



Expression of Interest (EOI) inviting interested Contractor for Rehabilitation, Operation and Maintenance of GMDC's existing Pyrite Removal and Lignite Beneficiation Plant situated at GMDC's Bhavnagar "Lignite Projects at Bhavnagar" Gujarat.

EOI NO : GMDC/EOI/TECH-II/01/2025-26



**Gujarat Mineral Development Corporation Limited
Khanij Bhavan, 132-Ring Road, Gujarat University Ground,
Vastrapur, Ahmedabad- 380052**

May 2025

Disclaimer

Gujarat Mineral Development Corporation (GMDC) has prepared this Expression of Interest (EOI) document solely to assist prospective Bidders in making their decision of whether or not to bid. While GMDC has taken due care in the preparation of information contained herein and believes it to be accurate, neither the GMDC or any of its authorities or agencies nor any of their respective officers, employees, agents or advisors gives any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

This information is not intended to be exhaustive and interested parties are required to make their own inquiries and do site visits that it may require in order to submit the EOI. The information is provided on the basis that it is non-binding on GMDC, any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

GMDC reserves the right not to proceed with the EOI process at any stage without assigning any reasons thereof, or to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the EOI further with any party submitting an EOI.

No reimbursement of cost of any type will be paid to persons or entities submitting the EOI.

Table of Contents

1. BACKGROUND	4
2. EXISTING PYRITE REMOVAL PLANT & PROCESS DETAILS.....	5
3. SCOPE OF WORK.....	8
4. TENTATIVE PROJECT STRUCTURE AND GMDC ASSISTANCE	17
5. DESCRIPTION OF BID PROCESS	20
6. QUALIFICATION CRITERIA AND EVALUATION PROCESS.....	22
6.1 QUALIFICATION CRITERIA	22
6.2 EOI OPENING AND EVALUATION PROCESS	23
7. EOI SUBMISSION	24
8. KEY DATES.....	25
9. OTHER INSTRUCTIONS.....	26
9.1 EOI VALIDITY PERIOD	26
9.2 EXTENSION OF PERIOD OF EOI VALIDITY	26
9.3 MODIFICATION AND WITHDRAWAL OF EOI	26
9.4 DISQUALIFICATION	26
9.5 ONE EOI PER BIDDER	27
9.6 COST OF BIDDING	27
9.7 SITE VISIT	27
9.8 AMENDMENT TO EOI DOCUMENT	27
9.9 LATE PROPOSAL FOR EOI	27
ANY PROPOSAL FOR EOI RECEIVED BY THE GMDC AFTER THE DUE DATE AND TIME FOR SUBMISSION OF EOI PRESCRIBED IN KEY DATE SECTION WILL BE REJECTED RETURNED UNOPENED TO THE BIDDERS.....	27
9.10 GMDC'S RIGHTS AND OTHER TERMS	27
9.11 CORRUPT AND FRAUDULENT PRACTICES	28
9.12 CLARIFICATION OF PROPOSAL SUBMITTED FOR EOI.....	29
10. ANNEXURES.....	30

LIST OF ANNEXURES

ANNEXURE 1: COVER LETTER	30
ANNEXURE 2: GENERAL INFORMATION.....	31
ANNEXURE 3: EXPERIENCE STATEMENT	32
ANNEXURE 4: FINANCIAL CAPABILITY STATEMENT	33
ANNEXURE 5: NET WORTH STATEMENT	34
ANNEXURE 6: TECHNOLOGY DESCRIPTION.....	35
ANNEXURE 7: ANTI BLACKLISTING CERTIFICATE.....	37
ANNEXURE 8 SITE FAMILIARISATION VISIT CERTIFICATE	38
ANNEXURE 9 NOTIFICATION BY MoEF.....	39
ANNEXURE 10 SUMMARY OF LAB TEST REPORT OF THE LIGNITE BEFORE BENEFICIATION.....	40

1. BACKGROUND

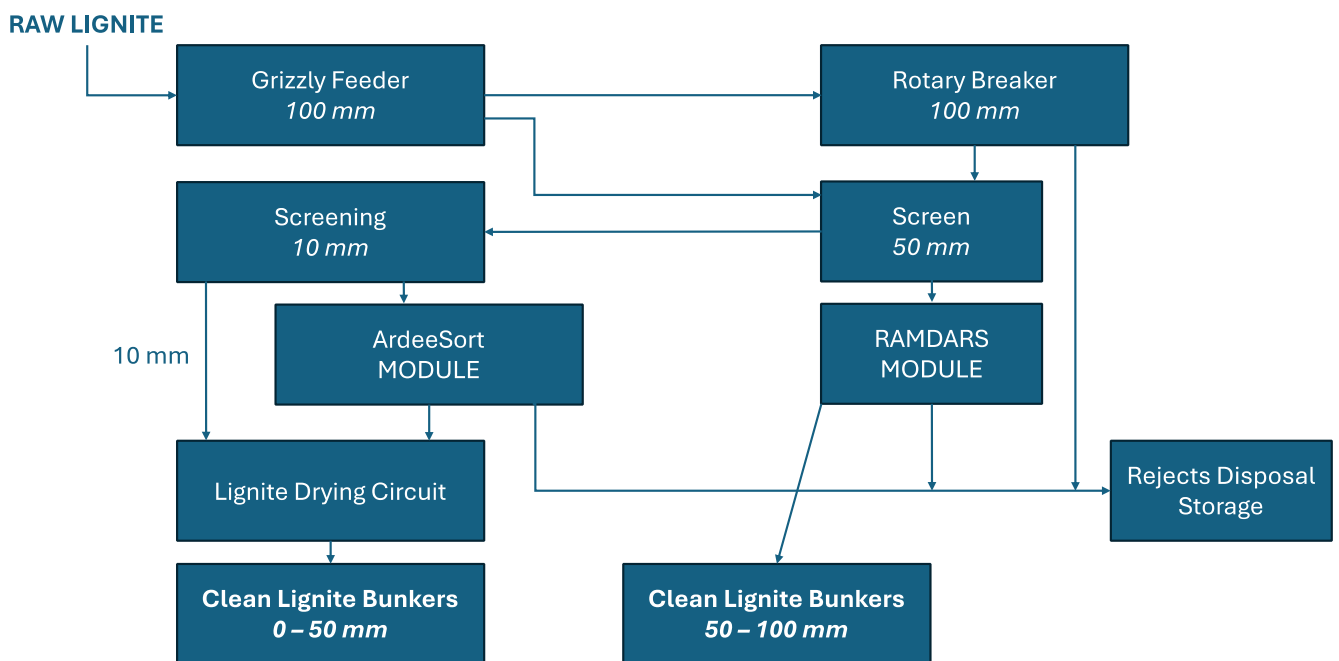
Gujarat Mineral Development Corporation Limited, a Government of Gujarat Enterprise, is a pioneer institution in the field of mining for more than five decades, catering to the needs of the minerals and solid fuel for the industries based in Gujarat. GMDC's mining activities are spread all over Gujarat. It is currently dealing in minerals like Lignite, Bauxite, Fluorspar, Ball Clay, Silica sand, Manganese and Coal. GMDC has also set up a 250 MW lignite based Akrimota Thermal Power Station (ATPS) at Nani Chher in Kutch, Wind power plant of 200 MW at Maliya, Jodiya, Godsar, Bhanvad, Bada, Varvada, Rojmal and Solar Power plant of 5 MW at Panandhro Project.

GMDC has been operating its dry pyrite removal plant at Bhavnagar since 2015 by appointing Contractor on build, own, operate, maintain and transfer basis. The Contract period has ended on 31st December 2024. Therefore, the need for rehabilitation and appointment of a new Contractor through competitive bidding process has arisen. Through this EOI, GMDC invites expression of interest from reputed and qualified Contractors who can assist in rehabilitation of the existing plant, bring in new, preferably dry, technology if so required and thereafter operate and maintain the same on build/refurbish operate and transfer basis.

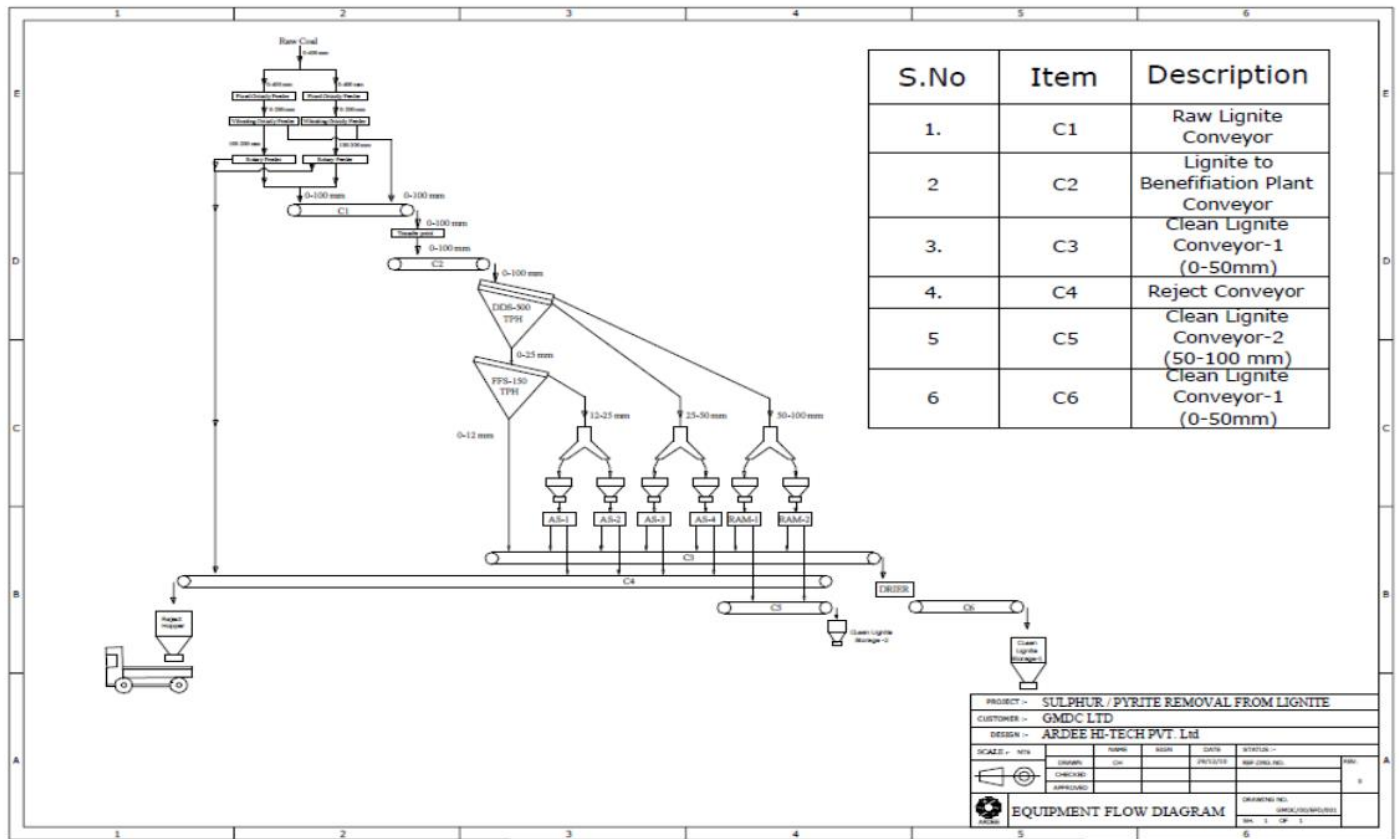
2. Existing pyrite removal plant & process details

GMDC had commissioned pyrite removal plant based on 1st Jan 2015 on Build, own, operate, maintain and transfer basis. Annual design production capacity of the plant is 1.5 million tonnes, and the Peak Operating Capacity is 400 tonnes per hr. The Plant has employed dry coal beneficiation method for removal of pyrite. Existing Lignite beneficiation process is specified hereunder.

Process Flow Incorporating Lignite Drying Circuit



The following is the equipment flow diagram showing the detailed placement of the equipment and machinery.



The design of the plant also supports producing the end product in different fraction sizes. As per the design of the plant, the fraction size of the lignite after pyrite removal is distributed as below.

- 50- 100 mm (30%)
- 10-50 mm (30%)
- <10 mm (40%)

More priority shall be given to fractions ≥ 50 mm. Any fraction below 50 mm shall be considered as wastage. Suitable liquidated damages shall be applicable for the wastage and that shall be specified in the subsequent RFP document.

Key components of existing plant are listed below.

- Microwave generator with power supply unit Magnatron Power.
- Material feeding arrangements with feeder and air lock valve.
- Rotary drum assembly with insulated casing on guide rollers and with material lifting arrangements.
- Hot air generator with Thermic Fluid heating arrangements – diesel/ electricity back-up.

- Dust extraction system with PP cartridge and pulse valve discharge system and suction fans.
- Rotary air lock discharge system
- Electrical panel
- Surge Hopper and discharge system.
- X-Ray separation unit (*not functional as of now*)

As per the lab test of Lignite sample conducted between January 2024 to March 2025, the average quality parameters of lignite samples before the beneficiation process are provided in table below.

	Parameters	Average Value between January 2024 to March 2025	Min Value between January 2024 to March 2025	Max Value between January 2024 to March 2025
Proximate Analysis	SM %	29	16.95	42.4
	IM %	17	7.77	27.56
	VM%	39	34.01	43.41
	Ash%	12	8.1	22.96
	F.C	33	27.12	39.07
	GCV K Cal/kg	5061	4197	5745
	Total Sulphur	3	1.43	6.72
Sulphure Distribution	Sulphatic Sulphur	0.27	0.06	1.38
	Organic Sulphur	0.38	0.12	0.8
	Pyritic Sulphur	2	0.24	5.73

The summary if test reports for raw lignite parameters are attached as annexure 10 this EOI document for the Bidders' reference.

3. Scope of Work

The broad scope is specified hereunder to solicit the comments of EOI participants. Detailed Scope shall be specified in the second stage of RFP process.

The scope of work of the Contractor is broadly divided into following areas:

- (i) Detailed assessment of Plant for checking (evaluating) the technical feasibility of reusability of existing equipment and structure.
- (ii) Rehabilitation of the plant, Testing and commissioning to achieve full operational capability
- (iii) Operation of the plant to meet production and quality performance targets.
- (iv) Maintenance of the plant to ensure reliability and longevity.
- (v) Handover of the Plant to GMDC at the end of Contract Period.

The work includes undertaking technical feasibility of existing plant equipment and structure to establish reusability to the extent possible. GMDC intends Contractor to either use existing technology or bring in new suitable (preferably dry process) technology to achieve annual production capacity of 1.5 million tonne and desired performance/quality parameters as stated in table below.

Output Performance/Quality parameter
Moisture
Volatile matter
Ash
Pyrrated Sulphur
Inherent Sulphur
Fixed Carbon
Lignite GCV
Crusher (Oversize fractions and generation of fines in the crushed product shall not exceed 5.0%.)

The scope of work of the Plant contractor will also include Operation & Maintenance of the Plants for 10 (ten) years after successful Rehabilitation of the Plant. GMDC shall supply raw lignite at plant receiving hopper at its own cost. Upon receipt of raw lignite at plant receiving hopper, the Contractor shall assume the responsibilities of operations and maintenance up to the stage of delivery of the processed/ perform lignite into Transporter/ customer's trucks using the bunker. Broadly the operations shall include receipt of raw lignite of specified quantity at plant receiving hopper, process of raw lignite to meet requisite quality & quantity of perform lignite and delivery of perform lignite to GMDC's customer's truck at designated delivery places which is situated below the bunker and within the plant area.

The ownership of raw lignite, perform lignite, middling and rejects including slurry (if any) shall remain with GMDC.

3.1 Handover of the Plant to the Contractor

- (i) GMDC shall handover to the Successful Bidder, the physical possession of the existing plant free from encumbrances together with the necessary rights on **“As is Where is basis”** within 15 days from the date of signing of Agreement for the purpose of Rehabilitation, Operation and Maintenance basis in accordance with the terms and conditions specified in this EOI and subsequent RFP to issued to the eligible Bidders.
- (ii) The inventory of equipment, spares etc along with the conditions of civil, electrical, mechanical and any other components shall be recorded along with the photographs in joint measurement books.

3.2 Detailed assessment of Plant for checking technical feasibility of reusability of existing equipment / retrofitting/repair/ replacements.

Conduct a detailed diagnostic inspection and thereafter the assessment of the plant's current state. This includes inspecting mechanical, electrical, and civil components to identify deficiencies, safety risks, the components that can be reused/ possibilities of retrofitting/ replacement and areas for improvement.

a. Mechanical Component: The Contractor shall assess all the mechanical components of the plant, including but not limited to the following:

- (i) Conveyer belts with its associated system
- (ii) Crusher
- (iii) Sorting Screen
- (iv) Compressors and receiving tank
- (v) Fire pump house and Fire Hydrant system
- (vi) Weighbridge system
- (vii) Pyrite reject hopper
- (viii) Any other mechanical components necessary for the proper functioning of the plant but not mentioned above
- (ix) Safety System of equipment such as sensors, pull cord, metal detectors etc.

b. Electrical Component: The Contractor shall assess all the electrical components of the plant, including but not limited to the following:

- (i) Transformers and other electricity transmission machinery
- (ii) Switchgears
- (iii) Substation
- (iv) Cables and electricity transmission wires
- (v) Electrical Panels
- (vi) Motors
- (vii) Variable Frequency Drives
- (viii) Lighting

- (ix) Emergency Lighting
 - (x) Instrumentation and Automation Systems including Programmable Logical Control System
 - (xi) Any other electrical components necessary for the proper functioning of the plant but not mentioned above
- c. Civil Component: The Contractor shall assess all the strength of civil/structural components of the plant, including but not limited to the following:
- (i) Structural Audit
 - (ii) Crack Identification
 - (iii) Corrosion Identification and mitigation
 - (iv) Stability of Foundations
 - (v) Drainage and effluent channels if any
 - (vi) Conveyor Supports, Pipelines, Trenches and Tanks
 - (vii) Walkways and Staircases
 - (viii) Ancillary structures
 - (ix) Any other civil structures/components necessary for the proper functioning of the plant but not mentioned above
- d. The Contractor shall assess the adequacy of existing processes and the strength of civil/structural components of the plant, Upon completion of the thorough assessment of the plant, the Contractor shall prepare an assessment report specifying the following;
- Suitable dry coal beneficiation technology which Contractor intends to implement,
 - Items/equipment to be replaced from the existing plant
 - Items which can be repaired and/or retrofitted
 - Items which can be reused,
 - Any Civil Structure
 - Any improvement needed in civil and mechanical structure etc. The report shall also specify the costs of rehabilitation along with the timeline and shall be submitted to GMDC for its review.

The Contractor shall also assess the scope of modernizing the plant through technology upgrades/ changes. Such modernization shall lead to increased throughput, enhanced quality, better safety and ultimately lead to value creation for GMDC. In case, the Contractor intends to propose new technology then it shall undertake demonstration of the operations and performance of new proposed technology. GMDC shall approve the change in technology if found suitable at its own sole discretion.

It is mandatory for the prospective Bidders/ Contractors to undertake site visit prior to raising any pre- EOI queries/Pre-bid Queries and also undertake detailed inspection and assessment of the existing plant at its own costs prior to submission of the price proposal during the second stage of RFP.

3.3 Rehabilitation of the plant, Testing and commissioning

The Contractor shall undertake Rehabilitation of the plant after the assessment of technical feasibility as per the clause 3.2 to achieve full operational capability. The Contractor shall undertake below mentioned scope for the rehabilitation.

- (1) The Contractor shall re design the plant if the major upgrades in process or technology change / replacement of equipment / change in processes are proposed. The Contractor shall also undertake the re-designing and detailed engineering of existing equipment / new equipment (if ascertained necessary) and furnishing of drawings, as applicable.
- (2) Post the redesigning of the plant, the Contractor shall undertake technical services relating to planning, procurement, manufacturing, inspection, supply, installation and commissioning etc.
- (3) Undertake time-bound Project co-ordination relating to revamping the existing Equipment, construction planning and scheduling, erection planning, field construction engineering, trial run demonstration, commissioning and performance guarantee tests.
- (4) Acquire all the necessary tools and tackles necessary for the successful rehabilitation of the Pyrite Removal Plant.
- (5) Ensure that the rehabilitation is carried out in a safe manner wherein, the Contractor shall provide fencing, notice boards and lights to warn others as may be deemed necessary by GMDC/Contractor.
- (6) Carry out required grouting works if so, required on the existing plant structure as well as the rehabilitated components diligently by employing the best safety practices.
- (7) Carry out strengthening of civil and mechanical structure of existing plant If ascertained necessary during the technical assessment.
- (8) Undertake all repair and /or replacement and /or retrofitting of identified mechanical, electrical, civil work components of the Plant to ensure its longevity for a period of 15 years.
- (9) Make provision and ensure availability of all materials, stores, equipment and craft necessary for satisfactory execution and the completion of the work.
- (10) Ensure Timebound completion of rehabilitation work.
- (11) Upon completion of rehabilitation and commissioning of the existing plant, the Contractor shall notify GMDC for the trial run of the Plant. During the trial run, the Contractor shall demonstrate the performance of the plant at rated capacity with desired parameters for a period of 10 days. During this period, the GMDC shall ensure to supply required quantity of raw lignite to the Contractor to carry out the

above tests. No payment will be done to Contractor for demonstration of the performance (Trial Run) of the plant at rated capacity with specified parameters. During the trial run period of 10 days, the Contractor shall ensure/ guarantee the following performance parameters.

- (i) The Plant shall run for a rated capacity and provide the desired throughput as specified in table placed in the third para of this section 3.
- (ii) The quality of the processed / beneficiated lignite should adhere to the desired parameters as specified in table placed in the third para of this section 3.
- (iii) Organic Efficiency should be at least 95% (i.e ratio between the actual yield and theoretical maximum yield)

GMDC shall accept the plant and issue the Commissioning Certificate (the "Commissioning Certificate") if trial run tests provide the performance parameters as specified in sub- clause (11) hereinabove and the Contractor submits all the documents as well as drawings of the Rehabilitated plant.

- (12) GMDC has already obtained EC for the existing plant. All equipment / new technology for the pyrite removal should be in compliance with statutory and regulatory requirements.

3.4 Operation and Maintenance

A. Operations of Plant

- (1) The Contractor shall assume full responsibility for the operation of the plant. The operation and maintenance of the plant must be carried out by the Contractor in a proficient manner following Good Industry Practices and complying with all safety and environment-related requirements.
- (2) The Contractor shall prepare monthly production plan in consultation with GMDC aligning the requirements of annual production target. Such plan shall be signed off for each month 5 days ahead of beginning of that particular month.
- (3) The Contractor shall prepare and submit the operation manuals for the plant O&M for approval. Any modifications made to the Operation Manual hitherto shall be discussed and approved by GMDC before implementation
- (4) The Contractor shall undertake operations in compliance with monthly production plan and operations module.
- (5) The Contractor must be aligned with QA/QC aspect of complete process.
- (6) The Contractor will provide housekeeping facilities for the whole pyrite removal plant area on daily basis.
- (7) The Contractor shall deploy adequate manpower at each section of the plant. Critical manpower must be maintained in each section of the pyrite removal plant to supervise and execute the operation as per the SOP/SMP approved by the competent authority of GMDC.

- (8) The Contractor must comply with the all-statutory requirements like Factory Act, Environmental, and labour Laws under the guidance of GMDC.
- (9) GMDC shall provide water and electricity up to one point in mine. The Contractor shall be required to undertake further provision for enabling the supply up to the plant. Recurring expenditure of water and electricity for the plant shall be borne by the Contractor.
- (10) The Contractor must engage in tie-ups with system/equipment suppliers to ensure support and smooth operation.
- (11) The Contractor must provide beneficiated lignite meeting all the quantity and quality requirements.
- (12) The Contractor shall maintain a daily record of the treated lignite quality and quantity and all operating parameters throughout the O&M period and create a database for the same.
- (13) The Contractor shall maintain and acquire all the necessary tools and tackles required for the complete Operation and Maintenance of the Plant.
- (14) The Contractor's personnel will direct and manage the Sub-Contractor's resources (if any) and owe full responsibility for the operation, maintenance and administration of the Facility.
- (15) The Contractor must fulfil any fabrication needs that may arise as a result of plant operations and ensure the smooth functioning of the Plant.
- (16) The Contractor shall ensure proper and safe handling of all materials in all stages, i.e., Raw Material, Work in Progress Material and Finished Product. Any loss or damage to the same shall be indemnified from the Contractor's remuneration.
- (17) GMDC will conduct daily, weekly, monthly, and quarterly reviews for performance parameters related to Quality, Production, safety and environment compliances and Contractor shall be required to incorporate GMDC's suggestions.
- (18) The Contractor shall be liable to arrange for any spares/support for the equipment they bring to the manufacturing unit.
- (19) GMDC will not be liable for any damages to the Contractor's equipment for whatever reasons.
- (20) The Contractor shall maintain the following records during the period of O&M:
 - i. Repair history of all mechanical, electrical and instrumentation control equipment of the Pyrite Removal Plant and its communication instruments
 - ii. Daily log of operations of all the important equipment
 - iii. Test record of the quality of output lignite
 - iv. Logbook format and the data to be included in the logbook shall be decided during rehabilitation in consultation with GMDC.
 - v. All the records pertaining to the operation and maintenance of pyrite removal plant shall be provided to GMDC as per format decided by engineer in charge

appointed by GDMC on a daily, weekly, fortnightly, monthly, quarterly and yearly basis.

- vi. Standard Operating Procedure for safety parameters and permit to work obtained from GMDC engineer in-charge on time to time basis.
- (21) The Contractor shall be solely responsible for the safety and security of the goods in the store and shall be responsible for any loss or damages in stores for any reason. They shall provide insurance cover against the value of the goods to be stored without any additional cost to GMDC.
- (22) Any feedback or directives given to the Contractor by GMDC authorities pertaining to the manufacturing process will have to be followed by them.
- (23) GMDC may endeavour to provide boarding and lodging facility for personnel deployed by Contractor at request depending upon the availability of accommodation at additional charges. These charges shall be borne by the Contractor along with the electricity and all other expenses which may incur to provide the such facilities.

B. Maintenance of the Plant

- (1) Corrective Maintenance: Respond swiftly to unexpected equipment failures or system malfunctions. Ensure repairs are completed efficiently to restore operations with minimal disruption.
- (2) Preventive Maintenance: Design and execute a proactive maintenance strategy to minimize downtime and extend the lifespan of equipment. This includes routine inspections, lubrication, cleaning, and calibration.
- (3) Periodic routine maintenance of the Pyrite Removal Plant. Such maintenance must ensure adequate cleanliness, illumination and structural safety. In addition to this, the general hygienic standards must be maintained.
- (4) The Contractor shall be required to acquire all tools & tackles, power tools, and measuring & testing equipment for each maintenance discipline.
- (5) The manpower for maintenance must be qualified and competent to carry out the required processes. The Contractor will be required to arrange additional manpower in case of planned shutdown maintenance which shall encompass the Process, Mechanical, and Electrical & Instrumentation sections. The planning and timeline for the same shall be devised after consultation with GMDC.
- (6) All records shall be maintained as per the requirement of ISO certifications obtained by GMDC and DGMS.

C. Safety

- (1) The Contractor will ensure proper safety norms and provide all necessary safety equipment to the personnel they have deployed while GMDC will provide all necessary safety equipment to GMDC's Staff when they undertake plant visit.

- (2) The Contractor shall have to provide a suitable, reliable and adequate firefighting system having fire-fighting hydrant points at strategic locations on all the floors as per BIS regulations and relevant norms. In addition to this, fire extinguishers of different types suitable for industrial use shall be provided at all the required vulnerable locations.
- (3) Safety Reporting: Brief reports of all accidents and hazardous incidents including descriptions of cause, extent of injuries, action taken, and precautions instituted to prevent repetition of such events.
- (4) GMDC shall not be liable in any manner whatsoever for any injuries to or death of any of Contractor's personnel by any accidents or how so ever.
- (5) GMDC maintains and follows global standards and practices as an ISO 9001, ISO 14001, and OHSAS 18001 certified company. The Contractor shall maintain the required documents and records to comply with the above standards on a routine basis during the Contract Period.

D. Compliance with Environment and labour related regulations

- (1) The Contractor will maintain effluent & pollutant levels as per the statutory norms. The Contractor shall submit all details of Ambient Air Quality as required by GPCB & CPCB and as per statutory norms. GMDC will obtain all necessary clearances and consents to operate the plant
- (2) The Contractor shall comply with the requirements of Pyrate treatment plant as per the Environment Clearance modification issued by Ministry of Environment and Forest, Govt of India to Surkha North Mines dated 18/5/2022. The Notification is placed as annexure 9 to the Tender.
- (3) The Contractor must get issued a labour license covering all types of Labor that it may source and comply with all statutory provisions of the Central or Gujarat State Labor Laws.

3.5 Tentative Timeline

- (1) The Contract Period shall be a period between the date of signing of the Agreement and end date of the completion of Operation and Maintenance Period.
- (2) Tentative timeline for Rehabilitation of the Plant and O&M of the Plant is specified in the table below.

Scope	Tentative Time to Completion
Revamping/Renovation of Pyrite Removal Plant	6 Months
Operation and Maintenance Period	10 Years post Commissioning of the Plant after Revamping/Renovation of

	the Plant.
--	------------

3.6 Takeover of the Plant by GMDC

GMDC shall takeover the plant upon completion of the Contract period or in the event of early termination of the contract in sound working condition, meeting all the output parameters specified in the EOI and subsequent RFP. The effective remaining life of the plant shall be minimum 15 year. The Contractor shall provide adequate inventory of the equipment/machinery spare parts to operate the plan for the effective life of the plant remained at the time of takeover of the Plant.

4. Tentative Project Structure and GMDC Assistance

4.1 Tentative Project Structure and Roles & Responsibilities

GMDC intends to appoint qualified and experienced Contractors who can make investment and assist GMDC in rehabilitation of the existing plant, bring in new technology if so required and thereafter operate and maintain the same on build-operate-transfer basis. GMDC shall provide commitment for monthly uplift/ of minimum quantities of processed lignite/ perform lignite. GMDC shall make payment for the processed lignite/performance lignite in terms of Rs per ton basis.

Summary of Roles and Responsibilities envisaged at this stage is stipulated in table below.

Sr. No.	Description	GMDC	Contractor
1.	Investment		The Contractor to invest
2.	Electricity	GMDC shall provide the connection at one location in mine area.	Recurring Cost of electricity to be borne by the Contractor
3.	Water	GMDC shall provide the connection at one location in mine area	Recurring Cost of water to be borne by the Contractor
4.	Land	GMDC to provide the land limited to the current battery area of the plant during the contract period.	
5.	Raw Material – Lignite	GMDC to provide the raw material (Lignite) at lignite receiving hopper of the plant	
6.	Machinery, technology		The Contractor to arrange for machinery
7.	Rehabilitation		The Contractor to undertake rehabilitation work for the plant as per scope of work
8.	O&M		The Contractor to undertake O&M of the plant as per scope of work
9.	Compliance		The Contractor to ensure adherence to all requisite compliances
10.	Staffing		The Contractor to deploy skilled staff for complete O&M of the Pyrite Removal Plant
11.	Training	GMDC shall provide training related to statutory norms and compliances as per The Mines Act 1952 and any amendments thereto at free	The Contractor to conduct timely training for its staff and supervisory staff of GMDC regarding the O&M of the plant at free

		of cost	of cost.
12.	Housekeeping		The Contractor shall undertake the complete housekeeping of the plant area
13.	Effluents and Pollutants	Obtaining clearances and consent to Operate	<p>Maintain effluents & pollutants levels as per statutory norms. The Contractor shall provide all the required details in the prescribed formats of GPCB and CPCB to GMDC in timely manner.</p> <p>Disposal of the tailings and other waste materials shall be carried out as per agreed / prescribed procedures.</p>
14.	Plant Personnel Insurance		<p>The contractor to insure all persons working in Pyrite Removal Plant at Bhavnagar on their behalf and to ensure that the manpower of all their sub-Contractors are also covered under insurance as per statutory norms.</p> <p>The Contractor shall submit the copy of the insurance policy and premium payment receipt to GMDC.</p>
15.	Lodging and Boarding	GMDC will provide boarding and lodging facility at the request of Contractor depending upon the availability of accommodation at additional charges.	The lodging and boarding charges of personnel deployed by Contractor shall be borne by the Contractor. Electricity charges as well as other expenses pertaining to lodging will be borne by the Contractor.
16.	Safety Equipment		The Contractor will ensure proper safety norms and provide all necessary safety equipment to the personnel they have deployed in Lignite project

			at Bhavnagar.
--	--	--	---------------

4.2 GMDC assistance

GMDC will assist in the following:

- Supply of power at a single point of the proposed plant site on chargeable basis (Sub station of 500 KVA is available).
- Land for disposal of rejected lignite and other impurities.
- Assured supply of raw lignite.
- Assured receipt of performance lignite.

5. Description of Bid Process

GMDC intends to appoint a Contractor who will assist GMDC in Rehabilitation, operation and maintenance of existing pyrite removal plant on Build, Operate and Transfer (BOT) basis.

For the purpose of selection of the right Contractor, GMDC is adopting a two-stage selection process comprising an unpriced EOI Stage and a priced RFP stage. During this first stage of Expression of Interest (EOI), Bidder having requisite qualification for undertaking the Scope of Work shall be shortlisted based on qualification criteria specified in section 6 of this EOI. Shortlisted bidders based on EOI stage, shall be invited for Request for Proposal (RFP) stage.

The RFP stage will provide a detailed scope of work and request priced proposals against this scope. Only the short-listed Bidders shall be invited to submit their Technical Proposal and Price/Commercial Proposals. The RFP proposals shall be evaluated finally to select the Contractor.

GMDC has adopted the two-stage bidding process since intends to understand the following through the first stage of the EOI:

- a) Contractor landscape – having experience and financial capacity to undertake this project.
- b) Type of Technology offered by prospective Contractors including its uniqueness and having capability of proposed technology in achieving desired production capacity and adherence to desired quality parameters.
- c) Typical time frame required for the Rehabilitation of the plant.
- d) Broad magnitude of the Costs associated with the Rehabilitation of the plant

At the end of the exercise, GMDC intends to shortlist qualified Contractors who have the capability and interest to undertake this project on BOT basis for a predefined contract period.

This EOI document provides a broad scope of work and other requirements of GMDC from the eventually selected partners. Respondents to the EOI are required to provide the following

1. Comments on the Scope Framework.
2. Comments on roles and responsibilities and the Business arrangement.

3. Support Required from GMDC.
4. Implementation timeline and Phasing.
5. Broad magnitude of the Costs associated with the Rehabilitation of the plants.

Feedback received from the above shall be used as input to finalise the detailed scope, system functionalities and components, roles and responsibilities, and terms and conditions of the project for RFP stage. No suggestions would however be binding.

EOI Participants are requested to suggest applicable technologies, risks, challenges, and requirements for tests as may be required.

6. Qualification Criteria and Evaluation Process

6.1 Qualification Criteria

The Bidder must meet the Qualification Criteria specified hereunder in order to qualify for the RFP stage.

A. Minimum Qualification Criteria

- 1) The Bidder must be having experience in at least one project of coal or lignite beneficiation in terms of design, installation, commissioning and operation for at least one year either in India or globally. The Bidder should submit the relevant contract/work order and client completion/ performance certificate as evidence.
- 2) The Bidder should have average annual audited turnover of minimum Rs 20 crore in the any three financial years out of the last five years. The Bidder should submit the CA certificate and audited financial statements as evidence.
- 3) The Bidder should have a Networth of at least Rs 2.5 cr as on 31st March, 2024. The Bidder should submit a CA certificate as evidence.
- 4) The Bidder should not be blacklisted by any Government Agency in India or abroad. The Bidder should submit an anti-blacklisting affidavit as per the format provided in **Annexure 7**.
- 5) The bidder shall have visited the site/plant and shall have obtained the site familiarisation certificate from the competent authority as per the format provided in the Annexure 8.

B. Assessment of proposed technology interventions and uniqueness of the technical proposal

Uniqueness of the technical proposal shall be evaluated based on below mentioned criteria

- 1) Detailed description of lignite beneficiation technology, its working principles, key features, and functionalities.
- 2) The alignment/ convergence of existing plant technology with the new proposed technology.
- 3) Magnitude of reusability of existing equipment.
- 4) Life & Performance of proposed technology interventions.
- 5) Timeline for Rehabilitation of the project.
- 6) Broad magnitude of capital expenditure and operating expenditure.

- 7) Case studies elaborating existing operational plant/s with proposed technology and their performance parameters

The Bidders shall have to submit description on above criteria as part of **Annexure 6**

The Bidders meeting the qualification criteria specified in section **6.1 A** shall be further evaluated for assessment of proposed technology interventions and uniqueness of the technical proposal as per the clause **6.1 B**. GMDC may its sole discretion invite Bidders for making presentation on its technical proposal as per the criteria specified in **clause 6.1 B**.

6.2 EOI Opening and Evaluation Process

- a) GMDC will open the EOI on the date, time and place specified in Key Dates Section.
- b) GMDC shall verify whether EOI submitted by Bidder are responsive with regards to timely submission, format of submission (as per EOI) and mode of submission (i.e. submitted through either RPAD or Speed Post or courier or Hand delivery). The proposal of Bidders determined to be non-responsive shall be summarily rejected and not considered for further evaluation.
- c) Assessment of Minimum Qualification Criteria of only responsive EOI shall be carried out.
- d) The Bidders meeting the qualification criteria specified in section **6.1 A** shall be further evaluated for assessment of proposed technology interventions and uniqueness of the technical proposal as per the clause **6.1 B**. GMDC may its sole discretion invite Bidders for making presentation on its technical proposal as per the criteria specified in **clause 6.1 B**.
- e) The Bidders who's EOI are determined to be responsive and meeting Qualification Criteria shall be shortlisted for next stage of RFP (the "Shortlisted Bidders"). RFP shall be issued to only shortlisted Bidders.

7. EOI SUBMISSION

The proposal for Expression of Interest (EOI) with Qualification details, any other details and Annexure, Suggestions/inputs as specified in **section 10** shall be submitted in a single copy format in sealed envelope to GMDC office at address given below.

To

General Manager (CPD)

Gujarat Mineral Development Corporation Ltd

Khanij Bhavan,

132-Ring Road, Gujarat University Ground, Vastrapur,

Ahmedabad- 380052

Gujarat.

The sealed Envelope shall bear the following identification:

- Notice No (if any):
- **Name of the Work:**
- Indicate the name, address and contact details of the Bidder.

Proposal for EOI and other details shall be submitted at above specified address and submission format on or before the Due Date and time for EOI submission specified in Key Dates section. The EOI shall be submitted through RPAD /Speed Post/Courier/Han delivery only. Late proposal shall not be accepted and summarily rejected.

8. KEY DATES

Dates for Downloading of EOI, Submission Date and date of Meeting with prospective Bidder is specified in table below.

Event	Date and Time
EOI Downloading	EOI Document may be downloaded from website https://www.gmdcltd.com/current-tenders/ between 3/5/2025 to 26/5/2025 up to 4:00 PM.
Meeting with Prospective Bidder	Meeting with Prospective Bidder shall be held on 12/5/2025 at 12:00 PM at following Address; GMDC Limited, Khanij Bhavan, 132 Feet Ring Road, Near Gujarat University Ground, Vastrapur, Ahmedabad, Gujarat 380052
Queries by Email	Queries if any may be sent by email to gm.cpd.co@gmdcltd.com by 8/5/2025 up to 3:00 PM .
Due Date for EOI Submission (i.e. Last Date for EOI submission)	Complete EOI in sealed envelope with relevant details may be submitted through Speed Post or RPAD only by 26/5/2025 up to 4:00 PM at following address; To, GM (CPD) Gujarat Mineral Development Corporation Ltd Khanij Bhavan, 132-Ring Road, Gujarat University Ground, Vastrapur, Ahmedabad- 380052 Gujarat.
Date of Opening of EOI	The EOI may be opened on 26/5/2025 at 5:00 Pm (Time) in the office of GM (CPD), GMDC Ltd.

9. Other Instructions

9.1 EOI Validity period

The EOI validity period shall be 120 days from the date of submission of EOI.

9.2 Extension of Period of EOI Validity

In exceptional circumstances, the GMDC may solicit the Bidder's consent for an extension of the period of EOI validity. Any such request by the GMDC and the response thereto shall be made in writing and such extension of Bid validity period by the Bidder should be unconditional. A Bidder may refuse GMDC's request for such extension. A Bidder accepting the request of GMDC shall not be permitted to modify its Bid.

9.3 Modification and Withdrawal of EOI

No bid may be withdrawn in the interval between the deadline for Due Date of EOI Submission and the expiration of the EOI Validity Period.

9.4 Disqualification

Even though the Bidders may meet the Qualification criteria, they are subject to be disqualification for any of the following reasons:

- a) Misleading or false representation in the forms, statements and attachments submitted under this EOI.
- b) Has been identified by the GMDC as poor performer in implementation of ongoing GMDC's/ or other Government department or Local Body's works.
- c) Blacklisted by any Government agency/Central Government/State Government/Local Self Government Body.
- d) Record of poor performance such as abandoning the work, rescinding of contract for which the reasons are attributable to the non-performance of the Bidder, consistent history of litigation awarded against the applicant or financial failure due to bankruptcy.

9.5 One EOI per Bidder

Each Bidder shall submit only one EOI. A Bidder who submits more than one EOI under this EOI will be disqualified.

9.6 Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of his EOI and the GMDC will in no case be responsible or liable for those costs.

9.7 Site Visit

The Bidder is mandated conduct a visit and examine the project site and obtain all information before pre-bid stage that may be necessary for preparing the EOI for itself on its own responsibility. GMDC shall facilitate such visit to Bhavnagar Plant site. The Bidder will obtain a site visit certificate as per the format provided in the Annexure 8 of the Tender. The costs of visiting the site shall be at the Bidder's own expense. No reimbursement shall be provided.

9.8 Amendment to EOI document

- a) Before the deadline for submission of EOI, the GMDC may modify the EOI document by using addenda/Corrigendum.
- b) Any addendum thus issued shall be part of the bidding documents. The addendums shall be posted on <http://www.gmdcltd.com>. Bidders are required to regularly check the website for such addendum.
- c) To give prospective Bidders reasonable time in which to take an addendum into account in preparing their EOIs, the GMDC may its sole discretion, extend as necessary the due date for submission of EOI.

9.9 Late Proposal for EOI

Any proposal for EOI received by the GMDC after the due date and time for submission of EOI prescribed in Key Date Section will be rejected returned unopened to the Bidders.

9.10 GMDC's Rights and Other Terms

- a) GMDC's decision for selection or rejection of the EOIs shall be final and binding to all.
- b) Conditional EOI shall not be accepted and liable for rejection.
- c) GMDC's decision for Shortlisting or rejection of the Bidder shall be final and binding to all.

- d) If GMDC is convinced that the Bidder has resorted to material misrepresentation or provided fraudulent information / statement, the said Bidder will be liable for disqualification / rejection at any stage.
- e) GMDC reserves sole and absolute discretion and right to annul the bidding process at any stage and not proceed for subsequent Request For Proposal (RFP) if GMDC finds it appropriate.

9.11 Corrupt and Fraudulent Practices

- a) The GMDC requires that Bidders under this EOI, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the GMDC defines, for the purpose of these provisions, the terms set forth below as follows:
 - i. **corrupt practice:** means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - ii. **fraudulent practice** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the GMDC and includes collusive practice among Bidders (prior to or after bid submission) designed to establish offer/proposal at artificial non-competitive levels and to deprive the GMDC of the benefits of free and open competition.
 - iii. Will reject a proposal for award of work if GMDC determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
 - iv. Will declare a Bidder ineligible, either indefinitely or for a stated period of time, to be awarded a GMDC contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.
- b) The GMDC will reject a proposal for award if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question. The GMDC will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by GMDC if it at any time

determines that the firm has engaged in corrupt or fraudulent practices in competing for the contract, or during execution.

9.12 Clarification of Proposal Submitted for EOI

- a) To assist in the examination, evaluation and comparison of EOIs, the GMDC may, at his discretion, ask any Bidder for authentication the correctness of the information/ details furnished by him in his bid or request for further clarifications/information as may be required for Evaluation. Such request by the GMDC and the response by bidder shall be in writing.
- b) Subject to Sub Clause (a) above, no Bidders shall contact the GMDC on any matter relating to his EOI from the time of EOI opening to the time of short listing.
- c) Any effort by the Bidder to influence the GMDC in the GMDC's bid evaluation, bid comparison or contract award decisions may result in the rejection of his bid.

GMDC reserves its right to amend, modify, cancel and or otherwise annul the EOI and or any of its contents at any time without assigning any reason whatsoever.

10. Annexures

Annexure 1: Cover Letter

{On Bidder's letterhead}

Dated:

To,

The GM (CPD)
Gujarat Mineral Development Corporation Ltd
Khanij Bhavan,
132-Ring Road, Gujarat University Ground, Vastrapur,
Ahmedabad- 380052

Subject: Submission of Expression of Interest for EOI no_____

Dear Sir,

With respect to above mentioned subject, we are pleased to submit the EOI. Our EOI proposal is subject to all terms and conditions contained in the EOI document. I have not made any changes either directly or indirectly in terms and conditions of the EOI. In additions to terms and conditions of this EOI, we are not given any written or oral promise from the GMDC.

We are fully aware that the GMDC has right to accept any EOI or reject any/all EOI without giving any reason and upon rejection of EOI, we shall not be entitled to any right with related to the GMDC.

We have thoroughly read and understood all the terms and conditions of this EOI and we promise to observe all the terms and conditions of this EOI. We have signed and sealed each and every page of this EOI document.

(Signature and stamp of the Bidder with date)

Annexure 2: General Information

{On Bidder's letterhead}

(1) Bidders name and contact details.

Name of the Bidder Organization:

Nature of Entity (Banks/Financial Institution):

Address of Registered Office:

Phone:

Fax:

E-mail:

Main Line of Business with experience:

(2) Copy of the Registration of the Bidder (Certificate of Incorporation, Memorandum of Article, Article of Association, Service Tax Registration copy, Shops and Establishment Dept. Certificate, etc. as may be applicable) (to be attached separately).

Annexure 3: Experience Statement

- A. Whether the Bidder has relevant project experience in at least one project of coal or lignite beneficiation in terms of design, installation, commissioning and operation for at least one year either in India or globally. Provide followings
 - 1) Provide relevant contract/work order and client completion/ performance certificate as evidences of such experience.
- B. Any other Documents/information demonstrating Bidder's capability

Annexure 4: Financial Capability Statement

{On Statutory Auditor's letterhead}

I hereby declare that I have scrutinized and audited the financial statement of M/s_____. The Turnover of the Bidder (name of the Bidder) as on 31st March, 2024 as per Audited statement is as follows;

Years	Turnover (in Crore)
2019-20	
2020-21	
2021-22	
2022-23	
2023-24	

(Signed and Sealed by the statutory auditor)

ENCL.

- (1) Copy of latest available Audited annual reports for last three years as applicable or as per Financial Year/Calendar Year followed by the Bidder firm.

Annexure 5: Net worth Statement

{On Statutory Auditor's letterhead}

I hereby declare that I have scrutinized and audited the financial statement of M/s_____. The Networth of the Bidder (name of the Bidder) as on 31st March, 2024 as per Audited statement is as follows;

Years	Networth (in Crore)
2023-24	

(Signed and Sealed by the statutory auditor)

ENCL.

- (2) Copy of latest available Audited annual reports for last three years as applicable or as per Financial Year/Calendar Year followed by the Bidder firm.

Annexure 6: Technology Description

(Assessment of proposed technology interventions and uniqueness of the technical proposal)

A. Technology Overview (Provide a comprehensive overview of the technology)

- Detailed description of the technology and its working principle.
- Key features and functionalities.
- Operating principles and underlying technologies.
- Diagrams, schematics, or flowcharts to illustrate the technology.
- Any unique selling propositions or competitive advantages

B. Life & Performance (Provide the technology's lifespan and expected performance)

- Estimated lifespan of the technology (e.g., years, operating hours).
- Factors influencing the technology's lifespan (e.g., wear and tear, maintenance, environmental conditions).
- Expected performance metrics (e.g., efficiency, throughput, accuracy).
- Data on expected maintenance intervals, replacement parts, and potential upgrades.
- Historical performance data or case studies (if available).
- Tentative/Indicative output interms of following performance parameter

Parameter	Output Value
Moisture	
Volatile matter	
Ash	
Pyrated Sulphur	
Inherent Sulphur	
Fixed Carbon	
Lignite GCV	
Crusher (Oversize fractions and generation of fines in the crushed product shall not exceed 5.0%.)	

C. Tentative Cost (Capex + Opex) (Provide a detailed cost breakdown of the technology.)

Capital Expenditure (Capex):

- Equipment costs
- Installation costs
- Infrastructure costs (e.g., foundations, utilities)
- Transportation and logistics
- Project management and supervision

Operating Expenses (Opex):

- Maintenance costs (preventive and corrective)
- Energy consumption costs
- Labor costs (operation and maintenance)
- Consumables (e.g., spare parts, lubricants)

- Environmental compliance costs

D. Manpower Required (Provide the personnel needed for operation and maintenance)

- Number of personnel required for each role (e.g., operators, technicians, engineers).
- Job descriptions and qualifications for each role.
- Training requirements for personnel.
- Staffing plan, including potential staffing models and shift arrangements.

E. Reusable components from existing plant

- Provide a comprehensive list of all potential reusable components and categorize components based on their type, condition, and potential for reuse, Include photographs or drawings of each component.
- Case studies elaborating existing operational plant with proposed technology and performance parameters.

Annexure 7: Anti Blacklisting Certificate

(Format of self-certificate stating that the Entity/Promoter/s / Director/s of Entity are not blacklisted (On a Stamp Paper of relevant value)

**Anti-Blacklisting Certificate
(On Rs. 300 Stamp Paper)**

M/s. (Name of the Bidder), (the names and addresses of the registered office) hereby certify and confirm that we or any of our promoter/s / director/s or our firm are not barred by Government of Gujarat (GoG) / any other entity of GoG or blacklisted by any state government or central government / department / Local Government agency in India or similar agencies from foreign countries from Participating in Project/s, for last one year from _____(Bid Due Date)

We further confirm that we are aware that our application for the captioned Project would be liable for rejection in case any material misrepresentation is made or discovered with regard to the requirements of this EOI at any stage of the Bidding Process or thereafter during the agreement period. Dated this Day of, (Year).

Annexure 8 Site Familiarisation Visit Certificate

(Self-attested, and to be certified by Authorised official at Site,)

It is certified that., I, Mr./ Mrs. _____ *[Insert the name of the Bidder's representative]* of _____ *[Insert the name of the Bidder]* has visited the site in connection with the Tender No. _____ *[Insert the tender no.]* for the _____ *[Insert the name of the Project]* and have understood the site conditions and ground level situation required for the Bidding process.

Dated this _____ day of _____ 202__.

Signature
(Company Seal)

In the capacity of duly authorized to sign bids for and on behalf of:

Certified by:

Signature
Name

Designation:

Annexure 9 Notification by MoEF

No.J-11015/234/2006-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O.Complex,
New Delhi -110510.

Dated: 18th May 2012

To
Chief General Manager,
M/s Gujarat Mineral Development Corp. Ltd.,
Khanij Bhawan, 6th Floor, A Tower, Ring Road
Near University Ground, Vastrapur,
AHMEDABAD – 380 052.

MODIFICATION OF EC

Sub: Installation of Pyrite Treatment Plant in Surkha (North) Lignite Mine Project (3 MTPA) of M/s Gujarat Mineral Development Corporation Ltd., located in village Surkha, Tehsil Ghogha, District Bhavnagar, Gujarat- Modification of EC granted on dated 07.05.2007 – reg.

Sir,

This is with reference to your letter No. GMDC/Env/689/2010-11/21801 dated 03.01.2011 and letter dated 18.01.2011, 18.05.2011, 09.09.2011 and 04.01.2012 regarding environmental clearance (EC) granted to Surkha (North) Lignite Mine Project of 3 MTPA capacity on 07.05.2007. It is noted that pyrite has been encountered during mining of the lignite project, which requires removal and to be used in an environmentally friendly manner. The proposal for removal of pyrite through installation of a pyrite treatment plant has been considered by this Ministry and the EC letter stands modified by incorporation of the following additional conditions:

- (i) No manual separation of the pyrite shall be permitted when X-ray technology is in use.
- (ii) No wastes from the separation process or wastes generated from the mine shall be disposed/enter the marshy areas and creeks or other surface water bodies.
- (iii) The radiation levels shall be monitored for the level of radioactive exposure by competent authorised/Certified persons who are well trained.
- (iv) The proponent may also find the applicability of the technology adopted in any other project elsewhere in the world and report to MOEF.
- (v) Manual handling shall be avoided at all circumstances.
- (vi) The pyrite waste shall be stored in concrete structures and dispatched by mechanically covered trucks to end users.
- (vii) Periodic audit and inspections by BARC experts on the operation and maintenance so that there are no health hazards.

In addition, in general conditions No (iii) and (iv) of the EC letter, the words SPM is replaced with PM₁₀ and RPM is replaced with PM_{2.5}.

All other conditions remain the same.

Yours faithfully,

(Dr.T.Chandini)
Director

Copy to:

1. Secretary, Ministry of Coal, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Rajasthan, Secretariat, Gandhinagar.
3. Chief Conservator of Forests, Regional office (WZ), Ministry of Environment & Forests, Bhopal.
4. Chairman, Gujarat State Pollution Control Board, Sector 10-A, Gandhinagar – 382043.

Annexure 10 Summary of Lab Test Report of the lignite before beneficiation

Lignite Sample analysis by Griffith India pvt Ltd -Gandhidham, From Jan- 2024. To Mar-2025.											
SAMPLE NUMBER	SAMPLE DATE	Proximate Analysis							Sulphure Distribution		
		SM %	IM %	VM%	Ash%	F.C	GCV K Cal/kg	Total Sulphur	Sulphatic Sulphur	Organic Sulphur	Pyritic Sulphur
BVN-3542/BA	09-01-2024	27.57	20.83	39.03	9.53	30.61	4795	2.22	0.22	0.33	1.67
BVN-3543/BB	09-01-2024	30.54	16.47	40.25	10.50	32.78	5135	2.04	0.20	0.31	1.50
BVN-3544/BA	09-01-2024	24.85	21.48	37.32	10.05	31.15	4920	2.34	0.23	0.35	1.76
BVN-3545/BB	09-01-2024	28.34	20.21	39.15	9.30	31.34	4930	1.98	0.20	0.30	1.48
BVN-3594/BA	01-02-2024	34.11	25.19	34.01	9.71	31.09	4553	2.08	0.14	0.31	1.63
BVN-3595/BB	01-02-2024	33.49	18.63	35.92	13.86	31.59	4714	2.89	0.14	0.27	2.48
BVN-3729/BA	23-04-2024	23.64	12.80	42.08	8.99	36.13	5499	2.02	0.16	0.36	1.50
BVN-3730/BB	23-04-2024	20.66	11.39	40.66	15.91	32.04	5150	3.52	0.24	0.67	2.61
BHA/BA/A/160	28-05-2024	33.24	18.63	39.17	12.28	29.92	5068	2.40	0.18	0.51	2.25
BHA/BB/A/161	28-05-2024	32.96	18.81	38.14	11.15	31.90	5078	2.39	0.15	0.25	1.99
BHA/BA/A/242	13-06-2024	41.40	15.52	36.22	15.09	33.17	4850	4.57	0.24	0.48	3.85
BHA/BB/A/243	13-06-2024	39.85	15.96	39.06	11.49	33.49	5113	2.02	0.12	0.16	1.74
BHA/BA/B/258	26-06-2024	25.10	19.45	39.92	10.14	30.49	4895	3.47	0.19	0.47	2.81
BHA/BB/B/259	26-06-2024	23.96	18.67	38.50	11.72	31.11	4940	3.34	0.17	0.49	2.68
BHA/BA/T/B/311	15-07-2024	33.13	19.91	35.47	14.26	30.36	4537	3.77	0.19	0.39	3.19
BHA/BB/B/312	15-07-2024	32.91	19.46	37.54	14.13	28.87	4827	2.19	0.12	0.35	1.72
BHA/BA/T/A/357	29-07-2024	22.24	24.81	37.78	9.05	28.36	4620	1.43	0.06	0.19	1.16
BHA/BB/A/358	29-07-2024	22.76	23.21	37.33	10.69	28.77	4540	1.55	0.09	0.22	1.24
BHA/BA/T/A/394	09-08-2024	17.36	18.29	37.57	12.22	31.92	4907	2.19	0.24	0.54	1.41
BHA/BB/A/395	09-08-2024	16.95	17.50	37.29	12.16	33.05	4938	2.79	0.20	0.52	2.07
BHA/BA/T/A/427	21-08-2024	30.21	27.56	35.26	10.06	27.12	4197	2.27	0.11	0.18	1.98
BHA/BB/A/429	21-08-2024	30.37	24.28	35.77	11.61	28.34	4483	2.23	0.10	0.20	1.93
BHA/BA/T/A/470	09-09-2024	29.69	21.84	36.91	11.29	29.96	4793	2.01	0.16	0.22	1.63
BHA/BB/A/471	09-09-2024	23.50	23.95	36.57	9.52	29.96	4817	1.73	0.13	0.12	1.48
BHA/BA/T/B/570	28-09-2024	35.64	15.35	37.92	14.62	32.11	4828	3.81	0.21	0.49	3.11
BHA/BB/B/571	28-09-2024	35.09	18.17	36.00	12.28	33.55	4952	3.43	0.16	0.40	2.87
BHA/BA/A/620	09-10-2024	39.76	14.69	40.97	11.19	33.15	5329	2.20	0.17	0.42	1.61

BHA/BB/A/621	09-10-2024	40.46	14.60	40.78	11.93	32.69	5275	1.85	0.15	0.33	1.37
BHA/BA/A/716	25-10-2024	31.56	23.58	36.51	8.59	31.32	4839	1.79	0.14	0.32	1.33
BHA/BB/A/717	25-10-2024	30.26	21.36	37.67	9.21	31.76	4893	1.74	0.14	0.40	1.20
BHA/BA/B/810	12-11-2024	41.11	11.76	42.90	10.17	35.17	5694	1.97	1.38	0.30	0.32
BHA/BB/B/811	12-11-2024	38.71	12.13	41.62	11.15	35.10	5496	1.77	1.24	0.27	0.24
BHA/BA/B/900	25-11-2024	25.60	11.89	39.13	16.85	32.13	4957	2.01	0.34	0.14	1.53
BHA/BB/B/901	25-11-2024	23.58	12.93	40.08	12.01	34.98	5394	3.30	0.66	0.30	2.34
BHA/EAST/01/BA	26-11-2024	23.20	14.55	38.36	13.07	34.02	5402	3.51	0.35	0.53	2.63
BHA/NORTH/02/BA	26-11-2024	23.81	11.78	40.70	14.89	32.63	5362	4.02	0.60	0.40	3.02
BHA/WEST/03/BA	26-11-2024	24.34	12.81	40.59	11.79	34.81	5399	3.12	0.47	0.31	2.34
BHA/SOUTH/04/BA	26-11-2024	22.19	11.80	37.03	22.96	28.21	4475	3.25	0.59	0.28	2.34
BHA/FEED/BA/A/1032	12-12-2024	29.62	8.28	38.14	17.49	36.09	5254	6.72	0.36	0.63	5.73
BHA/BUNKER/BB/A/1033	12-12-2024	26.28	8.91	40.05	17.45	33.59	5232	5.70	0.28	0.50	4.92
BHA/BA/A-83 (FEED)	30-12-2024	22.75	16.75	37.08	10.68	35.49	4998	2.18	0.14	0.21	1.73
BHA/BB/A/84 (BUNKER)	30-12-2024	22.01	14.39	39.14	14.38	32.09	5013	3.45	0.17	0.55	2.73
BHA/BA/A/139	08-01-2025	28.13	22.20	35.19	14.22	28.39	4576	4.71	0.61	0.80	3.30
BHA/BB/A/140	08-01-2025	31.14	23.09	35.77	12.66	28.28	4560	4.71	0.61	0.71	3.39
BHA/BA/A/271-1	27-01-2025	22.8	13.23	38.68	12.93	35.16	5232	4.22	0.20	0.66	3.36
BHA/BB/A/272-2	27-01-2025	21.62	13.51	39.51	12.31	34.67	5254	3.67	0.16	0.50	3.01
BHA/BA/A/323-1	03-02-2025	31.75	11.62	43.41	8.57	36.40	5673	2.37	0.14	0.52	1.71
BHA/BB/A/323-2	03-02-2025	29.49	12.07	42.90	9.01	36.02	5600	2.30	0.11	0.54	1.65
BHA/BA/A/475-1	22-02-2025	23.11	12.51	42.50	8.11	36.88	5595	2.20	0.33	0.22	1.65
BHA/BB/A/477-2	22-02-2025	20.19	12.60	41.00	9.08	37.32	5466	2.43	0.44	0.24	1.75
BHA/BA/A/559-1	07-03-2025	36.12	15.01	39.94	8.10	36.95	5435	1.68	0.20	0.24	1.24
BHA/BB/A/561-2	07-03-2025	33.67	14.92	39.21	9.30	36.57	5384	1.57	0.11	0.20	1.26
BHA/BA/A/705-1	26-03-2025	42.4	7.79	41.28	11.86	39.07	5696	3.41	0.14	0.36	2.91
BHA/BB/A/707-2	26-03-2025	42.12	7.77	42.93	11.29	38.01	5745	2.18	0.14	0.33	1.71
Average		29	17	39	12	33	5061	3	0.27	0.38	2