**File No.: VIS (2023-24)-PL645-548-865 Dated: 12.02.2024**

**LENDER’S INDEPENDENT ENGINEER REPORT (2ND)**

**(FOR QUARTER ENDING DECEMBER 2023)**

**OF**

**5 TPD BIOMASS TO COMPRESSED BIOGAS (CBG) PLANT (PHASE-I)**

**SITUATED AT**

**VILLAGE SHAHPUR DANDI, TEHSHIL: BAHERI, DISTRICT: BAREILLY, STATE: UTTAR PRADESH, INDIA.**

**IMPLEMENTED BY**

**M/S. CARBON CIRCLE PRIVATE LIMITED**

**REPORT PREPARED FOR**

**STATE BANK OF INDIA, SME RUDRAPUR.**

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| **PART A** | **REPORT SUMMARY** |

|  |  |  |
| --- | --- | --- |
| **1.** | **Name of Project:** | **Carbon Circle Private Limited** (CCPL) is establishing a Compressed Biogas (CBG) plant with a total capacity of 10 Tons Per Day (TPD) in Baheri Tehsil, Bareilly District, and Uttar Pradesh. The project will be executed in two phases, Phase –I and Phase-II, with each phase setting up a 5 TPD plant. |
| **2.** | **Project Location:** | Village Shahpur Dandi, Tehshil: Baheri, District: Bareilly, State: Uttar Pradesh, India. |
| **3.** | **Name of the Borrower:** | M/S. Carbon Circle Private Limited. |
| **4.** | **Director’s/Partner’s:** | Mr. Guru Inder Mohan Singh |
| **5.** | **Prepared for Bank:** | State Bank of India SME Branch, Rudrapur, Uttarakhand |
| **6.** | **LIE Consultant Firm:** | M/s. R.K. Associates Valuers & Techno Engineering Consultants (P) Ltd. |
| **7.** | **Date of Survey:** | 31st of January 2024 |
| **8.** | **Date of Report:** | 12th of February 2024 |
| **9.** | **Purpose of the Report:** | To provide fair detailed analysis report to the Bank based on the “in-scope points” mentioned below for facilitating them to take appropriate credit decision on the Project. |
| **10.** | **Scope of the work provided by the Lender:** | 1. Periodic Project physical status review 2. Periodic review of expenditure of the Project |
| **11.** | **Documents perused for Proposal:** | 1. Brief description of the project. 2. Detailed Project Report. 3. CA Certificate 4. SBI’s TEV Report 5. Amendment Letter or Purchase Order for machines to be installed. 6. Other approvals. 7. Site/Plot Plan 8. Property Title Documents 9. Plant Layout |
| **12.** | **Annexure with the report:** | 1. Copies of Project Statutory approvals 2. CA Certificate 3. DPR 4. Site/Plot Plan |

|  |  |
| --- | --- |
| **PART B** | **INTRODUCTION** |

1. **ABOUT THE ASSIGNMENT:**

**M/S. Carbon Circle Private Limited** (CCPL) is establishing a Compressed Biogas (CBG) plant with a total capacity of 10 Tons per Day (TPD) in Baheri Tehsil, Bareilly District, and Uttar Pradesh. The project will be executed in two phases, Phase –I and Phase-II, with each phase setting up a 5 TPD plant. For which bank has appointed M/S R.K Associates Valuers & Techno Engineering Consultants (P) Ltd. for review of periodic physical & expenditure of the project.

1. **ASSIGNMENT OVERVIEW:**

**M/S. Carbon Circle Private Limited (CCPL**) is establishing a Compressed Biogas (CBG) plant in Baheri Tehsil, Bareilly District, Uttar Pradesh, with an aggregate capacity of 10 Tons per Day (TPD). The project will be implemented in two sequential phases, Phase-I and Phase-II, each dedicated to setting up a 5 TPD plant. This phased approach is designed to facilitate the efficient development and scaling of the CBG plant.

Whereas as per CA Certificate the appraised Project cost considered is Rs.40.40 Cr. which includes Land development, Building, Plant & Machinery etc. Detailed breakup of the same is available in later section of the report. Further the Project was independently appraised by Consultancy Services Cell of SBI. As per Consultancy Services Cell of SBIthe appraised cost is Rs. 39.50 crores, the difference on the same is observed in IDC value. **Further in the report only the appraised hard cost by SBI is taken into consideration. Soft cost such as IDC etc. is not covered in the part of report. This report covers only Phase-I of the Project i.e. 5 TPD Plant.**

As per MCA, M/s Carbon Circle Private Limited (CCPL) was incorporated on 29/10/2021. Company is formed by Mr. Guru Inder Mohan Singh who has experience of implementing and scaling solar energy businesses. As per information provided to us, he started his career in Power Finance Corporation Ltd. (PFC) where he was involved in extending credit to biomass based and bagasse-based cogeneration power projects. Thereafter, he worked as executive in AES Corporation, a Fortune 500 company and Azure Power, a NYSE listed solar power company.

As per Project appraisal report, Phase-I of the Project is scheduled to be completed by June, 2024. As per the site inspection report, the Project work started in January 2023.

The Project is executed through the package route, i.e appointment of different contractors / suppliers for different works and not through EPC route.

**Current Status of Implementation as on 31/01/2024:**

1. **Land:** Company has purchased total of the land admeasuring 2.74 hectares (equivalent to 6.8 acres) as per the sale deed provided to us. However on the site total land admeasuring is 3.11 Hectare/ 7.68 Acre. Total land CLU obtained is of 2.143 Hectare/ 5.29 Acre. The assessment of land has not been done in this report, individual should be considered same as the previous quarter report.
2. **Civil Works/Land Development**: The project has achieved significant milestones with the completion of land levelling, the erection of a boundary wall, and the construction of civil structures up to the plinth level. Notably, several structures have been fully completed.

However, for a comprehensive overview of the current status of the civil work and project progress, please refer to the table below that provides a breakdown of these advancements.

|  |  |  |
| --- | --- | --- |
| **As on site visit dated-31-01-2024** | | |
| **Particular** | **Status** | **Remarks** |
| Bagging & Sun Drying Unit | Footing structure work done till plinth level and land filling completed. | Refer PART C for detailed status. |
| Biogas Up gradation Plant Unit | All the Civil work is finished, only soil filling and flooring work is due. | Refer PART C for detailed status. |
| Main Control Unit | Structure work is complete and brickwork is in progress. | Refer PART C for detailed status. |
| Raw Water Unit | Construction Work Is Complete | Refer PART C for detailed status. |
| Mixer Plant | Only the final finishing and testing is left, rest of the work is complete. | Refer PART C for detailed status. |
| Digester 1 | Only the final finishing and testing is left, rest of the work is complete. | Refer PART C for detailed status. |
| Digester 2 | Only the final finishing and testing is left, rest of the work is complete. | Refer PART C for detailed status. |
| Lagoon | Structure/Construction work in progress | Refer PART C for detailed status. |
| Guard Rooms | One guard room is completed and another one is in progress | Refer PART C for detailed status. |
| Internal Road | Work in progress | Refer PART C for detailed status. |

1. **Plants/Machines/ Equipment’s:**

In the subject unit, M/S Carbon Circle Private Limited has proposed to install following Plant/ Machines as listed below:-

|  |  |  |  |
| --- | --- | --- | --- |
| **As on site visit dated-31-01-2024** | | | |
| **S. No** | **Particulars** | **Supplier/Vendor** | **Status/Remarks** |
| 1 | Digester | Planet Biogas Global GMBH | Construction work of the same is completed |
| 2 | Biogas Up gradation Plant | Biogas Engineering India Private Limited | Not yet arrived on site. |
| 3 | Hot Water Generator | HME Boilers Pvt. Ltd. | Arrived on site. |
| 4 | Mixer | Planet Biogas Global GMBH | Arrived on site. |

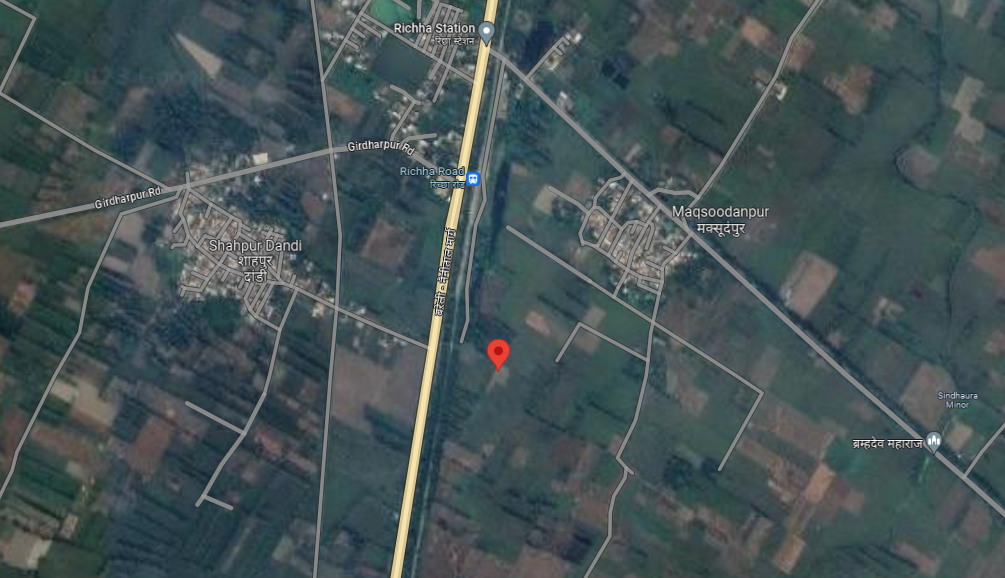
1. **Electrical Power Requirement:**

The proposed Compressed Biogas (CBG) plant has a continuous operating load requirement of approximately 660 KW. To meet this demand, the plant will source its power from the Riccha Substation, which operates at 11 KV and is situated about 2 kilometres away from the plant. To step down the voltage from 11 KV to the required 415V, a 1.6 MVA, 11/0.433kV distribution transformer will be installed. For the incoming power supply arrangement from the substation, a pole structure arrangement will be established at the 11 KV switchboard. In addition to the grid-based power supply, a separate 125 KVA DG (Diesel Generator) set is being planned to serve as a backup power source, ensuring uninterrupted operation of the plant in case of emergencies.

1. **Water Requirement**:
2. The water requirements of the CBG plant will be fulfilled by extracting water from on-site bore wells and storing it in a dedicated water reservoir.
3. As per estimate mentioned in the DPR, CBG plant's initial total raw water requirement stands at 343.5 cubic meters per day, representing fresh, untreated water without any recycling considerations. However, through the recovery of usable water from the liquid digestate, this requirement will decrease substantially to 96.5 cubic meters per day during phase-I, and an identical reduction will be applied during phase-II.
4. **PROJECT LOCATION:**

Details about Location of Unit is as below:

|  |  |
| --- | --- |
| **Particulars** | **Description** |
| **Postal Address** | |
| Village- Shahpur Dandi, Tehhshil-Baheri, District-Bareilly, State-Uttar Pradesh, India | |
| **Location** | |
| The location is in rural part of village area, nearby lands are mostly agricultural area. | |
| **Google Coordinates** | |
| Latitude | 28°42'35.9"N |
| Longitude | 79°29'20.1"E |
| **Connectivity Systems** | |
| Road | Baheri is around 45-50 km from Bareilly city through SH 37. The project site is currently accessible via an 8-foot-wide village road. However, there are plans to establish a dedicated entry through Richha Road, which connects to the nearby Bareilly-Nainital road, improving site accessibility and transportation logistics. |
| Rail | The Nearest Railway station to the subject locality is Richha Railway Station which is about approximately 0.5 Km from the Subject Project. |
| Air | The nearest airport to subject location, i.e, Bareilly Airport, is located approximately 40 kilometres away. |
| **Geographical Conditions On The Site** | |
| Temperature | The maximum temperature is around 104°F while the minimum is 41°F. |
| Rainfall | The average annual rainfall of this area is about 970 mm. |
| Seismic Zone | The above plant site area falls in Seismic Zone III. |



**Figure: Location of CBG Plant**

1. **SCOPE OF WORK DURING PROJECT DURATION:**
2. Periodic Project physical status review
3. Periodic review of expenditure of the Project.
4. **PURPOSE OF THE REPORT:** To provide fair detailed analysis report to the Bank based on the “in-scope points” mentioned above for facilitating them to take appropriate credit decision on the Project.
5. **METHODOLOGY ADOPTED:**
6. Study of Project Planning documents/ reports to know about the Project.
7. Additional information, data, documents collection from the borrower.
8. Site Inspection.
9. Review and analysis of the documents and information obtained from the borrower and corroborating it with the site inspection status.
10. Information compilation, analysis and reporting.
11. Expenditure assessment of the civil works has been done as per the physical observation during site survey and by taking benchmark cost of the respective items.
12. Verification of the bills & invoices have not been done on our end.

|  |  |
| --- | --- |
| **PART C** | **PLANT INFRASTRUCTURE SECTIONS & FACILITY DETAILS WITH**  **ACTUAL PROGRESS** |

1. **LAND AND LAND DEVELOPMENT:** For the purpose of the Project**,** company has purchased2.74 hectares (equivalent to 6.8 acres) of land at Rs.1,35,51,400/- as per the sale deed provided to us. However, during a site survey and based on the information provided, additional demarcated land was observed beyond the initial document. As per demarcated boundaries total land area is admeasuring approx. 7.68 Acres.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Gata No.** | **Area in (Hectares)** | **Sale Price** | **Stamp Duty** | **Total** |
| 1 | 391 | 1.0715 | 42,38,000 | 2,20,300 | 44,58,300 |
| 2 | 161 | 0.18575 | 7,34,000 | 36,700 | 7,70,700 |
| 3 | 161 | 0.18575 | 8,82,000 | 44,100 | 9,26,100 |
| 4 | 388 | 0.225 | 19,58,000 | 98,000 | 20,56,000 |
| 5 | 391 | 1.0715 | 50,86,000 | 2,54,300 | 53,40,300 |
| **Total** |  | **2.7395** | **1,28,98,000** | **6,53,400** | **1,35,51,400** |

1. **BUILDING & CIVIL WORKS:** For setting up/ development of above listed sections and other civil works, Carbon Circle Private Limited has estimated Rs.8.74 crore as per SBI appraisal report out of total project cost amounting to Rs.39.50 Crore. Same is considered in C.A. Certificate dated 31st December 2023.

The Physical progress is considered based on observation during our visit on 31st January 2024 of the subject Plant. During the Course of our visit to the subject Project Site following observations were made:

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Description** | **Remarks** |
| 1. | Bagging Unit | * Construction progress from the foundation to the plinth level has been successfully completed, and any necessary soil filling has also been carried out. * Necessary land levelling or filling to prepare the construction site has been finished. This includes adding or removing soil to achieve the desired ground level and ensure a stable foundation for the building. |
| 2. | Sun Drying Area | * Construction progress from the foundation to the plinth level has been successfully completed, and any necessary soil filling has also been carried out. * Necessary land levelling or filling to prepare the construction site has been finished. This includes adding or removing soil to achieve the desired ground level and ensure a stable foundation for the building. |
| 3. | Biogas Up gradation Plant | * The civil work has been completed. * The soil filling work is remaining for which the work is in progress. |
| 4. | Master control room and Office room | * The structure work till 1st floor is completed. * The 2nd floor roofing work and brick work of the structure is in progress. |
| 5. | Raw water Storage | * The construction of structure work is completed. |
| 6. | Hot Water Area | * The structure work and shed work is completed. |
| 7. | Mixer | * The structure work for the mixer has been completed. * The completion of the structure work typically involves creating a secure and stable foundation for the mixer, which is essential for its proper functioning and safety, the same has been achieved by the company. * The finishing and testing work is only left. |
| 8. | Anaerobic Digester 1 & 2 | * The structure work of anaerobic digesters has been completed. * The next steps may involve installing the necessary equipment, such as gas collection and processing systems, monitoring and control systems, and safety measures to ensure the efficient and safe operation of the anaerobic digesters, which has not started yet. * The final finishing and testing work is only left. |
| 9. | Liquid Digest lagoon | * The construction of structure work is in progress. |
| 10. | Guard Rooms | * All the civil work of the one guard room structure has been completed, currently in use and another guard room structure has been completed, work is in progress. |
| 11. | Internal Road | * Half of the total planned road has been constructed and the work for remaining half is in progress. |

*Note: The Physical progress captured in the report is based on the approximate observations of status of structures constructed on site during site inspection.*

**The percentage completion of the civil work executed is shown in chart form below:**

1. **PLANTS/MACHINERIES & OTHER EQUIPMENTS AND UTILITIES:**

The total amount envisaged against the purchase of Plant and Machinery amounts to Rs.26.16 cr. out of which expenditure incurred till 31st December 2024 is 24.50 cr. as per CA Certificate.

Brief description of the machineries involved in the plant process is shown below:

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Particulars** | **Supplier/Vendor** | **Status/Remarks** |
|
| **Plant & Machinery** | | | |
|  | Digester | Planet Biogas Global Gmbh | Purchase Order raised |
|  | Biogas Up gradation Plant | Biogas Engineering India Private Limited | Purchase Order raised |
|  | Mixer | Planet Biogas Global Gmbh | Not ordered yet |
| **Utilities** | | | |
|  | Compressor | Kirloskar Pneumatic Company | No information available |
|  | Hot Water Generator | HME Boilers Pvt Ltd. | Arrived on site |
|  | Water Treatment Plant | --- | No information available |
|  | Transformer | --- | Arrived on site |
|  | HT/LT Panels | --- | No information available |
|  | Bagging Unit | Yet to be awarded | No information available |
|  | Weigh bridge | Eagle Scale Manufacturing Works | No information available |
|  | SCADA | Yet to be awarded | No information available |
|  | DG Set | --- | No information available |

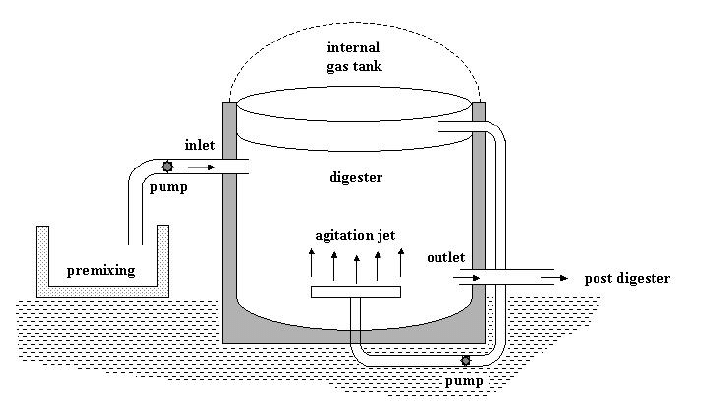
|  |  |  |
| --- | --- | --- |
| Particulars | Vendor | Expenditure verified through bills |
| Digester | PlanET | 10.735 |
| BUP | BGEI | 7.83 |
| Total estimated cost (as per C.A. Certificate) | 26.6 | 18.565 |
| Cost incured till (31st December 2023) | 24.5 |  |

The flow chart for production of Compressed Bio Gas from Press mud and organic solid waste produced from sugar industry during cane juicing processing- and etc.is shown below:

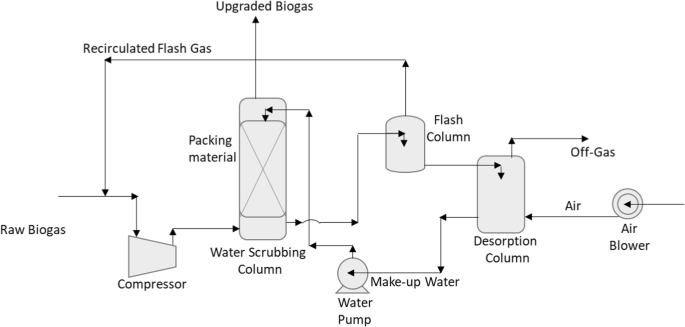
1. **Press Mud**:
   * Initial Biomass Input
2. **Mixing Tank**:
   * Preparation and Mixing
3. **Digester**:
   * Anaerobic Digestion
   * Production of Raw Biogas
   * Production of Digestate (Solid Residue)
4. **Digestate Handling System**:
   * Handling and Processing of Digestate
5. **Raw Biogas Storage**:
   * Storage of the Produced Raw Biogas
6. **Biogas Upgrading Unit**:
   * Biogas Purification
   * Removal of Impurities and Carbon Dioxide
7. **Purified Biogas Compression**:
   * Compression of Purified Biogas
8. **Issuing (Pipe Grid) System**:
   * Distribution of Compressed Biogas through a Pipe Grid

**Technical details and aspect of the above plant/machineries and equipment’s is shown below:**

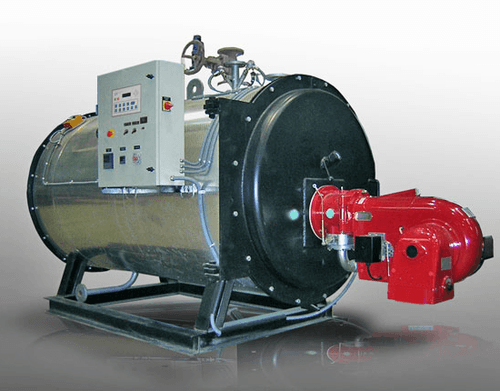
1. **Digester:**



1. **Biogas Up Gradation Plant:**



1. **Hot Water Generator:**



A hot water generator is integrated into the system to utilize the compressed biogas for heating purposes. The hot water generator essentially transfers the heat energy from the compressed biogas to water, producing hot water as an output.

1. **Mixer:** Mixers are employed for various purposes, starting with feedstock mixing, where they homogenize and blend diverse organic materials used as the feedstock for the anaerobic digestion process.

**Note:**

1. The Machineries/ equipment’s mentioned in the above table few of them have arrived and most of them not yet arrived on the site on the date of the survey.
2. The total amount envisaged against the purchase of Plant, Machinery and equipment’s amounts to Rs.26.16 cr., according to the documents provided.

|  |  |
| --- | --- |
| **PART D** | **PROJECT CONSULTANTS, CONTRACTORS & SUPPLIERS** |

As of now following below are the list of Contractors/ Suppliers/ Consultants which have been currently engaged in the Project.

|  |  |
| --- | --- |
| Contractors/ Suppliers/ Consultants | Nature of Work |
| M/s Avant grade System and Controls Pvt. Ltd. (AGSCPL) | Engineering Consultants |
| M/s Makin Developers Pvt. Ltd. | Building/Civil Works |
| M/S Planet Biogas Global GMBH (PlanET) | Providing and installation of digester |
| M/S Biogas Engineering India Pvt. Ltd. (BGEI) | Biogas Up-gradation machines |
| M/S Kirloskar Pneumatic Company Limited. | Compressor |
| M/S Fabking Solutions Pvt Ltd. | Portable cabin container |
| M/S Steeline Buildcon Pvt. Ltd. | PEB Shed |
| M/s Flowmore Ltd. | Pumps |
| M/S Ceasefire Industries Pvt. Ltd. | Fire Fighting System |
| M/S HME Boilers Pvt Ltd. | Hot water Generator |
| M/S Tata Bluescope Steel Pvt. Ltd. / Infinite Build Foam | Cladding Sheet / Insulation Material |
| M/S Tharayali Engineering Pvt. Ltd. | Erection, Commissioning & Quality |
| M/S UPPCL | Bay at 132 KV @ Richha S/s |
| M/S Electro Control Systems | Plant Electricals |
| M/S ARC Electro Enterprises | Electric Meter ( Supply & Services) |
| M/S Eagle Scale Manufacturing Works | Weigh machine |
| M/S Gandhi Automations Pvt Ltd. | Main Gate |

|  |  |
| --- | --- |
| **PART E** | **PROJECT COST & MEANS OF FINANCE** |

1. **TOTAL PROJECT COST & STATUS OF EXPERNDITURE:** M/s Carbon Circle Private Limited has estimated the total Project Cost amounting to Rs.40.40 Cr. out of which Rs.39.69 Cr. has been spent till 31st December 2023 as per CA Certificate dated 31st December 2023 with UDIN No. 24519826BKARMT6028.

Tabular and chart representation of the same is shown below:

***Amount in crores***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **Project Cost as Budgeted**  ***(As per SBI appraisal Report)*** | **Project Cost as Budgeted**  ***(As per CA Certificate)*** | **Expenditure Incurred Till 31st December 2023**  ***(As per CA Certificate)*** | **Expenditure Incurred Till Date**  ***(LIE Assessment)*** |
| Land including land developments | 1.15 | 1.15 | 1.63 | 1.35 |
| Building & Civil works | 8.74 | 8.74 | 9.67 | 8.68 |
| Plant Machinery | 26.16 | 26.16 | 24.5 | --- |
| Preoperative Expenses | 1.75 | 1.75 | 3.28 | --- |
| Interest During Construction | 1.50 | 2.40 | 0.61 | --- |
| Margin Money for Working Capital | 0.20 | 0.20 | 0.00 | --- |
| **Total** | **39.50** | **40.40** | **39.69** | **10.04** |

1. **COST EXPENDITURE ANALYSIS:** A detailed comparison between the actual construction expenses and the company's reported costs, as certified by a Chartered Accountant (CA), is presented below. Alongside this, a cost assessment based on a site survey is also provided:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PARTICULARS** | **TOTAL ESTIMATED COST**  **( Rs. In Cr.)** | **AMOUNT INCURRED TILL 31.12.2023**  ***(As Per C.A. Certificate)*** | **AMOUNT OF WORK DONE ON SITE – 2nd Qtr. Report**  **(As on 31-01-2024)** | **REMARKS** |
| Land including land developments | 1.15 | 1.63 | ~1.35 | This includes cost of land with stamp duty (as per the value mentioned in the sale deed). For breakup of expenditure please refer to Table below. |
| Building and other civil works. | 8.74 | 9.67 | ~8.68 | The cost assessment for building and civil works is done in accordance with the benchmark or market cost, as per the percentage of work completed. Minor difference which is coming from CA Certificate is normal which comes from actual Vs estimated calculation.  (As CA certificate was prepared in September and shows the expenditure incurred till 31.08.2023 and the survey was conducted 17.10.2023) |
| Plant, Machinery and equipment. | 26.16 | 24.50 | --- | As of now, no machineries has arrived on the site. The total expenditure incurred to date is solely based on the information provided in the CA Certificate only for the amount which must have been paid in advances. |
| Pre-operative Expenses | 1.75 | 3.28 | --- | Since breakup was not available therefore we were unable to verify its cost as of now and thus have not commented on this item. |
| Interest During Construction | 2.40 | 0.61 | --- | Can be referred directly from CA certificate as out of Engineering purview. Not in scope of LIE. |
| Margin Money for Working Capital | 0.20 | 0.00 | --- | Can be referred directly from CA certificate as out of Engineering purview. Not in scope of LIE. |
|  | | | | |

* Detailed breakup of the cost assessed, according to current site status is shown below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Work** | **Particulars** | **Type of Structure** | **Area** | **Unit** | **Rate** | **Amount** |
| Land including land development | Land Purchase  (including stamp duty amount) | --- | --- | --- | --- | 1,35,51,400/- |
| **Sub Total(A)** | | | | | | **1,35,51,400/-** |
| Building and other civil works | Bagging Unit | R.C.C | 8611.12 | Sq. Ft. | 800 | 6,888,896.00 |
| Sun Drying Unit | R.C.C | 10462.5108 | Sq. Ft. | 800 | 8,370,008.64 |
| Biogas Up gradation Plant | R.C.C | 13950.0144 | Sq. Ft. | 1200 | 16,740,017.28 |
| Master Control Room and Office Room | R.C.C | 11043.7614 | Sq. Ft. | 1200 | 13,252,513.68 |
| Raw Water | R.C.C | 5037.5052 | Sq. Ft. | 1300 | 6,548,756.76 |
| Mixer | R.C.C | 160 | Cum | 8000 | 1,280,000.00 |
| Digester 1 | R.C.C | 850 | Cum | 9000 | 7,650,000.00 |
| Digester 2 | R.C.C | 850 | Cum | 9000 | 7,650,000.00 |
| Lagoon | R.C.C | 7976.0499 | Sq. Ft. | 900 | 7,178,444.91 |
| Guard Room 1 | R.C.C | 180 | Sq. Ft. | 1400 | 252,000.00 |
| Guard Room 2 | Precast | 180 | Sq. Ft. | 1100 | 198,000.00 |
|  | Boundary Wall | Precast | 21643.189 | Sq. Ft. | 150 | 3,246,478.35 |
| Road |  | 759 | Cum | 10000 | 7,590,000.00 |
| **Sub Total(B)** | | | | | | **Rs.8,68,45,116/-** |
| **TOTAL(A+B)** | | | | | | **Rs.10,03,96,516/-** |

**Comment/Note:**

1. The rates adopted for the particulars and items is as per the benchmark cost or prevailing market cost.
2. The rates adopted for the Digester and mixer includes the cost of P.C.C and other construction materials such as shuttering, reinforcements, etc.
3. The rates adopted for the other units are adopted as per the percentage completion of work.
4. The cost assessment for building and civil works is done in accordance with the benchmark or market costs, and any discrepancies are attributed to manual calculations.
5. We have given a general overview of the project based on expenses shown by chartered accountant in their CA certificate as per CA Certificate dated 31st December 2023 with UDIN No. 24519826BKARMT6028 based on the Data/ information gathered from client and the observation made during the site survey.
6. Estimation/vetting is only done for the civil work executed.
7. Civil work cost expenditure assessment is done considering benchmark and market cost based on the progress as seen during the site visit and the analysis is given accordingly.
8. Bills/ Invoices of civil works has not been verified at our end.
9. Advances paid for machines procurement has not been covered at our end which is already covered in CA certificate since no machine has physically come on the site yet.

1. **SOURCES OF FINANCE & UTILIZATION OF FUNDS:**

The Project cost mentioned above has been planned to be covered from following resources:

|  |  |
| --- | --- |
| (Amount in Rs. Crore) | |
| PARTICULARS |  |
| Promoter’s Contribution in the form of share capital | 10.00 |
| Promoter’s Contribution in the form of interest free unsecured loan | 6.40 |
| Term Loan (Debt) | 24.00 |
| TOTAL | **40.40** |

***Source:*** *As per CA Certificate*

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| **PART F** | **STATUTORY & REGULATORY APPROVALS, CLEARANCES & NOC** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | NAME OF LICENSE/ REGISTRATION | PURPOSE | DATE OF ISSUE | CURRENT STATUS |
| **ISSUING AUTHORITY** | **LICENCE NO.** |
|  | Change of Land Use Certificate (CLU) | Change in land use | 29/03/2023 | Obtained  (for 2.143 hectare of Land) |
|  | Building Plan Approval | Approval of building plans | --- | To be obtained |
| 1. 2. | Pollution Certificate | Consent to establish new unit | 02/01/2023 | NOC is obtained by the Company from the competent Authority. |
| Uttar Pradesh Pollution Control Board | 173061/UPPCB |
|  | Electricity Connection | --- | --- | Obtained |
|  | Fire NOC | --- | --- | To be obtained |
| 1. 3. | Application for prior approval of only filling of compressed gas cylinders | Application for the grant to fill compressed gases in cylinders | 16/01/2023 | Obtained |
| PESO | OIN1283802 |
| *Observations & Comments:*  *Above mentioned are the preliminary approvals which are required for the Project. The status mentioned above is as per the documents provided by the client.* | | | | |

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| **PART G** | **PROJECT SCHEDULE & CURRENT STATUS** |

The timeline and scheduling for the implementation of the "Bio Mass to CBG Plant" is to complete within twelve months from the date of ordering the main packages, specifically the Anaerobic Reactor package and Bio Gas purification package, which are long lead items for the project.

The target was to commission the project and start commercial production by 1st November 2023.

|  |  |  |  |
| --- | --- | --- | --- |
| **As per Consultancy Services Cell, LHO New Delhi** | | | |
| **Activity** | **Commencement** | **Expected date of completion** | **Current Status** |
| Land Purchased | --- | Purchased | Completed |
| Civil Construction | April 2023 | Sep 2023 | Work in progress. Likely to be completed by March-2024 as per present progress. |
| Plant & Machinery | August 2023 | Apr 2024 | Few has arrived but major machines yet to be arrived. |
| Trial Run | --- | May 2024 | To be done |
| Commercial Operation | --- | June 2024 | To be done |

**Current Status:**

During the recent site visit, it was observed that the project's progress is at a good pace major civil works has been completed or in the last stage, few machines were found to be arrived but most of the machines are yet to be arrived.

Further, the company is proactively planning and implementing measures to get the project back on track and aiming to start the commissioning and COD (Commercial Operation Date) by February 2024 as informed by them on site.

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| --- | --- |
| **PART I** | **DISCLAIMER** |

* + - 1. No employee or member of R.K Associates has any direct/ indirect interest in the Project.
      2. This report is prepared based on the copies of the documents/ information which the Bank/ Borrower has provided to us out of the standard checklist of documents sought from them and further based on our assumptions and limiting conditions. The client/owner and its management/representatives warranted to us that the information they supplied was complete, accurate and true and correct to the best of their knowledge. All such information provided to us has been relied upon in good faith and we have assumed that it is true and correct in all respect. I/We shall not be liable for any loss, damages, cost or expenses arising from fraudulent acts, misrepresentations, or wilful default on part of the owner, borrower, its directors, employee, representative or agents. Verification or cross checking of the documents provided to us from the originals or from any Govt. departments/ Record of Registrar has not been done at our end since this is beyond the scope of our work. If at any time in future, it is found or came to our knowledge that misrepresentation of facts or incomplete or distorted information has been provided to us then this report shall automatically become null & void.
      3. Legal aspects for eg. investigation of title, ownership rights, lien, charge, mortgage, lease, sanctioned maps, verification of documents, etc. have not been done at our end and same has to be taken care by legal expert/ Advocate. It is assumed that the concerned Lender/ Financial Institution has satisfied them with the authenticity of the documents, information given to us and for which the legal verification has been already taken and cleared by the competent Advocate before requesting for this report. I/ We assume no responsibility for the legal matters including, but not limited to, legal or title concerns.
      4. This report is a general analysis of the project based on the scope mentioned in the report. This is not an Audit report, Design document, DPR or Techno feasibility study. All the information gathered is based on the facts seen on the site during survey for the quarter ending June 2022, verbal discussion & documentary evidence provided by the client and is believed that information given by the borrower is true best of their knowledge.
      5. All observations mentioned in the report is only based on the visual observation and the documents/ data/ information provided by the client. No mechanical/ technical tests, measurements or any design review have been performed or carried out from our side during Project assessment.
      6. Bank/FII should ONLY take this report as an Advisory document from the Financial/ Chartered Engineering firm and its specifically advised to the creditor to cross verify the original documents for the facts mentioned in the report which can be availed from the borrowing borrower directly.
      7. In case of any default in loans or the credit facility extended to the borrowing borrower, R.K Associates shall not be held responsible for whatsoever reason may be and any request for seeking any explanation from the employee/s of R.K Associates will not be entertained at any instance or situation.
      8. The documents, information, data provided to us during the course of this assessment by the client is reviewed only upto the extent required in relation to the scope of the work. No document has been reviewed beyond the scope of the work.
      9. This report only contains general assessment & opinion as per the scope of work evaluated as per the information given in the copy of documents, information, data provided to us and/ and confirmed by the owner/ owner representative to us at site which has been relied upon in good faith. It doesn’t contain any other recommendations of any sort including but not limited to express of any opinion on the suitability or otherwise of entering into any transaction with the borrower.
      10. We have relied on data from third party, external sources & information available on public domain also to conclude this report. These sources are believed to be reliable and therefore, we assume no liability for the truth or accuracy of any data, opinions or estimates furnished by others that have been used in this analysis. Where we have relied on data, opinions or estimates from external sources, reasonable care has been taken to ensure that such data has been correctly extracted from those sources and /or reproduced in its proper form and context, however still we can’t vouch its authenticity, correctness or accuracy.
      11. This Report is prepared by our competent technical team which includes Engineers and financial experts & analysts.
      12. This is just an opinion report and doesn’t hold any binding on anyone. It is requested from the concerned Financial Institution which is using this report for taking financial decision on the project that they should consider all the different associated relevant & related factors also before taking any business decision based on the content of this report.
      13. All Pages of the report including annexures are signed and stamped from our office. In case any paper in the report is without stamp & signature then this should not be considered a valid paper issued from this office.
      14. Though adequate care has been taken while preparing this report as per its scope, but still we can’t rule out typing, human errors, over sightedness of any information or any other mistakes. Therefore, the concerned organization is advised to satisfy themselves that the report is complete & satisfactory in all respect. Intimation regarding any discrepancy shall be brought into our notice immediately. If no intimation is received within 15 (Fifteen) days in writing from the date of issuance of the report, to rectify these timely, then it shall be considered that the report is complete in all respect and has been accepted by the client upto their satisfaction & use and further to which R.K Associates shall not be held responsible in any manner.
      15. Defect Liability Period is **15 DAYS**. We request the concerned authorized reader of this report to check the contents, data and calculations in the report within this period and intimate us in writing if any corrections are required or in case of any other concern with the contents or opinion mentioned in the report. Corrections only related to typographical, calculation, spelling mistakes, incorrect data/ figures/ statement will be entertained within the defect liability period. Any new changes for any additional information in already approved report will be regarded as additional work for which additional fees may be charged. No request for any illegitimate change in regard to any facts & figures will be entertained.
      16. R.K Associates encourages its customers to give feedback or inform concerns over its services through proper channel at valuers@rkassociates.org in writing within 15 days of report delivery. After this period no concern/ complaint/ proceedings in connection with the Financial Feasibility Study Services will be entertained due to possible change in situation and condition of the subject Project.
      17. Our Data retention policy is of **ONE YEAR**. After this period, we remove all the concerned records related to the assignment from our repository. No clarification or query can be answered after this period due to unavailability of the data.
      18. This Lender’s Independent Engineer report is governed by our (1) Internal Policies, Processes & Standard Operating Procedures, (2) Information/ Data/ Inputs given to us by the client and (3) Information/ Data/ Facts given to us by our field/ office technical team. Management of R.K Associates never gives acceptance to any unethical or unprofessional practice which may affect fair, correct & impartial assessment and which is against any prevailing law. In case of any indication of any negligence, default, incorrect, misleading, misrepresentation or distortion of facts in the report then it is the responsibility of the user of this report to immediately or at least within the defect liability period bring all such act into notice of R.K Associates management so that corrective measures can be taken instantly.
      19. R.K Associates never releases any report doing alterations or modifications from pen. In case any information/ figure of this report is found altered with pen then this report will automatically become null & void.

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| --- | --- | --- |
| **SURVEY ANALYST** | **ENGINEERING ANALYST** | **REVIEWER** |
| Vishal Singh & Ashil Baby | Deepak Kumar Singh | Sr. V.P. Projects |
|  |  |  |

**For**

**R.K. Associates Valuers and Techno Engineering Consultants Pvt. Ltd**

**Place: Noida**

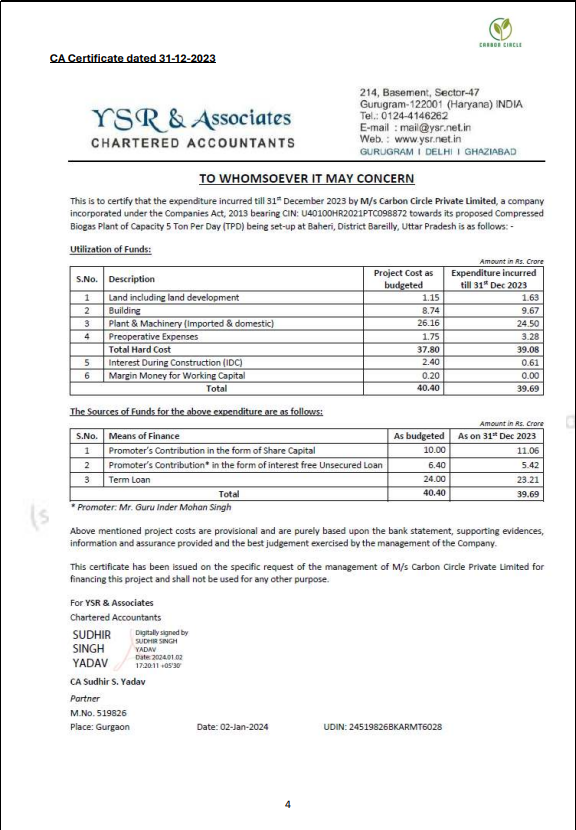
**Date: 12th February 2024**

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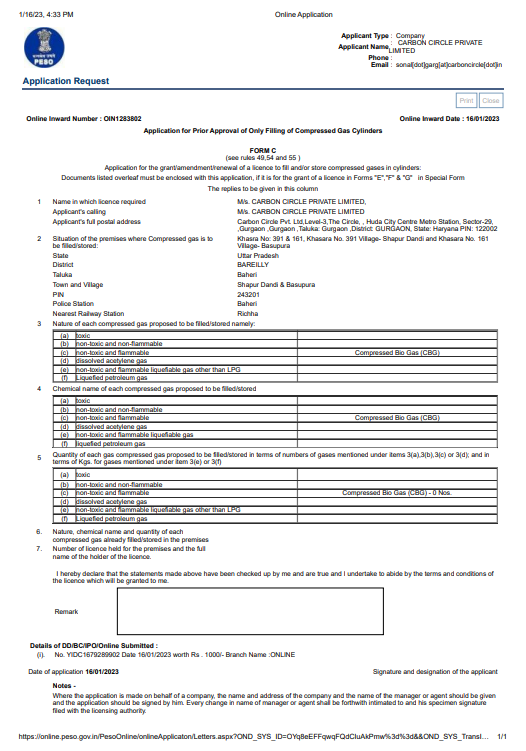
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**ENCLOSURE 1: IMPORTANT DOCUMENTS EXHIBIT**

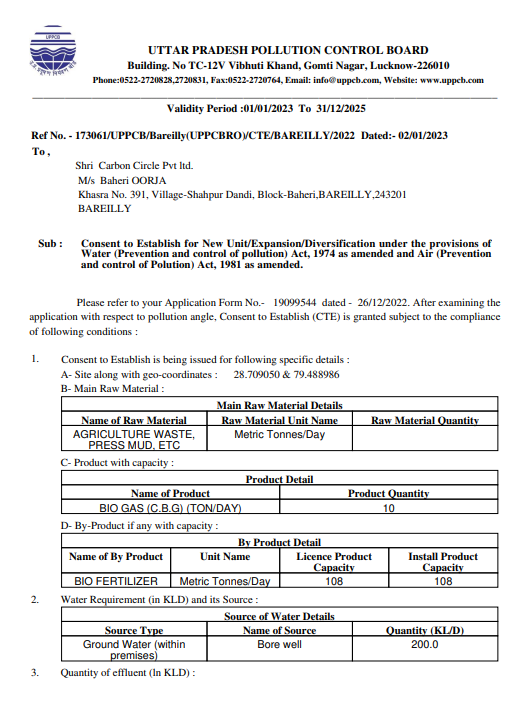
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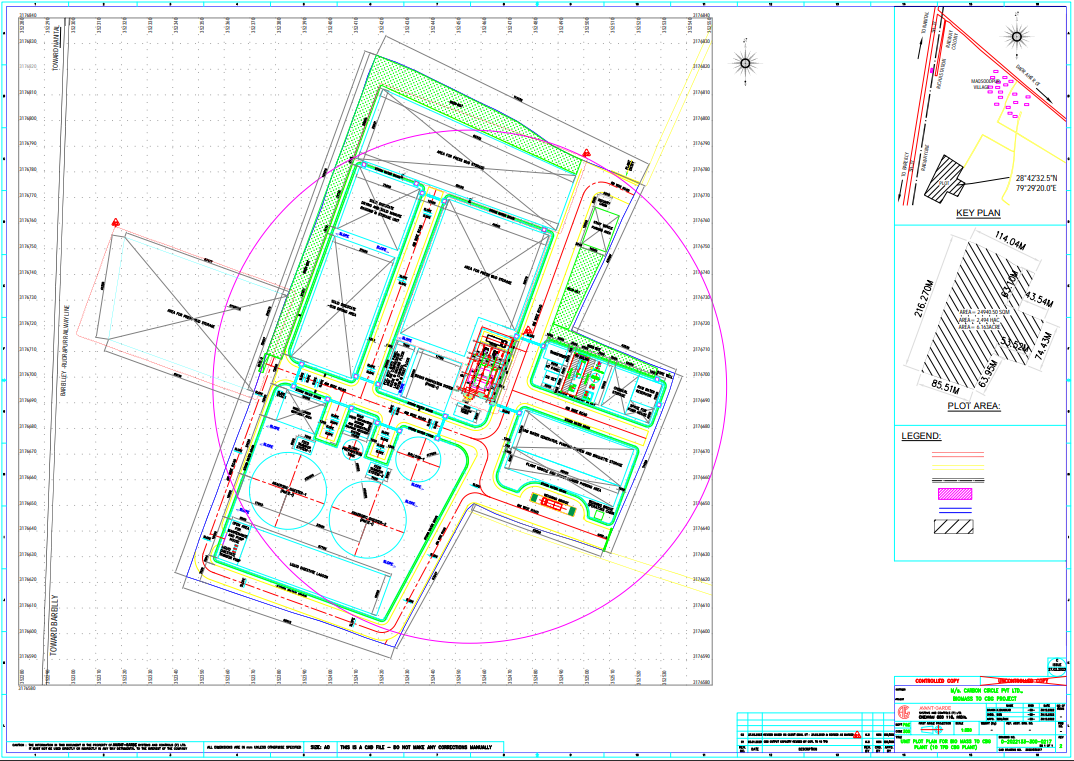


**DOCUMENT- 2: Application for prior approval only filling of compressed of gas cylinders**



**DOCUMENT-3: POLLUTION CERTIFICATE**

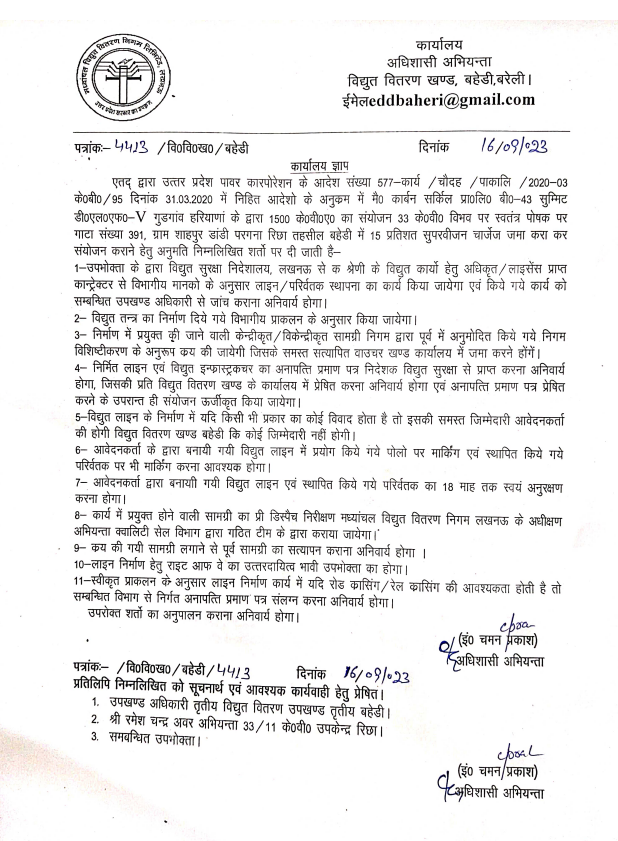
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**DOCUMENT 4: SITE PLAN**

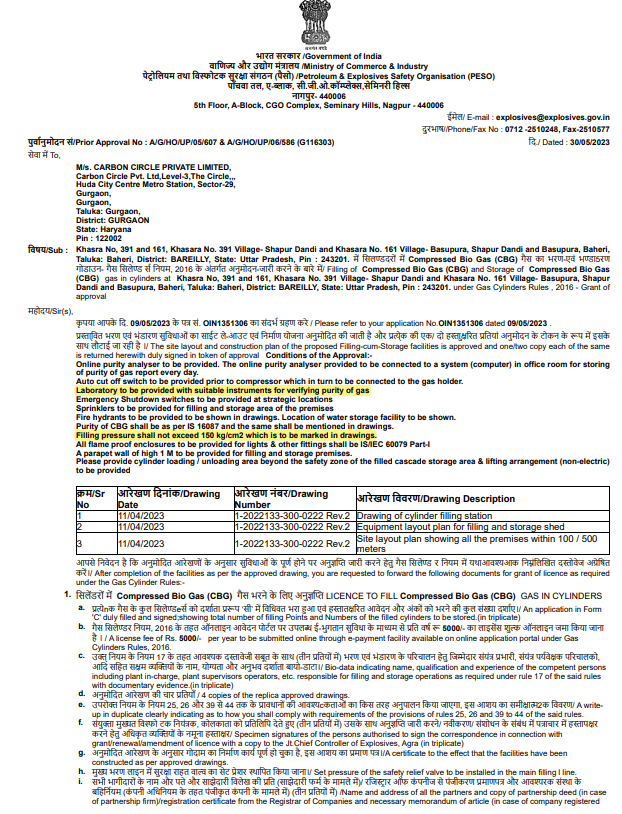
**DOCUMENT 5: CHANGE IN LAND USE**

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**DOCUMENT 5: ELECTIRCAL CONNECTION CERTIFICATE**



**DOCUMENT 6: APPLICATION FOR PRIOR APPROVAL OF ONLY FILLING OF COMPRESSED GAS CYLINDERS**



**ENCLOSURE-2: - SITE PHOTOGRAPHS** 



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**Digester**

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**Lagoon**

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**Biogas Up gradation Plant**

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**Master Control Room & Office Room**

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**Machines**

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**Baggage Unit & Sun Drying Area**

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**Hot water Treatment Plant & Meter Room**

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**Mixer & Control Room for Digester**

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**Site Photographs**

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