rs/Tonne     |  |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value                            | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                               | Annual                       | Tonne        |  |  |  |  |  |  |  |  |
| (iv)       | Quantity used for power generation (DG Set)      | Annual                       | Tonne        |  |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (CPP)         | Annual                       | Tonne        |  |  |  |  |  |  |  |  |
| (vi)       | Quantity used for process heating                | Annual                       | Tonne        |  |  |  |  |  |  |  |  |
| (vii)      | Total HSHS Consumption as fuel                   | (iv)+(v)+(vi)                | Tonne        |  |  |  |  |  |  |  |  |
| (viii)     | Thermal Energy Used in Power Generation (DG Set) | (iv)x(ii)/1000               | Million kcal |  |  |  |  |  |  |  |  |
| (ix)       | Thermal Energy Used in Power Generation (CPP)    | (v)x(ii)/1000                | Million kcal |  |  |  |  |  |  |  |  |
| (x)        | Thermal Energy Used in Process                   | (vi)x(ii)/1000               | Million kcal |  |  |  |  |  |  |  |  |
| <b>E.4</b> | <b>High Speed Diesel (HSD)</b>                   |                              |              |  |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)              | Basic Cost + Taxes + Freight | Rs/Tonne     |  |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value                            | Annual (As Fired Basis)      | kcal/ kg     |  |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                               | Annual                       | kilolitre    |  |  |  |  |  |  |  |  |
| (iv)       | Average Density                                  | Annual                       | kg/ltr       |  |  |  |  |  |  |  |  |



|            |   |  |              |  |  |  |  |  |  |  |  |
|------------|---|--|--------------|--|--|--|--|--|--|--|--|
| (v)        | Quantity used for power generation (DG Set)   | Annual                                   | kilolitre    |  |  |  |  |  |  |  |  |
| (vi)       | Quantity used for power generation (CPP)  | Annual                                   | kilolitre    |  |  |  |  |  |  |  |  |
| (vii)      | Quantity used for Internal material handling / Transportation (Raw material handling , Loco, etc) | Annual                                   | kilolitre    |  |  |  |  |  |  |  |  |
| (viii)     | Quantity used for process heating   | Annual                                   | kilolitre    |  |  |  |  |  |  |  |  |
| (ix)       | Total HSD Consumption as fuel   | $[(v) + (vi) + (viii)] \times (iv)$      | Tonne        |  |  |  |  |  |  |  |  |
| (x)        | Thermal Energy used in Power Generation (DG Set)  | $[(v) \times (iv)] \times (ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |  |
| (xi)       | Thermal Energy used in Internal Transportation (Internal Raw Material handling, Loco etc)         | $[(vii) \times (iv)] \times (ii) / 1000$ | Million kcal |  |  |  |  |  |  |  |  |
| (xii)      | Thermal Energy used in Power Generation (CPP)   | $[(vi) \times (iv)] \times (ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |  |
| (xiii)     | Thermal Energy used in Process  | $(viii) \times (iv) \times (ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |  |
| <b>E.5</b> | <b>Light Diesel Oil (LDO)</b>   |  |              |  |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)   | Basic Cost + Taxes + Freight             | Rs/Tonne     |  |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value   | Annual (As Fired Basis)                  | kcal/ kg     |  |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased  | Annual                                   | kilolitre    |  |  |  |  |  |  |  |  |
| (iv)       | Average Density   | Annual                                   | kg/ltr       |  |  |  |  |  |  |  |  |
| (v)        | Quantity used for power generation (DG Set)   | Annual                                   | kilolitre    |  |  |  |  |  |  |  |  |



|        |   |   |              |  |  |  |  |  |  |  |
|--------|---|---|--------------|--|--|--|--|--|--|--|
| (vi)   | Quantity used for power generation (CPP)  | Annual  | kilolitre    |  |  |  |  |  |  |  |
| (vii)  | Quantity used for Internal Transportation, if any   | Annual  | kilolitre    |  |  |  |  |  |  |  |
| (viii) | Quantity used for process heating   | Annual  | kilolitre    |  |  |  |  |  |  |  |
| (ix)   | Total LDO Consumption as fuel   | $[(v) + (vi) + (viii)] \times (iv)$   | Tonne        |  |  |  |  |  |  |  |
| (x)    | Thermal Energy Used in Power Generation (DG Set)  | $[(v) \times (iv)] \times (ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |
| (xi)   | Thermal Energy Used in Internal Transportation (Internal Raw Material handling, Loco etc) | $[(vii) \times (iv)] \times (ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |
| (xii)  | Thermal Energy Used in Power Generation (CPP)   | $[(vi) \times (iv)] \times (ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |
| (xiii) | Thermal Energy Used in Process  | $(viii) \times (iv) \times (ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |
| E.6    | Liquid Waste (pl. specify and refer CPCB guidelines, enclosed)                            | Thermal Energy Input through Liquid waste, mentioned in CPCB guidelines, not to be taken into account |              |  |  |  |  |  |  |  |
| (i)    | Landed Cost of fuel (Last purchase)   | Basic Cost + Taxes + Freight  | Rs/Tonne     |  |  |  |  |  |  |  |
| (ii)   | Gross Calorific Value   | Annual (As Fired Basis)   | kcal/ kg     |  |  |  |  |  |  |  |
| (iii)  | Quantity purchased  | Annual  | kilolitre    |  |  |  |  |  |  |  |
| (iv)   | Average Density   | Annual  | kg/ltr       |  |  |  |  |  |  |  |





|        |   |  |              |  |  |  |  |  |  |  |
|--------|---|--|--------------|--|--|--|--|--|--|--|
| (v)    | Quantity used for power generation (DG Set)           | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (vi)   | Quantity used for power generation (CPP)              | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (vii)  | Quantity used for process                             | Annual   | kilolitre    |  |  |  |  |  |  |  |
| (viii) | Total Liquid waste Consumption as fuel                | $[(v)+(vi)+(vii)] \times (iv)$   | Tonne        |  |  |  |  |  |  |  |
| (ix)   | Thermal Energy Used in Power Generation (DG Set)      | $(v) \times (iv) \times (ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |
| (x)    | Thermal Energy Used in Power Generation (CPP)         | $(vi) \times (iv) \times (ii) / 1000$  | Million kcal |  |  |  |  |  |  |  |
| (xi)   | Thermal Energy Used in Process                        | $(v) \times (iv) \times (ii) / 1000$   | Million kcal |  |  |  |  |  |  |  |
| E.7    | Total Liquid Energy Used in Power Generation (DG Set) | E.1.(ix) + E.2.(viii) + E.3.(viii) + E.4.(x) + E.5.(x) + E.6.(ix) otherwise E.6 (v) not considered | Million kcal |  |  |  |  |  |  |  |
| E.8    | Total Liquid Energy Used in Power Generation (CPP)    | E.1.(x) + E.2.(ix) + E.3.(ix) + E.4.(xii) + E.5.(xii) + E.6.(x) otherwise E.6. (x)                 | Million kcal |  |  |  |  |  |  |  |



|        |   |  |              |  |  |  |  |  |  |  |
|--------|---|--|--------------|--|--|--|--|--|--|--|
| E.9    | Total Liquid Energy Used in Process   | E.1.(xi) + E.2.(x) + E.3.(x) + E.4.(xi) + E.5.(xi) + E.4.(xiii) + E.5.(xiii) | Million kcal |  |  |  |  |  |  |  |
| F      | Gaseous Fuel  |  |              |  |  |  |  |  |  |  |
| F.1    | Natural Gas (CNG/NG/ PNG/LNG)   |  |              |  |  |  |  |  |  |  |
| (i)    | Landed Cost of fuel (Last purchase)   | Basic Cost + Taxes + Freight   | Rs/SCM       |  |  |  |  |  |  |  |
| (ii)   | Gross Calorific Value   | Annual (As Fired Basis)  | kcal/SCM     |  |  |  |  |  |  |  |
| (iii)  | Quantity purchased  | Annual   | Million SCM  |  |  |  |  |  |  |  |
| (iv)   | Quantity used for power generation  | Annual   | Million SCM  |  |  |  |  |  |  |  |
| (v)    | Quantity used for Internal transportation, if any   | Annual   | Million SCM  |  |  |  |  |  |  |  |
| (vi)   | Quantity used for process heating   | Annual   | Million SCM  |  |  |  |  |  |  |  |
| (vii)  | Total CNG Consumption as fuel   | (iv)+(v)+(vi)  | Million SCM  |  |  |  |  |  |  |  |
| (viii) | Thermal Energy Used in Power Generation   | (iv)x(ii)  | Million kcal |  |  |  |  |  |  |  |
| (ix)   | Thermal Energy Used in Internal Transportation (Internal Raw Material handling, Loco etc) | (v)x(ii)   | Million kcal |  |  |  |  |  |  |  |
| (x)    | Thermal Energy Used in Process  | (vi)x(ii)  | Million kcal |  |  |  |  |  |  |  |



|            |  |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------|--|---|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>F.2</b> | <b>Liquefied Petroleum Gas (LPG)</b>                 |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)        | Landed Cost of fuel (Last purchase)                  | Basic Cost + Taxes + Freight            | Rs/Tonne            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)       | Gross Calorific Value                                | Annual (As Fired Basis)                 | kcal/kg             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii)      | Quantity purchased                                   | Annual                                  | Million kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)       | Quantity used for power generation                   | Annual                                  | Million kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)        | Quantity used for process heating                    | Annual                                  | Million kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vi)       | Total LPG Consumption as fuel                        | (iv)+(v)                                | Million kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vii)      | Thermal Energy Used in Power Generation              | (iv)x(ii)                               | Million kcal        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (viii)     | Thermal Energy Used in Process                       | (v)x(ii)                                | Million kcal        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>F.3</b> | <b>Total Gaseous Energy Used in Power Generation</b> | <b>F.1.(viii) + F.2.(vii)</b>           | <b>Million kcal</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>F.4</b> | <b>Total Gaseous Energy Used in Process</b>          | <b>F.1.(ix) + F.2.(viii) + F.1 (ix)</b> | <b>Million kcal</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>G</b>   | <b>Total Thermal Energy</b>                          |   |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>G.1</b> | <b>Total Thermal Energy Used in Power Generation</b> | <b>D.7 + E.7 + E.8 + F.3</b>            | <b>Million kcal</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>G.2</b> | <b>Total Thermal Energy Used in Process</b>          | <b>D.8 + E.9 + F.4</b>                  | <b>Million kcal</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>G.3</b> | <b>Total Thermal Energy Input through all Fuels</b>  | <b>G.1 + G.2 + C.2.5.(iv)</b>           | <b>Million kcal</b> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| H   | Gross Heat Rate                        |  |                 |  |  |  |  |  |  |  |
|-----|--|--|-----------------|--|--|--|--|--|--|--|
| H.1 | Gross Heat Rate of DG Set              | [E.5 (x)+E.4 (x)+ E.3 (viii)+ E.2 (viii)+ E.1 (ix)+E.6 (ix)] x10/C.2.1.(ii)  | kcal/kWh        |  |  |  |  |  |  |  |
| H.2 | Gross Heat Rate of CPP (Steam Turbine) | [(E.1.(x) + E.2.(ix) + E.3.(ix) + E.4.(xii) + E.5.(xii) + E.6.(x)) + (D.1.(ix) + D.2.(ix) + D.3.(ix) + D.4.(ix) + D.5.(ix) + D.6.(ix) + D.7.(ix) + D.8.(ix) + D.9.(viii) + + D.10.(viii))] x 10 / C.2.2.(ii) | kcal/kWh        |  |  |  |  |  |  |  |
| H.3 | Gross Heat Rate of CPP (Gas Turbine)   | F.3x10/C.2.3.(ii)  | kcal/kWh        |  |  |  |  |  |  |  |
| H.4 | Weighted Heat Rate                     | Weighted heat arte w.r.t. generation and power source  | kcal/kWh        |  |  |  |  |  |  |  |
| I   | Performance Indicators                 |  |                 |  |  |  |  |  |  |  |
| I.1 | Thermal SEC                            | Annual   | kcal/kg Clinker |  |  |  |  |  |  |  |



|      |   |        |                          |  |  |  |  |  |  |
|------|---|--------|--------------------------|--|--|--|--|--|--|
| I.2  | Electrical SEC (up to Clinkerization)   | Annual | kWh/<br>Tonne<br>Clinker |  |  |  |  |  |  |
| I.3  | Electrical SEC (Cement Grinding)  | Annual | kWh/<br>Tonne<br>Cement  |  |  |  |  |  |  |
| J    | Raw Material Quality  |        |                          |  |  |  |  |  |  |
| J.1  | Lime STonne Bond Index  | Annual | kWh/short<br>Tonne       |  |  |  |  |  |  |
| J.2  | Burnability   | Annual | Factor                   |  |  |  |  |  |  |
| K    | Coal Quality in CPP (As Fired Basis)  |        |                          |  |  |  |  |  |  |
| K.1  | Ash   | Annual | %                        |  |  |  |  |  |  |
| K.2  | Moisture  | Annual | %                        |  |  |  |  |  |  |
| K.3  | Hydrogen  | Annual | %                        |  |  |  |  |  |  |
| K.4  | GCV   | Annual | kcal/kg                  |  |  |  |  |  |  |
| L    | Miscellaneous Data \$   |        |                          |  |  |  |  |  |  |
| L.1  | Additional Equipment installation after baseline year due to Environmental Concern        |        |                          |  |  |  |  |  |  |
| (i)  | Additional Electrical Energy Consumed   | Annual | Lakh kWh                 |  |  |  |  |  |  |
| (ii) | Additional Thermal Energy Consumed  | Annual | Million kcal             |  |  |  |  |  |  |
| L.2  | Biomass/ Alternate Fuel availability (as per Sr. No D.9/D.10/E.6)                         |        |                          |  |  |  |  |  |  |
| (i)  | Biomass replacement with Fossil fuel due to Biomass un-availability (used in the process) | Annual | Tonne                    |  |  |  |  |  |  |



|            |   |        |              |  |  |  |  |  |  |
|------------|---|--------|--------------|--|--|--|--|--|--|
| (ii)       | Alternate Solid Fuel replacement with Fossil fuel due to Alternate Solid Fuel un-availability (used in the process)   | Annual | Tonne        |  |  |  |  |  |  |
| (iii)      | Alternate Liquid Fuel replacement with Fossil fuel due to Alternate Liquid Fuel un-availability (used in the process) | Annual | Tonne        |  |  |  |  |  |  |
| <b>L.3</b> | <b>Project Activities (Construction Phase)</b>  |        |              |  |  |  |  |  |  |
| (i)        | Electrical Energy Consumed due to commissioning of Equipment  | Annual | Lakh kWh     |  |  |  |  |  |  |
| (ii)       | Thermal Energy Consumed due to commissioning of Equipment   | Annual | Million kcal |  |  |  |  |  |  |
| <b>L.4</b> | <b>New Line/Unit Commissioning</b>  |        |              |  |  |  |  |  |  |
| (i)        | Electrical Energy Consumed due to commissioning of New process Line/Unit till it attains 70% of Capacity Utilization  | Annual | Lakh kWh     |  |  |  |  |  |  |
| (ii)       | Thermal Energy Consumed due to commissioning of New Process Line/Unit till it attains 70% of Capacity Utilization     | Annual | Million kcal |  |  |  |  |  |  |



|            |   |        |              |  |  |  |  |  |  |  |
|------------|---|--------|--------------|--|--|--|--|--|--|--|
| (iii)      | Clinker Production till new line attains 70% of Capacity utilization  | Annual | Tonne        |  |  |  |  |  |  |  |
| (iv)       | Date of Commissioning (70% Capacity Utilization)  | Date   |              |  |  |  |  |  |  |  |
| (v)        | Electrical Energy Consumed from external source due to commissioning of New Line/Unit till it attains 70% of Capacity Utilization in Power generation | Annual | Lakh kWh     |  |  |  |  |  |  |  |
| (vi)       | Thermal Energy Consumed due to commissioning of New Line/Unit till it attains 70% of Capacity Utilization in Power generation                         | Annual | Million kcal |  |  |  |  |  |  |  |
| (vii)      | Net Electricity Generation till new Line/Unit attains 70% Capacity Utilization  | Annual | Lakh kWh     |  |  |  |  |  |  |  |
| (viii)     | Steam Generation From Co-Gen till new line/Unit attains 70% of Capacity Utilization   | Annual | Tonne        |  |  |  |  |  |  |  |
| (ix)       | Date of Commissioning (70% Capacity Utilization) Power Generation   | Date   |              |  |  |  |  |  |  |  |
| <b>L.5</b> | <b>Unforeseen Circumstances</b>   |        |              |  |  |  |  |  |  |  |
| (i)        | Electrical Energy to be Normalized  | Annual | Lakh kWh     |  |  |  |  |  |  |  |

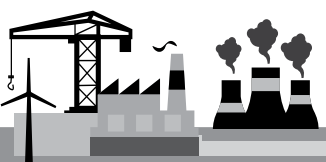


| (ii)  | Thermal Energy to be Normalized                                  | Annual        | Million kcal      |  |  |  |  |  |  |  |
|---|--|---------------|-------------------|--|--|--|--|--|--|--|
| \$ Authentic documents in support of claim in Thermal and Electrical Energy is required |  |               |                   |  |  |  |  |  |  |  |
| <b>M</b>  | <b>Documentation for Normalization</b>                           |               |                   |  |  |  |  |  |  |  |
| (i)   | Capacity Utilization- Document Available for Normalization       |               | Yes/No            |  |  |  |  |  |  |  |
| (ii)  | Fuel Quality in CPP- Document Available for Normalization        |               | Yes/No            |  |  |  |  |  |  |  |
| (iii)   | Petcoke Utilization in Kiln-Document Available for Normalization |               | Yes/No            |  |  |  |  |  |  |  |
| (iv)  | CPP PLF- Document Available for Normalization                    |               | Yes/No            |  |  |  |  |  |  |  |
| (v)   | Power Mix-Document Available for Normalization                   |               | Yes/No            |  |  |  |  |  |  |  |
| (vi)  | Product Mix- Document Available for Normalization                |               | Yes/No            |  |  |  |  |  |  |  |
| (viii)  | Others Factors- Document Available for Normalization             |               | Yes/No            |  |  |  |  |  |  |  |
| <b>N</b>  | <b>Energy Saving and Investment</b>                              | <b>Annual</b> | <b>Million Rs</b> |  |  |  |  |  |  |  |
| (i)   | Investment made for achieving target                             | Annual        | Million Rs        |  |  |  |  |  |  |  |
| (ii)  | Thermal Energy Saving during the year                            |               |                   |  |  |  |  |  |  |  |
| a   | Solid Fuel   |               |                   |  |  |  |  |  |  |  |
| a.1   | Coal   | Annual        | Million kcal      |  |  |  |  |  |  |  |



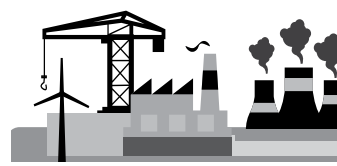


|       |  |        |              |  |  |  |  |  |  |  |
|-------|--|--------|--------------|--|--|--|--|--|--|--|
| a.2   | Lignite                                  | Annual | Million kcal |  |  |  |  |  |  |  |
| a.3   | Petro Coke                               | Annual | Million kcal |  |  |  |  |  |  |  |
| a.4   | Biomass/Waste                            | Annual | Million kcal |  |  |  |  |  |  |  |
| b     | Liquid Fuel (FO/HSD/LDO/LSHS/HSHS)       | Annual | Million kcal |  |  |  |  |  |  |  |
| c     | Gaseous Fuel                             | Annual | Million kcal |  |  |  |  |  |  |  |
| (iii) | Electrical energy Saving during the year | Annual | Lakh kWh     |  |  |  |  |  |  |  |
| O     | Process Flow Diagram Attached            | Yes/No |              |  |  |  |  |  |  |  |



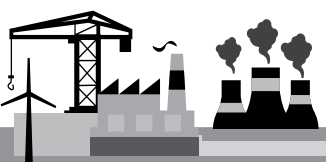
| List of additional Equipment installed due to Environmental Concern after baseline year   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
|---|-------------------|--------------------|-----------------------------|--------------------------|------------------------------|--|-----------------|----------------|---|---|--|
| Name of the Unit  |                   |                    | Assessment Year (20_ - 20_) |                          |                              |  |                 | Source of Data |   | Remarks   |  |
| Sr No   | Equip - ment Name | Equip - ment Sr No | Section                     | Date of Commi - ssioning | Electrical Rated Capacity kW | Thermal Rated Capacity Million kcal/ annum | Running Load kW | Running Hrs    | Electricity Consum - ption \$ Lakh kWh/ Annum | Thermal Consum - ption \$\$ Million kcal/ Annum |  |
| 1   |                   |                    |                             | Date                     |                              |  |                 | Hrs/ Annum     |   |   |  |
| 2   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| 3   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| 4   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| 5   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| n   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| Total   |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| \$ Equipment wise Energy Meter Reading or Energy Management System Data required in support of the claim                          |                   |                    |                             |                          |                              |  |                 |                |   |   |  |
| \$\$ Equipment wise Document related to consumption of Liquid Fuel, Solid Fuel Alternate Fuel is required in support of the claim |                   |                    |                             |                          |                              |  |                 |                |   |   |  |

| List of Equipment and Energy consumed during project activity up to commissioning during the Assessment year                      |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
|---|-------------------|--------------------|-----------------|-----------------------------|--------------------------|------------------------------|--|--------------------|----------------|---|---|
| Name of the Unit  |                   |                    | Assessment Year |                             |                          |                              |  | Source of Data     |                | Remarks                                       |   |
| Sr No   | Equip - ment Name | Equip - ment Sr No | Sec - tion      | Project Activity Start Date | Date of Commi - ssioning | Electrical Rated Capacity kW | Thermal Rated Capacity Million kcal/ annum | Run - ning Load kW | Run - ning Hrs | Electricity Consum - ption \$ Lakh kWh/ Annum | Thermal Consum - ption \$\$ Million kcal/ Annum |
| 1   |                   |                    |                 | Date                        | Date                     |                              |  |                    | Hrs / Annum    |   |   |
| 2   |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| 3   |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| 4   |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| 5   |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| n   |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| Total   |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| \$ Equipment wise Energy Meter Reading or Energy Management System Data required in support of the claim                          |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |
| \$\$ Equipment wise Document related to consumption of Liquid Fuel, Solid Fuel Alternate Fuel is required in support of the claim |                   |                    |                 |                             |                          |                              |  |                    |                |   |   |



## Supporting Pro-forma Sc: Chlor Alkali

| Form-Sc (General Information) |  |                  |           |
|-------------------------------|--|------------------|-----------|
| Sector - Chlor Alkali Sector  |  |                  |           |
| 1                             | Name of the Unit                         |                  |           |
| 2                             | i) Year of Establishment                 |                  |           |
|                               | ii) Registration No (As provided by BEE) |                  |           |
| 3                             | Unit Type                                | CPP/Non CPP      | Unit Type |
| 4                             | Plant Contact Details & Address          |                  |           |
| a                             | City/Town/Village                        |                  |           |
|                               | Post Office                              |                  |           |
|                               | District                                 |                  |           |
|                               | State                                    | Pin              |           |
|                               | Telephone                                | Fax              |           |
| b                             | Plant's Chief Executive Name             |                  |           |
|                               | Designation                              |                  |           |
|                               | Telephone with STD Code                  | Fax              |           |
|                               | Mobile                                   | E-mail           |           |
| 5                             | Registered Office                        |                  |           |
| a                             | Company's Chief Executive Name           |                  |           |
|                               | Designation                              |                  |           |
|                               | Address                                  |                  |           |
|                               | City/Town/Village                        |                  |           |
|                               | Post Office                              |                  |           |
|                               | District                                 |                  |           |
|                               | State                                    | Pin              |           |
|                               | Telephone with STD Code                  | Fax              |           |
| 6                             | Energy Manager Details                   |                  |           |
| a                             | Name                                     |                  |           |
|                               | Designation                              | Whether EA or EM |           |
|                               | EA/EM Registration No.                   |                  |           |
|                               | Telephone                                | Fax              |           |
|                               | Mobile                                   | E-mail           |           |



## Sector Specific Form- Sc (Details of Production and Energy Consumption)

| Sector :-        |  |                    |                      |                            |                            |  |   |  |                   |
|------------------|--|--------------------|----------------------|----------------------------|----------------------------|--|---|--|-------------------|
| Name of the Unit |  |                    |                      |                            |                            |  |   |  |                   |
| S. No            | Particulars  | Basis/<br>Formulae | Unit                 | Year 1<br>(20__ -<br>20__) | Year 2<br>(20__ -<br>20__) | Year 3/<br>Previous<br>Year (20__ -<br>20__) | Baseline<br>Year<br>(Average<br>of Year<br>1 to Year<br>3) (20__ -<br>20__) | Current/<br>Assessment/<br>Target Year<br>(20__ -20__) | Source<br>of data |
| <b>A</b>         | <b>Production and Capacity Utilization details</b> |                    |                      |                            |                            |  |   |  |                   |
| <b>A.1</b>       | <b>Caustic Soda Lye</b>                            |                    |                      |                            |                            |  |   |  |                   |
| (i)              | Installed Capacity                                 | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (ii)             | Actual Production                                  | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (iii)            | Opening Stock Caustic Soda lye                     | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (iv)             | Closing Stock Caustic Soda lye                     | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (v)              | Capacity Utilization (%)                           | (ii)/(i)*100       | %                    |                            |                            |  |   |  |                   |
| <b>A.2</b>       | <b>Liquefied Chlorine</b>                          |                    |                      |                            |                            |  |   |  |                   |
| (i)              | Installed Capacity                                 | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (ii)             | Actual Production                                  | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (iii)            | Opening Stock Liquefied Chlorine                   | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (iv)             | Closing Stock Liquefied Chlorine                   | Annual             | Tonne                |                            |                            |  |   |  |                   |
| (v)              | Capacity Utilization (%)                           | (ii)/(i)*100       | %                    |                            |                            |  |   |  |                   |
| <b>A.3</b>       | <b>Hydrogen (Compressed)</b>                       |                    |                      |                            |                            |  |   |  |                   |
| (i)              | Installed Capacity                                 | Annual             | Lakh NM <sup>3</sup> |                            |                            |  |   |  |                   |
| (ii)             | Actual Production                                  | Annual             | Lakh NM <sup>3</sup> |                            |                            |  |   |  |                   |
| (iii)            | Opening Stock Hydrogen Bottled                     | Annual             | Lakh NM <sup>3</sup> |                            |                            |  |   |  |                   |



|            |                                   |              |          |  |  |  |  |  |  |  |
|------------|-----------------------------------|--------------|----------|--|--|--|--|--|--|--|
| (iv)       | Closing Stock Hydrogen Bottled    | Annual       | Lakh NM3 |  |  |  |  |  |  |  |
| (v)        | Capacity Utilization (%)          | (ii)/(i)*100 | %        |  |  |  |  |  |  |  |
| <b>A.4</b> | <b>Caustic Soda (Flakes)</b>      |              |          |  |  |  |  |  |  |  |
| (i)        | Installed Capacity                | Annual       | Tonne    |  |  |  |  |  |  |  |
| (ii)       | Actual Production                 | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iii)      | Opening Stock Caustic Soda Flakes | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iv)       | Closing Stock Caustic Soda Flakes | Annual       | Tonne    |  |  |  |  |  |  |  |
| (v)        | Capacity Utilization (%)          | (ii)/(i)*100 | %        |  |  |  |  |  |  |  |
| <b>A.5</b> | <b>Product 1</b>                  |              |          |  |  |  |  |  |  |  |
| (i)        | Product Name                      |              |          |  |  |  |  |  |  |  |
| (ii)       | Installed Capacity                | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iii)      | Actual Production                 | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iv)       | Opening Stock Product 1           | Annual       | Tonne    |  |  |  |  |  |  |  |
| (v)        | Closing Stock Product 1           | Annual       | Tonne    |  |  |  |  |  |  |  |
| (vi)       | Capacity Utilization (%)          | (ii)/(i)*100 | %        |  |  |  |  |  |  |  |
| <b>A.6</b> | <b>Product 2</b>                  |              |          |  |  |  |  |  |  |  |
| (i)        | Product Name                      |              |          |  |  |  |  |  |  |  |
| (ii)       | Installed Capacity                | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iii)      | Actual Production                 | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iv)       | Opening Stock Product 2           | Annual       | Tonne    |  |  |  |  |  |  |  |
| (v)        | Closing Stock Product 2           | Annual       | Tonne    |  |  |  |  |  |  |  |
| (vi)       | Capacity Utilization (%)          | (ii)/(i)*100 | %        |  |  |  |  |  |  |  |
| <b>A.7</b> | <b>Product 3</b>                  |              |          |  |  |  |  |  |  |  |
| (i)        | Name                              |              |          |  |  |  |  |  |  |  |
| (ii)       | Installed Capacity                | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iii)      | Actual Production                 | Annual       | Tonne    |  |  |  |  |  |  |  |
| (iv)       | Opening Stock Product 3           | Annual       | Tonne    |  |  |  |  |  |  |  |
| (v)        | Closing Stock Product 3           | Annual       | Tonne    |  |  |  |  |  |  |  |
| (vi)       | Capacity Utilization (%)          | (ii)/(i)*100 | %        |  |  |  |  |  |  |  |



| A.8   | Product Ratio   |        |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------|---|--------|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| (i)   | Caustic Soda Lye  | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)  | Liquefied Chlorine to Caustic Soda Lye                                      | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii) | Hydrogen (Compressed) to Caustic Soda Lye                                   | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)  | Caustic Soda (Flakes) to Caustic Soda Lye                                   | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)   | Product 1 to Caustic Soda Lye   | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vi)  | Product 2 to Caustic Soda Lye   | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vii) | Product 3 to Caustic Soda Lye   | Annual | Factor   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B     | Electricity Consumption   |        |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B.1   | Electricity through Grid / Other (including colony and others)              |        |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)   | Purchased Electricity from grid (SEB)                                       | Annual | Lakh kWh |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)  | Renewable Electricity (Through Wheeling)                                    | Annual | Lakh kWh |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii) | Electricity from CPP located outside from plant boundary (Through Wheeling) | Annual | Lakh kWh |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)  | Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)            | Annual | %        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)   | Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)            | Annual | Lakh kWh |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vi)  | Renewable Purchase obligation of plant (RPO) (Solar & Non-Solar)            | Annual | MW       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



|         |  |              |                 |  |  |  |  |  |  |  |
|---------|--|--------------|-----------------|--|--|--|--|--|--|--|
| (vii)   | Renewable Energy generator as approved by MNRE   | Annual       | MW              |  |  |  |  |  |  |  |
| (viii)  | Quantum of Renewable Energy Certificates (REC) obtained as a Renewable Energy Generator (Solar & Non-Solar)          | Annual       | MWh             |  |  |  |  |  |  |  |
| (ix)    | Quantum of Energy sold under preferential tariff   | Annual       | MWh             |  |  |  |  |  |  |  |
| (x)     | Plant Connected Load   | Annual       | MW              |  |  |  |  |  |  |  |
| (xi)    | Contract Demand with utility   | Annual       | MVA             |  |  |  |  |  |  |  |
| (xii)   | Notified Baseline Energy Consumption   |              | TOE/<br>Tonne   |  |  |  |  |  |  |  |
| (xiii)  | Notified Target Energy Consumption   |              | TOE/<br>Tonne   |  |  |  |  |  |  |  |
| (xiv)   | Saving Target in TOE/<br>Tonne of product as per PAT scheme Notification   |              | TOE/<br>Tonne   |  |  |  |  |  |  |  |
| (xv)    | Equivalent Major Product Output in Tonne as per PAT scheme Notification  |              | Tonne           |  |  |  |  |  |  |  |
| (xvi)   | Total Electricity Purchased from grid/<br>Other  |              | Lakh kWh        |  |  |  |  |  |  |  |
| (xvii)  | Total Electricity Purchased from grid/<br>Other (with out colony/<br>construction power etc.)                        |              | Lakh kWh        |  |  |  |  |  |  |  |
| (xviii) | Equivalent Thermal Energy of Purchased Electricity from Grid /<br>Other (without colony/<br>construction power etc.) | (vii)x860/10 | Million<br>kcal |  |  |  |  |  |  |  |



| B2     | Boiler Details                          |                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------|---|---------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| B2.1   | For Steam Generation                    |                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B2.1.1 | Boiler 1                                | For Steam Generation (Process Boiler) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)    | Type                                    |                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)   | Rated Capacity                          |                                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii)  | Total Steam Generation                  | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)   | Running Hrs                             | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)    | Coal Consumption                        | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vi)   | GCV of Coal                             | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vii)  | Type of Fuel - 2 Name : Consumption     | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (viii) | GCV of any Fuel -2                      | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ix)   | Type of Fuel - 3 Name : Consumption     | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (x)    | GCV of any Fuel -3                      | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xi)   | Type of Fuel - 4 Name : Consumption     | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xii)  | GCV of any Fuel -4                      | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xiii) | Feed water Temperature                  | Annual                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xiv)  | Operating Efficiency                    | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xv)   | SH Steam outlet Pressure (Operating)    | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xvi)  | SH Steam outlet Temperature (Operating) | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xvii) | SH Steam Enthalpy (Operating)           | Annual Average                        |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |





|               |  |   |                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------|--|---|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| (xviii)       | Design Efficiency                                  | (iii)/(iv)  | %                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xix)         | Operating Capacity                                 |   | TPH              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xx)          | Specific Energy Consumption                        | $\frac{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}{(iii)}$             | kcal/kg of Steam |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xxi)         | Percentage of Coal Energy Used in steam Generation | $\frac{[(v) \times (vi)]}{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}$ | %                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>B2.1.2</b> | <b>Boiler 2</b>                                    | <b>For Steam Generation (Process Boiler)</b>  |                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)           | Type   |   |                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)          | Rated Capacity                                     |   | TPH              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii)         | Total Steam Generation                             | Annual  | Tonne            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)          | Running Hrs  | Annual  | Hrs              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)           | Coal Consumption                                   | Annual  | Tonne            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vi)          | GCV of Coal  | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vii)         | Type of Fuel - 2 Name : Consumption                | Annual  | Tonne            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (viii)        | GCV of any Fuel -2                                 | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ix)          | Type of Fuel - 3 Name : Consumption                | Annual  | Tonne            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (x)           | GCV of any Fuel -3                                 | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xi)          | Type of Fuel - 4 Name : Consumption                | Annual  | Tonne            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xii)         | GCV of any Fuel -4                                 | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xiii)        | Feed water Temperature                             | Annual  | °C               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



|               |  |   |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------|--|---|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| (xiv)         | Operating Efficiency                               | Annual Average  | %                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xv)          | SH Steam outlet Pressure (Operating)               | Annual Average  | kg/cm <sup>2</sup> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xvi)         | SH Steam outlet Temperature (Operating)            | Annual Average  | °C                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xvii)        | SH Steam Enthalpy (Operating)                      | Annual Average  | kcal/kg            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xviii)       | Design Efficiency                                  |   | %                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xix)         | Operating Capacity                                 | (iii)/(iv)  | TPH                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xx)          | Specific Energy Consumption                        | $\frac{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}{(iii)}$             | kcal/kg of Steam   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (xxi)         | Percentage of Coal Energy Used in steam generation | $\frac{[(v) \times (vi)]}{[(v) \times (vi) + (vii) \times (viii) + (ix) \times (x) + (xi) \times (xii)]}$ | %                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>B2.1.3</b> | <b>Boiler 3</b>                                    | <b>For Steam Generation (Process Boiler)</b>  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (i)           | Type   |   |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (ii)          | Rated Capacity                                     |   | TPH                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iii)         | Total Steam Generation                             | Annual  | Tonne              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (iv)          | Running Hrs  | Annual  | Hrs                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (v)           | Coal Consumption                                   | Annual  | Tonne              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vi)          | GCV of Coal  | Annual Average  | kcal               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (vii)         | Type of Fuel - 2 Name : Consumption                | Annual  | Tonne              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (viii)        | GCV of any Fuel -2                                 | Annual Average  | kcal/kg            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



|               |  |  |                  |  |  |  |  |  |  |  |
|---------------|--|--|------------------|--|--|--|--|--|--|--|
| (ix)          | Type of Fuel - 3 Name : Consumption                | Annual   | Tonne            |  |  |  |  |  |  |  |
| (x)           | GCV of any Fuel -3                                 | Annual Average   | kcal/kg          |  |  |  |  |  |  |  |
| (xi)          | Type of Fuel - 4 Name : Consumption                | Annual   | Tonne            |  |  |  |  |  |  |  |
| (xii)         | GCV of any Fuel -4                                 | Annual Average   | kcal/kg          |  |  |  |  |  |  |  |
| (xiii)        | Feed water Temperature                             | Annual   | °C               |  |  |  |  |  |  |  |
| (xiv)         | Operating Efficiency                               | Annual Average   | %                |  |  |  |  |  |  |  |
| (xv)          | SH Steam outlet Pressure (Operating)               | Annual Average   | kg/cm2           |  |  |  |  |  |  |  |
| (xvi)         | SH Steam outlet Temperature (Operating)            | Annual Average   | °C               |  |  |  |  |  |  |  |
| (xvii)        | SH Steam Enthalpy (Operating)                      | Annual Average   | kcal/kg          |  |  |  |  |  |  |  |
| (xviii)       | Design Efficiency                                  |  | %                |  |  |  |  |  |  |  |
| (xix)         | Operating Capacity                                 | (iii)/(iv)   | TPH              |  |  |  |  |  |  |  |
| (xx)          | Specific Energy Consumption                        | $\frac{[(v)x(vi)+(vii)x(viii)+(ix)x(x)+(xi)x(xii)]}{(iii)}$      | kcal/kg of Steam |  |  |  |  |  |  |  |
| (xxi)         | Percentage of Coal Energy Used in steam Generation | $\frac{[(v)x(vi)]}{[(v)x(vi)+(vii)x(viii)+(ix)x(x)+(xi)x(xii)]}$ | %                |  |  |  |  |  |  |  |
| <b>B2.1.4</b> | <b>Boiler 4</b>                                    | <b>For Steam Generation (Process Boiler)</b>                     |                  |  |  |  |  |  |  |  |
| (i)           | Type   |  |                  |  |  |  |  |  |  |  |
| (ii)          | Rated Capacity                                     |  | TPH              |  |  |  |  |  |  |  |
| (iii)         | Total Steam Generation                             | Annual   | Tonne            |  |  |  |  |  |  |  |



|         |   |   |                  |  |  |  |  |  |  |  |
|---------|---|---|------------------|--|--|--|--|--|--|--|
| (iv)    | Running Hrs                             | Annual  | Hrs              |  |  |  |  |  |  |  |
| (v)     | Coal Consumption                        | Annual  | Tonne            |  |  |  |  |  |  |  |
| (vi)    | GCV of Coal                             | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |
| (vii)   | Type of Fuel - 2 Name : Consumption     | Annual  | Tonne            |  |  |  |  |  |  |  |
| (viii)  | GCV of any Fuel -2                      | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |
| (ix)    | Type of Fuel - 3 Name : Consumption     | Annual  | Tonne            |  |  |  |  |  |  |  |
| (x)     | GCV of any Fuel -3                      | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |
| (xi)    | Type of Fuel - 4 Name : Consumption     | Annual  | Tonne            |  |  |  |  |  |  |  |
| (xii)   | GCV of any Fuel -4                      | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |
| (xiii)  | Feed water Temperature                  | Annual  | °C               |  |  |  |  |  |  |  |
| (xiv)   | Operating Efficiency                    | Annual Average  | %                |  |  |  |  |  |  |  |
| (xv)    | SH Steam outlet Pressure (Operating)    | Annual Average  | kg/cm2           |  |  |  |  |  |  |  |
| (xvi)   | SH Steam outlet Temperature (Operating) | Annual Average  | °C               |  |  |  |  |  |  |  |
| (xvii)  | SH Steam Enthalpy (Operating)           | Annual Average  | kcal/kg          |  |  |  |  |  |  |  |
| (xviii) | Design Efficiency                       |   | %                |  |  |  |  |  |  |  |
| (xix)   | Operating Capacity                      | (iii)/(iv)  | TPH              |  |  |  |  |  |  |  |
| (xx)    | Specific Energy Consumption             | $\frac{[(v)x(vi)+(vii)x(viii)+(ix)x(x)+(xi)x(xii)]}{(iii)}$ | kcal/kg of Steam |  |  |  |  |  |  |  |



| (xxi)         | Percentage of Coal Energy Used in steam Generation | $\frac{[(v)x(vi)]}{[(v)x(vi) + (vii)x(viii) + (ix)x(x) + (xi)x(xii)]}$ | %       |  |  |  |  |  |  |  |
|---------------|--|--|---------|--|--|--|--|--|--|--|
| <b>B2.1.5</b> | <b>Boiler 5</b>                                    | <b>For Steam Generation (Process Boiler)</b>                           |         |  |  |  |  |  |  |  |
| (i)           | Type   |  |         |  |  |  |  |  |  |  |
| (ii)          | Rated Capacity                                     |  | TPH     |  |  |  |  |  |  |  |
| (iii)         | Total Steam Generation                             | Annual   | Tonne   |  |  |  |  |  |  |  |
| (iv)          | Running Hrs  | Annual   | Hrs     |  |  |  |  |  |  |  |
| (v)           | Coal Consumption                                   | Annual   | Tonne   |  |  |  |  |  |  |  |
| (vi)          | GCV of Coal  | Annual Average   | kcal/kg |  |  |  |  |  |  |  |
| (vii)         | Type of Fuel - 2 Name : Consumption                | Annual   | Tonne   |  |  |  |  |  |  |  |
| (viii)        | GCV of any Fuel -2                                 | Annual Average   | kcal/kg |  |  |  |  |  |  |  |
| (ix)          | Type of Fuel - 3 Name : Consumption                | Annual   | Tonne   |  |  |  |  |  |  |  |
| (x)           | GCV of any Fuel -3                                 | Annual Average   | kcal/kg |  |  |  |  |  |  |  |
| (xi)          | Type of Fuel - 4 Name : Consumption                | Annual   | Tonne   |  |  |  |  |  |  |  |
| (xii)         | GCV of any Fuel -4                                 | Annual Average   | kcal/kg |  |  |  |  |  |  |  |
| (xiii)        | Feed water Temperature                             | Annual   | °C      |  |  |  |  |  |  |  |
| (xiv)         | Operating Efficiency                               | Annual Average   | %       |  |  |  |  |  |  |  |
| (xv)          | SH Steam outlet Pressure (Operating)               | Annual Average   | kg/cm2  |  |  |  |  |  |  |  |
| (xvi)         | SH Steam outlet Temperature (Operating)            | Annual Average   | °C      |  |  |  |  |  |  |  |