Serial No. 13 dt. 09/02/2026

BEFORE THE NATIONAL GREEN TRIBUNAL

EASTERN ZONE BENCH, KOLKATA

O. A. NO. 168 OF 2025 (EZ)

Bitu Biswakarma

-Versus-

Central Pollution Control Board & Ors.

-And-

In the matter of:
Raja Brick Fields

... Respondent No. 7

NOTARY KOLKATA S.M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

AFFIDAVIT IN REPLY/COUNTER AFFIDAVIT FILED BY MANAS RANJAN CHATTERJEE, RESPONDENT NO. 7

I, Manas Ranjan Chatterjee, son of Late Amarnath Chatterjee, aged about 61 years by faith Hindu, by occupation- Business, residing at Abha Mension 2/C, Purba Apcer Garden Beside Minibus Association, Police Office Station- U.C. Donga, Police Station – Asansol South, District Paschim Bardhaman, partner of Raja Brick Fields, do hereby solemnly affirm and say as follows:-

Manas Ranjan Chatterjee

09 FEB 2026

X

1. That I am the respondent No. 7 in the Original Application and as such I am well acquainted with the facts and circumstances of the above case. I have filed this affidavit as partner of the respondent No. 7 i.e. Raja Brick Fields.

2. The present proceeding was initiated by the applicant for closure of illegal and non complaint Brick Clins (including GMB, GRC, Raja Brick fields and other units) operating in Baraboni, Paschim Bardhaman.

3. I state that our firm carrying on business of Brick field under the name and style Raja Brick fields at Village- Joyram Danga, Police Station- Baraboni District Pachim Bardhaman, since long as partner with valid documents/ permissions which are required to carry on the said. Copy of the said documents are annexed herewith and marked with letter A-1" collectively.

4. I state and submit that the statements made in the application are not tenable in the eye of law as I am carrying on business of brick field with valid documents/permissions.

NOTARY KOLKATA S.M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

Manas Ranjan Chatterjee

5. I state that the applicant filed the instant application with an intention to harass and disturb our lawful business.

6. In view of what has been stated and submitted above, the Hon'ble Tribunal may be pleased to dismiss the instant application and/or pass an appropriate order as to this Hon'ble Tribunal may deem fit and proper.

7. The statement made above are true to my knowledge.

Manas Ranjan Chatterjee
Respondent No. 7

Identified by me

Bikram Sarkar
Advocate

NOTARY KOLKATA S. M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

SOLEMNLY AFFIRMED AND DECLARED BEFORE ME ON IDENTIFICATION

S. M. HASSAN
NOTARY

09 FEB 2026

- ~~4~~ 72 Annexure - "A/1"

WEST BENGAL POLLUTION CONTROL BOARD

Paribesh Bhawan, 10A, Block LA, Sector III , Salt Lake
Kolkata 700 098,INDIA; Ph 335 9088,& Fax : (0091) (33) 335 8073

Application for Consent to Operate for Red & Orange Category Industries

Application for Consent to Operate for discharge of effluent, *under Scction 25 and Section 26* **of Water (Prevention and Control of Pollution) Act, 1974 and emission/continuation of emission** *under Section 21* **of the Air (Prevention and Control of Pollution) Act, 1981.**

Application No. : 7303729 **Date of Submission : 07/08/2025**

Category : ORANGE

Industry Type : Brickfields (excluding fly ash brick manufacturing using lime process)

From : Raja Bricks,

Vill.: Joyramdanga, P.O. + P.S.: Barabani, Dist.: Paschim Bardhaman, PIN: 713334

(Name and Address of the Unit)

To : The .....

.....

.....

.....

Sir,

1. I/We hereby apply in the application form for both Consent to Operate (Fresh/Renewal) (i) under sub-section (2) of Section 25 and Section 26 of Water (Prevention and Control of Pollution) Act, 1974 to make discharge from land/premises and (ii) under sub-section (2) of Section 21 of the Air (Prevention and Control of pollution) Act, 1981 to make emission from a proposed industrial plant owned by Dilip Kumar Maji for a period upto 04/06/2023

2. The Annexure, Appendices, other particulars and plans are attached .

3. I/We further declare that the information furnished in the application form, Annexure/Appendices and plans is correct the best of my/our knowledge.

4. I/We hereby submit that in case of a change either or a point or the quantity of discharge or the quantity of emissin, a fresh application for consent shall be made and until such consent is granted, no change shall be made.

5. I/We hereby agree to submit to the board, application for renewal of consent two months in advance of the date of expiry of the consented period, if to be continued there after.

6. I/We undertake to furnish any other information within seven days of its being called for by the State Board.

7. I/We enclose herewith Challan of Rs. .....
deposited at Branch on in favour of
West Bengal Pollution Control Board being the 'Consent to Operate application fee'.

NOTARY KOLKATA S.M. HASAN Regn. No. 13789/18 GOVT. OF INDIA

Date:.....

Name of the applicant : Dilip Kumar Maji

: Partner

cation on behalf of : Raja Bricks

ress of applicant : Vill.: Joyramdanga, P.O. + P.S.: Barabani

ART - A : (GENERAL INFORMATION)

1. Full address of the factory (mentioning Post Office, : Police Station, local body with Ward No. etc.)

Vill.: Joyramdanga, P.O. + P.S.: Barabani, Dist.: Paschim Bardhaman, PIN: 713334

Telephone : 91-9641432018 Fax : -

Police Station : Barabani P. O. & Pin Code : Barabani 713334

LocalBody : Barabani G.P., Paschim Bardhaman Ward No : Mouza: Joyramdanga

J.L. No : 41 Plot No. & Dag No. : 80, 87, 115, 126

2. Full address of the Registered Office/City Office : Vill.: Joyramdanga, P.O. + P.S.: Barabani

Telephone : 91-9641432018 Fax : -

E-mail : manasranjanchatterjee00@gmail.com Website :

3. a) Size of industry (Large / Small[]) : Small

b) Power Supply Agency at the factory premises

[viz, C.E.S.C/W.B.S.E.B/Others /specify)] : WBSEDCL

4. Year of commissioning of the industry : August/2001

5. (i) Number of persons engaged by the factory : 50

a) Workers/Labour (including contract engagements : 48,

b) Management Staff : 1

c) Others(Night watchman ete.) : 1

(ii) a) No. of working hour per day : 24

b) No. of working day per year : 150,No

6. Population residing in the Quarters / Colony, if applicable :

7. Gross capital investment on land, building, plant & machinery Lakhs.22

excluding capital investment on pollution control system the unit till the date if application

(To be supported an undertaking affidavit, annual report or certificate from a Chartered Accountant).

8. Give the list of raw materials (including fuel) with consumption per month

(if the space provided below is for inadequate, please attach : separate sheet giving information using the same format).

SL NO.	Name of Raw Materials(including fuel)	Quantity per Month
1	Sand	24360 CFT/Year

NOTARY KOLKATA S.M. HASAN Regn. No. 1378/18 GOVT. OF INDIA

	Soil	73080 CFT/Year
3	Fly Ash	24360 CFT/Year
4	Coal as fuel	1.5 Metric Tonnes/Day

09. List of products and by-products manufactured :
(if the space provided below is for inadequate, please attach separate sheet giving information using the same format).

Name	Production Capacity (Per Month)	Average Production (Per Month)
Bricks	280000 Numbers/Month	260000 Numbers/Month

PART - B : INFORMATION REQUIRED IN CONNECTION WITH PERVENTION AND CONTROL OF WATER POLLUTION

10. Water consumption for different uses

Type of Use	Sources of supply (Strike out which if/are not applicable)	Quantity (M3/day)
Others	Domestic purpose Well for Domestic Use	6.7 KLD
Others	Manufacturing process Pond	9.0 KLD

11. Information regarding liquid waste discharged.
Do not give information on storm water discharged.

Sources (Place of generation)	Quantity(M3/day)	Place of discharge)
Own Well for Domestic use	5.3	Discharged to Panchayat Drain through Septic Tank

(If the space provided above inadequate, please attach separate sheet giving information the same format).
(Note: Please attach a diagram showing liquid waste flow from its place of generation upto the of final discharge.)

2. Whether facilities available for liquid waste treatment : Yes/No
if yes.
(a) Quantity of Liquid waste reted :
(b) Describe the facility along with a diagram :
(Please attach separate sheet)

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Attach latest `analysis report` of the Board or Board's recogzised laboratory showing quality of liquid waste discharge (before and after treatment) :

14. Whether water meter at water intake points installed : No,
15. Whether energy meter of E.T.P. installed :
16. Whether waste water flow measuring device installed : No

PART - C : INFORMATION REQUIRED IN CONNECTION WITH PERVENTION AND CONTROL OF Air POLLUTION

17. Details of source of emission–

(A) (From manufacturing process) :.....

Name the unit operation causing emission of pollutants

(Please attach additional sheet if required) :

Type	Details/Capacity/Unit/NA

(B) (From Furnaces, Heaters,Kiln etc.)

Type of Furnace/Heaters/Kiln	No. of Units	Capacity of each unit	Fuel used (nature & quantity) in individual Furnace
Brick Kiln	1	280000 Numbers/Month	Slack coal; 1.5 TPD

(C) (From Boilers)

Number of boilers	Capacity of each boiler	Fuel used (nature & quantity) in individual boilers

D. (From Diesel Generator Sets)

No. of DG sets	Capacity of each DG sets	Height of the stack above DG sets	Height of the DG room

E. (Noise pollution control measures)

Acoustic enclosure/acoustic treatment of DG room	Exhaust mufflet

17. Emission Details.

Emission Type	Stack Attached To	Height of the Stack	Stack Diameter	Fuel Consumption	Quantity	Gas Quantity(m^3/hr))	Fuel	SMF	Plant Capacity	Consp-Unit	Stack Draft Type	Remarks	Pollution Control Equipments

ocess Stack	Kilns	33.5	1.52 Mts	Slack Coal	1.5 Metric Tonnes/ Day	0	0	Yes	280000	Numbers/ Month	Natural draft	Brick Stack for Zigzag Pattern Brick Kiln	Gravity Dust Settling Chamber

f the space provided above is inadequate, please attach separate sheet giving information using the same format
Attach latest `analysis report` of the Board's recogzised laboratory)

PART - D : OTHER INFORMATION

19. **Give details regarding solid waste**

Type of Waste	Description of waste (Lump/Paste/Dust, etc.)	Quantity per month	unit	Method of disposal
From kiln	Coal ash	15	Metric Tonnes/Month	To be reused in brick making
From Process	Broken Bricks	20000	Numbers/Month	For road construction

20. **Attach a separate sheet (not applicable to small scale unit) Providing a brief write-up and schematic flow sheet of the manufacturing process clearly showing sources of generation of solid (hazardous and, non-hazardous) liquid and gaseous wastes** :

21. **Attach layout plan showing the different outlets for liquid waste discharge** :

22. **Other relevant information, if any :**
(Please attach separate sheet if required)

Seal Signature of Applicant.....

NOTARY KOLKATA S. M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

Check-list of accompaniments: **[Please put tick mark (-)as applicable]**

☐ The THIRD PART of the challan (in original) as proof of deposition of consent application fee
☐ Undertaking/Affidavit/Andull Report/certificate from a Chartered Accountant (Item No.07)

- [ ] ...tional sheet against Item No.08
- [ ] Additional sheet against Item No.09
- [ ] Additional sheet against Item No.11 (b)
- [ ] Additional shcct against Item No.13
- [ ] Additional sheet against Item No.17 (A)
- [ ] Additional sheet against Item No.18
- [ ] Additional sheet against Item No.20
- [ ] Additional sheet against Item No.21
- [ ] Additional sheet against Item No.22

Notes : => All enclosures, documents and analysis reports of Board's recogzised laboratories must be signed/counted-signed by the applicant with official seat.

=> All subsequent connection in the application form and enclosures should be signed by the applicant or any person authorised by tln applicant.

=> Thc form is to be filled prefenbly in by type written or logiblc hand writing

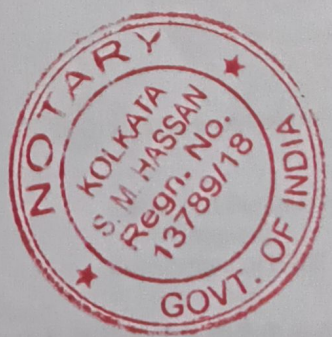
NOTARY KOLKATA S.M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

State Pollution Control Board, West Bengal

Receipt No.	56862668
Date :	11-12-2025
Depositor Name	Dilip Kumar Maji
Fees Applicable for the Current Year	917.00 ₹ From: 2025-12-01 00:00:00.0 To: 2026-03-31 00:00:00.0
Penalty Applied(In Rupees)	665.00 ₹
Advance Fee Applied(In Rupees)	26583.00 ₹ From: 2026-04-01 00:00:00.0 To: 2035-11-30 00:00:00.0
Arrear Applied(In Rupees)	6646.00 ₹ From: 2023-07-01 00:00:00.0 To: 2025-11-30 00:00:00.0
Other Applied(In Rupees)	0.00 ₹
Amount	34811.0
Bank Name	
Bank Id.	NA
Application No.	7303729
Name and Address of Industry	Raja Bricks, Vill.: Joyramdanga, P.O. + P.S.: Barabani, Dist.: Paschim Bardhaman, PIN: 713334, Baraboni, Paschim Bardhaman
Name of Regional Office	
Applied For	CTO - both - new
Payment Date	11-12-2025
Total Amount Paid (Rs.)	34811.0
Transaction Status	Successfully Completed

Payment Details

Print



UDIN: 25-G-GA000004-A-1765536658577 (Verify at https://udin2.wb.gov.in/verify-udin)

Government of West Bengal

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This document is available at UDIN platform till **4:20PM, December 12, 2035.**

NOTARY
KOLKATA
S. M. HASSAN
Regn. No.
13789/18
GOVT. OF INDIA

Authorised Signatory
(E-signed)
Department of IT&E

WEST BENGAL

WEST BENGAL POLLUTION CONTROL BOARD

Paribesh Bhawan, 10A, Block LA, Sector III
Salt Lake City, Bidhan Nagar, Kolkata – 700 106, INDIA
Website : www.wbpcb.gov.in, e-mail : wbpcbnet@wbpcb.gov.in

Category of the Industry : ORANGE
Application Type: CTO
CTO No.: WBPCB/7303729/2025

Date : 12/12/2025

Consent to Operate (CTO) under Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

Reference: Application No.: 7303729

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Section 21 of the Air (Prevention and control of Pollution) Act, 1981 as amended, and Rules and Orders made thereunder hereby grants Consent to **Raja Bricks** (hereinafter referred to as Applicant) for its unit located at **Plot No. 80, 87, 115, 126, JL No. 41, Mouza+Vill.: Joyramdanga, P.O. + P.S.: Barabani, Dist.: Paschim Bardhaman, Pin: 713334.** for the period from **01/12/2025** to **30/11/2035** to operate the industrial unit/project and to discharge liquid effluent and gaseous emission from the premises / land of the industrial unit/project, in accordance with the conditions as mentioned below, provided that on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in this consent letter and in the Environment (Protection) Act, 1986 and Rules thereunder, as amended.

Breach of the conditions and / or failure to comply with the directions as mentioned below shall render the industry/project liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Section 21 of the Air (Prevention and control of Pollution) Act, 1981 as amended.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the industry.

Conditions :

1 This Consent is valid for the following activities :

Sl.No	Name of Activity/Products/By-products	Production Capacity (Per Month)
1	Bricks	280000 Numbers/Month

2 The industry shall remain responsible for quantity and quality of liquid effluent and air emission.

3 Daily waste water generation and discharge shall not exceed :

No. of outlets	Source of Waste Water	Quantity in Kilo Liters/day	Place of discharge
1	Own Well for Domestic use	5.3	Discharged to Panchayat Drain through Septic Tank

4 To bring into any altered or new outlet / outfall or to change the place of discharge, the industry shall have to inform the Board and obtain prior permission of the Board in this effect.

5 The industry shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given below:

NOTARY KOLKATA S. M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

Outlet No.	Nature of effluent	Parameters and standard			Frequency of sampling
		Parameters	Standards	Unit	
1	Domestic	pH	5.5-9.0		Qtrly
1	Domestic	Total suspended Solid (TSS)	100	mg/L	Qtrly
1	Domestic	Chemical Oxygen Demand (COD)	250	mg/L	Qtrly
1	Domestic	Biological Oxygen Demand (BOD)	30	mg/L	Qtrly
1	Domestic	Oil & Grease	10	mg/L	Qtrly

Provisions shall be made to install sensor-based Water Quality monitoring system and flow meter to share the information with the state board on a Real Time basis.

6 Daily water consumption for the following purposes shall not exceed

SL NO.	Purpose of Water Use	Quantity (KL/Day)
1.	Domestic	6.7
2.	Others(Quenching)	9.0

7 The Industry shall install suitable digital device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the State Board. The device shall be able to provide information to disseminate the quantity on a real time basis.

8 All the stacks connected to various sources of emissions must be designated by numbers.

9 The industry shall install comprehensive pollution control equipment and operate and maintain the same to conform to the standard as given below:

Stack height from ground level (m	Stack attached to emission sources	Capacity of emission source	Cons up-Unit	Fuel details		Contr	Concentrations of parameters not to exceed						Frequency of sampling	Remarks
				Fuel used	Quantity	Tol syste m(if any)	PM(mg/N m3)	CO(%)	Acid Mist(mg/N m3)	Pb(mg/Nm3)	SO2(mg/Nm3)	NOX (mg/Nm3)	Others	
33.5	Kilns	280000	Numbers/Month	Slack Coal	1.5 Metric Tonnes/Day	Zigzag System	250						Qtrly	Brick Stack

10 The industry shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform etc. for monitoring / sampling the air emissions and the same shall be made available for inspection and use by the State Board's staff as well as State Board's authorized agencies.

11 Waste generation, treatment and disposal shall be as specified below :

S.No	Description of Waste	Quantity	Treatment and Disposal
1	From kiln	15 Metric Tonnes/Month	To be reused in brick making
2	From Process	20000 Numbers/Month	For road construction

The Industry shall obtain Authorisation for waste and also register for EPR wherever applicable.

12 The industry shall take adequate measures for control of noise level from its own sources within the premises within the limit given below :

Time	Limit in dB (A) Leq
Day time (06 a.m. to 10 p.m.)	65
Night time (10 p.m. to 06 a.m.)	55

NOTARY KOLKATA S. M. HASSAN Regn. No. 65 13789/15 GOVT. OF INDIA

Noise barriers should be installed if the Noise Level is found to be exceeding the desired levels.

13 The industry shall at all times maintain good house-keeping and control pollution (including fugitive emissions) from all sources to maintain clean environment in & around factory premises and in surrounding areas.

14 The Industry shall bring about at least 33% of the total land area under the tree cover.

15 The Industry shall provide sufficient alternate electric power source like Green DG or Storage Battery System etc. to operate all pollution control facilities. In absence of such alternate power source, the production shall be stopped/controlled to conform to the conditions of the Consent.

16 The industry shall install a separate energy meter showing the consumption of energy for operation of pollution control devices and shall install suitable device for measuring the volume of water consumed for different purposes as mentioned in Sl.No. 3.

17 The Industry shall provide drainage system for discharge of industrial and domestic effluent and a separate drainage system for storm-water.

18 The industry shall maintain a separate register showing consumption of chemicals used in pollution control systems.

19 The Industry shall get the samples of hazardous wastes / leachates analysed at least once in a year from a laboratory recognised by the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.

20 The Industry shall submit the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form V) as required under the provisions of Rule 14 of the Environment (Protection) [Second Amendment] Rules 1992 by 30th September of every year, to the WBPCB.

21 The Industry shall allow the officers of the State Board to enter into the premises of the unit at any reasonable time to inspect the pollution control systems and shall provide adequate and safe facility for collection of air, wastewater and solid waste samples for monitoring by the State Board as well as by authorized agencies of the State Board, as and when required by them.

22 The industry shall maintain an Inspection Book in the factory premises which shall be made available to inspecting officers of the State Board for inspection, review and to write down any direction or observation as is deemed necessary during the inspection.

23 The Industry shall furnish to the State Board all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emission.

24 The Industryshall maintain adequate number of qualified and trained personnel among its staff for propermaintenance and operation of the effluent treatment and/or emission control devices and for overallenvironment management of the industry.

25 The Industry shall have to make registration for the use of groundwater if any, with State Water Investigation Directorate (SWID).

26 The Industry shall intimate to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quantity as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The Applicant shall (i) take all steps adequate to prevent such accident discharge / release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.

27 If the Industry is using Diesel Generator set or generating any other hazardous waste, it should install a Digital Display Board to discriminate all information as stipulated in this regard.

28 The industry shall make an application to the State Board in the prescribed form for renewal of the consent at lease 120 (one hundred & twenty) days before the date of expiry of this Consent.

29 The industry shall not make any alteration / expansion / modification in the existing manufacturing process and equipment, pollution control system and shall not alter or bring in any new outlet/outfall or stack or change the place of discharge, without prior approval of the Board.

30 The industry shall comply with all applicable Environmental Acts and Rules.

31 The Industry shall comply with the provisions of relevant Waste Management Rules and also submit Annual Returns / Manifests on regular basis.

32 Concealing factual data or submission of false or fabricated data/information may result in revocation of Consent to Operate and attract action under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981.

Special Conditions:

1) This Consent to Operate is being issued based on the submission of compliance of the units concerning the Locational Guidelines & Operational Guidelines as stipulated in the Memo. No. 2648-M&M dated. 27.10.2016 from the Land & Land Reforms Department.

2) The Brickfield is permitted to operate only with zig-zag technology.

3) The Brickfield shall use only approved fuel, such as Piped Natural Gas, Coal, firewood, and/or agricultural residues. The use of Pet coke, tires, plastic, and hazardous waste is prohibited in the Brickfield.

4) Minimum stack height of 24 m from the Ground Level to be maintained. Stack height (in meter) shall also be calculated by the formula H=14Q0.3 (where Q is SO2 emission rate in kg/hr), and the maximum of two shall apply.

5) The unit shall construct permanent facilities (port hole and platform) as per the norms or design laid down by the Central Pollution Control Board for monitoring emission.

WEST BENGAL

6) Particulate matter in stack emission shall not exceed 250 mg/Nm3. Particulate Matter (PM) results shall be normalised at 4% CO2 as below:

PM (normalised) = (PM (measured)x 4%)/ (% of CO2 measured in the stack), no normalisation in case CO2 measured is greater than/equal to 4%.

7) The ash generated in the brick kilns shall be fully utilised in-house in brick making.

8) The brick kiln owners shall ensure that the road utilised for transporting raw materials or bricks is paved.

9) Vehicles shall be covered during the transportation of raw materials/bricks.

10) Royalty to be depositcd regularly at the ADM & DLLRO office.

11) The depth of quarry/removal of brick earth for the Brickfield shall not be more than 1.5 meters from the adjoining ground level.

12) The operation of the Brickfield shall not cause any damage to any public road, bridge, culvert, embankment, or any other public utility. It shall also not obstruct the flow of any canal/river/drainage in any manner whatsoever.

13) The operation of the Brickfield shall also not obstruct the flow of any canal /river/drainage in any manner whatsoever.

14) If the Brickfield is located within a distance of a radius of 100 kilometre from a Coal based Thermal Power Plant, it must utilise at least 25% fly ash of its total raw materials required, in compliance with the Fly Ash Utilisation Rules, 1999, and its amendments made thereafter by the Ministry of Environment, Forests & Climate Change, Government of India.

15) The unit must develop a multi-layer green belt of 10 meters in width along the periphery of brick fields/kilns, leaving two 10 meters wide gaps in the boundary for entry and exit of materials and vehicles or a 3-meter-high wall on the sides where land is not available for green belt development to prevent fugitive dust emission.

NOTARY KOLKATA S.M. HASSAN Regn. No. 3789/18 GOVT. OF INDIA

16) The unit should install a lightning arrestor as per PWD norms or of any other standard design for the above-mentioned brick field/kiln to avoid any damage to the stack/chimney by lightning.

17) While digging the earth to make bricks in the area marked for the same, the straight cutting of the earth should be avoided; instead, cutting would be done with a slope of 1:3 so that solid erosion of the agricultural land can be minimized.

18) Every effort should be made to restrict topsoil excavation to manufacture bricks. River silt and fly ash should be used as far as possible for this purpose.

19) Good housekeeping practices should be maintained, such as proper disposal of coal ash, provision for the double wall around the kiln, adequate layout, brick-lined passage, use of properly graded Coal, proper firing practices, protection from noise pollution, and other environmental measures.

20) This certificate is being issued based on the unit's submission. In case of any discrepancy found in the future, this certificate may be revoked.

Any violation of the aforesaid conditions shall entail cancellation of this Consent for Operate.

For and on behalf of West Bengal Pollution Control Board

12/12/2025

Environmental Engineer
Asansol Regional Office

WEST BENGAL

NOTARY KOLKATA S. M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

"This is computer generated document from OCMMS by WBPCB"

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WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan', Bldg. No. 10A, Block – LA, Sector III, Bidhannagar, Kolkata - 700 106

(Orange/Green Category Unit)

CO 122031

BAR-08

Office of the ADM & DL&RO Paschim Bardhaman

Memo Number 2892/cto/MM/2018 Date 17/12/2018

Consent to Operate *under Section 25 & 26 of the* **Water (Prevention and Control of Pollution) Act, 1974, and** *Section 21 of the* **Air (Prevention and Control of Pollution) Act, 1981.**

In exercise of the powers conferred by the West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Section 21 of the Air (Prevention and control of Pollution) Act, 1981 as amended, and Rules and Orders made thereunder hereby grants its Consent to :

M/s. RAJA BRICKS

(hereinafter referred to as Applicant) for its unit located at Mouza: Jayramdanga J.L. No. 41, P.S. Borabani, Dist. Paschim Bardhaman

(Detailed address of the manufacturing unit)

for a period from ..... to 04.06.2023 to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit in accordance with the conditions as mentioned below provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not ex... and as specified in the Environmental (Protection) Act, 1986.

Breach of the conditio... failure to comply with the directions mentioned below shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserves the right to revoke, withdraw or make any reasonable variation/change/alter the conditions of this cons...

Conditions :

01. This Consent is valid... nature of

Sl. No.	Name of major products and by - products	Quantity produced per month	Sl. No.	Name of major products and by - products	Quantity produced per month
01.	BRICKS	2,8...	03		
02.					

02. The *Applicant* shall obs... Wind... otio...

Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day
01	COAL	1.5 T/...						

03. The *Applicant* falls in the ..... N... .....category of the Water (Prevention and Control of Pollution) Cess ... 1977 ... Ru... made thereunder and shall comply with the provisions of said Act, and Rules and regularly submit to the Board the Returns of Water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

04. Daily water consumption for the following purposes should not exceed.

Industrial cooling, spraying in mine pits and boiler feed water *(water used for gardening should be included in this category of use)*	Domestic purpose	Processing whereby water gets polluted and the pollutants are easily biodegradable	Processing whereby water gets polluted and the pollutants are not easily biodegradable
3.0 KL	1.0 KL	NIL	NIL

05. Daily discharge of effluent shall not exceed

	Industrial liquid effluent	Domestic liquid effluent	Mixed (industrial & domestic) liquid effluent
No. of outfalls	One	One	NIL
Quantity	1.4 KL	0.7 KL	NIL KL
Place of discharge	Drain	Soakpit & Drain	NIL

06. The *Applicant* shall provide drainage system for conveying industrial & domestic liquid waste & seperate drainage system for storm-water and shall provide comprehensive treatment facility for industrial and domestic liquid waste (sewage, sullage & liquid effluent generated from canteen) and operate and maintain the same to conform to the *Standard* for final effluent as given below.

Outlet No.	Nature of effluent	Parameters and standard (in mg/l. max)							Frequency of effluent sampling
		pH	BOD	COD	TSS	O & G			
01	Domestic	5.5-9	30	250	100	10			Yearly
	Industrial								

NOTARY KOLKATA S. NAGAN Regn. No. 13789/18 GOVT. OF INDIA

WEST BENGAL POLLUTION CONTROL BOARD

07. This Applicant shall provide comprehensive pollution control equipment and operate and maintain the same continuously to conform the quality of the final gaseous emission to the *Standard* as given below :

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm³/hr.	Velocity of gaseous emission (mg/sec)	Concentrations of parameters not to exceed				Frequency of sampling
					SPM (mg./Nm³)	CO (% v/v)			
S-1	33.50	KILN	—	—	1000	01			Yearly
S-2									
S-3									
S-4									

08. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below.

Type of waste	Quantity	Treatment	Disposal
COAL ASH	15 MT	Manually	Land Filling

09. The *Applicant* shall take adequate measures for control of noise levels from its own sources within its premises to conform to

Time	Limit in dB (A) L_{eq}	Time	Limit in dB (A) L_{eq}
Day time (06 a.m. to ~~09~~ 10 p.m.)	65	Night Time (~~09~~ 10 p.m. to 06 a.m.)	55

10. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions and shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.

11. The *Applicant* shall at all times maintain good house keeping, proper working order, control pollution (including fugitive emissions) from all sources to maintain clean environment in & around factory premises and to surrounding areas/inhabitants.

12. The *Applicant* shall bring about at least 33% of the available open land under the green coverage/ plantation.

13. The *Applicant* shall provide for sufficient alternate electric power source to operate all pollution control facilities. In absence of such alternate power source, the production should be stopped/reduced/controlled to conform the conditions of the Consent.

14. All the stacks connected to various sources of emissions must be painted/displayed to designate by numbers such as S-1, S-2 etc. and shall have ports, ladder, platform etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices and shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.

16. The *Applicant* shall allow the Officers of the *State Board* to enter into the premises of the unit at any reasonable time to inspect the pollution control systems and shall provide adequate and safe facility for collection of air, wastewater and solid waste samples for monitoring and measuring by the *State Boards's* staff as well as *State Board's* authorised agencies.

17. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to inspecting officers of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection.

18. The *Applicant* shall intimate to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any pollutants in excess of quality and quantity as mentioned above to any receiving water body/system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster and the *Applicant* shall take adequate steps to prevent such accidental event.

19. The *Applicant* shall apply for renewal of consent to *State Board* in prescribed form 60 (sixty) days before expiry of this Consent.

20. The *Applicant* shall not make any alteration/modification/expansion in the existing manufacturing process and equipment, pollution control system and shall not bring into any altered or new outlet/outfall or stack or change the place of discharge, without prior approval of the Board.

21. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, Hazardous Wastes (Management & Handling) Rules, 1989 and Public Liability Insurance Act. 1991.

Additional Conditions :

NOTARY KOLKATA S. M. HASSAN Regn. No. 1378/18 GOVT. OF INDIA

SEAL

For and on behalf of the Board

Additional District Magistrate and District Land & Land Reforms Officer Paschim Bardhaman

(Member Secretary/Chief Engr./Sr. Env. Engr./Env. Engr./Asstt. Env. Engr./Sr. Scientist)

87 18

WEST BENGAL POLLUTION CONTROL BOARD

'Paribesh Bhawan' Bldg. No. 10A, Block-LA, Sector-III, Salt Lake City, Kolkata - 700 098

(Orange/Green Category Unit)

Apply for renewal of consent 60(Sixty) days before expiry.

Memo Number : ROIL/ 160 /433 / MM / 15 Date 05 / 06 / 2015

Consent to Operate *under Section 25 & 26* of the **Water (Prevention and Control of Pollution) Act, 1974,** and *Section 21* of the **Air (Prevention and Control of Pollution) Act, 1981.**

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Section 21 of the Air (Prevention and control of Pollution) Act, 1981 as amended, and Rules and Orders made thereunder hereby grants its Consent to :

M/s. RAJA BRICK FIELD

(hereinafter referred to as Applicant) for its unit located at Vill:- Joyramdanga P.O.:- Barabani P.S :- Barabani Dist. Burdwan.

(Detailed address of the manufacturing unit)

for a period from 05.6.2015 to 04.06.2018 to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit in accordance with the conditions as mentioned below provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in this consent letter and as specified in the Environmental (Protection) Act, 1986.

Breach of the conditions and/or failure to comply with the directions as mentioned below shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act. 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation/change/alter the conditions of this consent letter giving one month's notice to the applicant.

Conditions :

01. This Consent is valid for the manufacture of

Sl. No.	Name of major products and by - products	Quantity produced per month	Sl. No.	Name of major products and by products	Quantity produced per month
01.	BRICKS	3,00,000	03		
02.			04.		

02. The *Applicant* shall observe the following fuel consumption pattern.

Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day	Sl. No.	Type of fuel	Quantity per day
01	COAL	12 Mt.	02			03		

03. The *Applicant* falls in the ORANGE category of the Water (Prevention and Control of Pollution) Cess Act, 1977 and Rules made thereunder and shall comply with the provisions of said Act. and Rules and regularly submit to the Board the Returns of Water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

04. **Daily** water consumption for the following purposes should not exceed.

Industrial cooling, spraying in mine pits and boiler feed water *(water used for gardening should be included in this category of use)*	Domestic purpose	Processing whereby water gets polluted and the pollutants are easily biodegradable	Processing whereby water gets polluted and the pollutants are not easily biodegradable
3000 Ltrs	1000 Ltrs		

05. **Daily** discharge of effluent shall not exceed

	Industrial liquid effluent	Domestic liquid effluent	Mixed (industrial & domestic) liquid effluent
No. of outfalls	NIL	NIL	NIL
Quantity	NIL KL	700 Ltrs KL	NIL KL
Place of discharge	Nil	Throush Drain	NIL

06. The *Applicant* shall provide drainage system for conveying industrial & domestic liquid waste & seperate drainage system for storm-water and shall provide comprehensive treatment facility for industrial and domestic liquid waste (sewage, sullage & liquid effluent generated from canteen) and operate and maintain the same to conform to the *Standard* for final effluent as given below.

Outlet No.	Nature of effluent	Parameters and standard (in mg/l. max)								Frequency of effluent sampling
		pH	BOD	COD	TSS	O & G				
01	Domestic	5.5-9 mg	30mg	250mg	100mg	10mg				Yearly

BOARD KOLKATA S.M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

07. This *Applicant* shall provide comprehensive pollution control equipment and operate and maintain the same continuously to conform the quality of the final gaseous emission to the *Standard* as given below :

Stack No.	Stack height from G.L. (in mts.)	Stack attached to (sources and control system, if any)	Volume Nm^3/hr	Velocity of gaseous emission (mg/sec)	Concentrations of parameters not to exceed				Frequency of sampling
					SPM ($mg./Nm^3$)	CO (% v/v)			
S-1	30.00	KILN	14502.29	5.18	366.68	4.2			Yearly
S-2									
S-3									
S-4									

08. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below.

Type of waste	Quantity	Treatment	Disposal
COAL ASH	15 MT	Manually	Land Filling

09. The *Applicant* shall take adequate measures for control of noise levels from its own sources within its premises to conform to

Time	Limit in dB (A) L_{eq}	Time	Limit in dB (A) L_{eq}
Day time (06 a.m. to 09 p.m.)	55	Night Time (09 p.m. to 06 a.m.)	45

10. The *Applicant* shall remain responsible for quantity and quality of liquid effluent and air emissions and shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.

11. The *Applicant* shall at all times maintain good house-keeping, proper working order, control pollution (including fugitive emissions) from all sources to maintain clean environment in & around factory premises and to surrounding areas/inhabitants.

12. The *Applicant* shall bring about at least 33% of the available open land under the green coverage/ plantation.

13. The *Applicant* shall provide for sufficient alternate electric power source to operate all pollution control facilities. In absence of such alternate power source, the production should be stopped/reduced/controlled to conform the conditions of the Consent.

14. All the stacks connected to various sources of emissions must be painted/displayed to designate by numbers such as S-1, S-2 etc. and shall have ports, ladder, platform etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices and shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board.*

16. The *Applicant* shall allow the Officers of the *State Board* to enter into the premises of the unit at any reasonable time to inspect the pollution control systems and shall provide adequate and safe facility for collection of air, wastewater and solid waste samples for monitoring and measuring by the *State Boards's* staff as well as *State Board's* authorised agencies.

17. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to inspecting officers of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection.

18. The *Applicant* shall intimate to the State Board immediately of any occurrence or apprehension of occurrence of discharge of any pollutants in excess of quality and quantity as mentioned above to any receiving water body/system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster and the *Applicant* shall take adequate steps to prevent such accidental event.

19. The *Applicant* shall apply for renewal of consent to *State Board* in prescribed form 60 (sixty) days before expiry of this Consent.

20. The *Applicant* shall not make any alteration/modification/expansion in the existing manufacturing process and equipment, pollution control system and shall not bring into any altered or new outlet/outfall or stack or change the place of discharge, without prior approval of the Board.

21. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, Hazardous Wastes (Management & Handling) Rules, 1989 and 'Public Liability Insurance Act. 1991.

Additional Conditions :

Additional District Magistrate
and
District Land & Land Reforms Officer
Burdwan
(Empowered vide Order No. 3240-18/WPB-F(X)'97
dt. 05/02/2001 of W. B. Pollution Control Board)

Seal

(Member Secretary/Chief Engr./Sr. Env. Engr./Env.Engr./Asst.Env.Engr./Jr.Scientist)

GOVT. OF INDIA
KOLKATA
S. M. HASSAN
Regn. No.
13789/18

GOVERNMENT OF WEST BENGAL

89

OFFICE OF THE NOTARY PUBLIC

NEW UPPER CHELIDANGA, SHIB MANDIR
ASANSOL - 713304

GOVERNMENT OF WEST BENGAL सत्यमेव जयते NOTARY ASANSOL (WEST BENGAL) Regd. No. 13/2007 SHRI ASIM BANERJEE

PROFESSIONAL ADDRESSES :

ASANSOL COURT
&
NEW UPPER CHELIDANGA,
SHIB MANDIR,
ASANSOL - 713304
Mobile : 9832974125

Sl. No. 15/20 Date 13/05/20

NOTARIAL CERTIFICATE

(Pursuant to section 8 of the Notaries Act 1952)

TO ALL TO WHOM THESE PRESENTS shall come, **I, SHRI ASIM BANERJEE,** duly appointed and authorised by the Government of West Bengal to practise as a **"NOTARY"** do hereby verify, authenticate, certify, attest as under the execution of the **instrument** annexed here to collectively marked "A" on its being executed, admitted and identified by the respective signatories as to the matters contained therein, present before me.

According to that I do hereby certify, authenticate, and attest the contains thereon, and this is to certify, authenticate and attest that the annexed instrument "A" is the original. Deed of Partnership

executed by Dilip Kumar Maji and others

on 13/05/20 - Under Three Sheets

PRIMA FACIE the annexed **Instrument "A"** appears to be in the usual procedure to serve and avail as needs or occasions shall or may require for the same.

IN FAITH AND TESTIMONY WHEREOF being required of a "NOTARY" I, the said Notary, do hereby subscribe my signature and affix the seal of my office, Asansol on this the 13th day of — May — the year 2020

GOVERNMENT OF WEST BENGAL NOTARY ASANSOL (West Bengal) Regd. No. 13/2007 SHRI ASIM BANERJEE

NOTARY KOLKATA S. M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

SHRI ASIM BANERJEE
NOTARY,
Govt. of W. B.
New Upper Chelidanga, Shib Mandir

Sl No. 1510

90

22 21

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

पश्चिम बंगाल WEST BENGAL F 860284

INSTRUMENT - - - A

DEED OF PARTNERSHIP.

M/S. RAJA BRICKS.

THIS INSTRUMENT OF PARTNERSHIP is made this the 21st. Day of January, 2010 by & Between :-

(1) Sri Dilip Kumar Maji Son of Sri Nikhil Ch. Maji resident of Jayramdanga. P.O. Baraboni, Dist. Burdwan ;

(2) Sri Bikash Ghosh Son of Narayan Chandra Ghosh resident of Madanmohanpur, Baraboni, Burdwan;

(3) Sri Manas Ranjan Chatterjee Son of Amar Nath Chatterjee resident of Bhanora, Domohani ;

(4) Smt. Nilanjana Banerjee Wife of Late Sujit Banerjee resident of Rambandhu Tala,Asansol ; - A N D -

(5) Sri Dukhaharan Mondal Son of Paresh Nath Mondal resident of Madanmohanpur, Baraboni, Dist. Burdwan.

NOTARY KOLKATA SK. HASSAN Regd. No. 1378/18 GOVT. OF INDIA

WHEREAS the abovenamed persons have been carrying on business as Co-Partners since long under the name & style "M/S. RAJA BRICKS" having its principal place of business at P.O. & Vill. Jairam Danga, P.O. & P.S. Baraboni, Dist. Burdwan.

Contd... P/2.

91

~~24~~ 23 X

6. That the existing Bank Account in the name of the Partnership Firm may be continued and /or new Account/ Accounts may be opened as per mutual decision of the Partners ;

7. That all the Partners shall attend deligently to day to day activities of business or the Partnership Firm & shall be treated as working Partners ;

8. That all the Partners shall be entitled to get remuneration from the Firm in accordance with the following stipulations & manner and also subject to the provisions of Section 40(b) (v) of the I.T. Act, 1961 :-

a) On the first 3 Lakhs of the Book profit or in case of loss . | Rs.1,50,000/- or @ 90% whichever is more.

Plus - b) On the balance of the Book Profit. | @ 60% .

The sum total as per above calculation shall be the maximum remuneration entitled by the Partners which will be paid/ credited to them in equal proportions ;

9. That the partners shall also be entitled to get interest on their respective capital as it stood as on the 1st day of each accounting Year at a rate not exceeding 12% p.a.

10. That any of the partners may retire from the Firm by giving three Calender months' Notice in advance in writing ;

11. That all the partners are debarred from doing any acts, things, deeds etc. which may endanger the assets or Partnership Firm ;

12. That the Partnership shall be treated as a Partnership at will & shall not be dissolved in the event of retirement & death of any of the Partners ;

13. That in case of any dispute and/or difference or opinion which may arise between the Partners in respect of the Partnership Firm, shall be settled mutually or by appointing Arbitrator/s as the case may be ;

GOVT. OF W. B. NOTARY Asansol Court W. B Regd. No 3129 ASIM BANERJEE

NOTARY KOLKATA M. HASAN GOVT. OF INDIA

15 MAY 2010

15 MAY 2010

14. That nothing contained in this Deed of Partnership shall be governed by the Indian Partnership Act/, 1932.

In witness whereof all the Partners have put their respective signature on this Instrument of Partnership on the Day, Month & Year first written above.

Witness :

1.

2.

3.

Signature of the Partners :

1. Dilip Kumar Maji
(Dilip Kumar Maji.)

2. Bikash Ghosh
(Bikas Ghosh.).

3. Manas Ranjan Chatterjee
(Manas Ranjan Chatterjee.)

4. Nilanjana Banerjee
(Nilanjana Banerjee.)

5. Dukhaharan Mondal
(Dukhabaran Mondal .)

CORRIGENDUM

On 1st. Page (Sl.No.5) - Baraboni is to read against Kapista.

On 1st. Page (Last Para)- Address of the Partnership Firm should be at Vill. Jairam Danga, P.O. & P.S. Baraboni, Dist.Burdwan.

On 2nd. Page (Para-1) - Address of the Partnership Firm Should be at Vill. Jairam Danga, P.O. & P.S. Baraboni, Dist.Burdwan.

16 MAY 2010

Certified Authenticated attested this original instrument being execute admitted identified by the respective Signatories before me.

ASIM BANERJEE
NOTARY, Regd. No. 13/20..
Govt. of W.B. Asansol Court

NOTARY
KOLKATA
S.M. HASSAN
Regn. No. 13789/18
GOVT. OF INDIA

FORM 11

[See rule 58(2)]

Name Of District :**PASCHIM BARDHAMAN**
Name Of Block : **BARABANI**
Name Of Gram Panchayat : **BARABONI**
Trade Registration No:- **982** Trade Registration Date:-**28-May-2025**
Trade Registration Certificate issue No:- **1** Issue Date:-**28-May-2025**
Trade Registration Certificate issued for the period of: **2025-2026,2026-2027,2027-2028**
To **DILIP KUMAR MAJI AND OTHERS**
(Name of Prop/partner/Director)

Full Address :

VILLAGE -	JOYRAMDANGA	PARA -	JOYRAMDANGA
POLICE STATION -	BARABANI	POST OFFICE -	BARABANI
MOUZA -	JOYRAMDANGA (041)	DAG -	80 , 87 , 115 , 126
PIN NO -	713334		

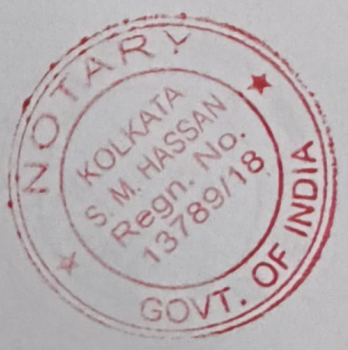
Gram Sansad/ Part No. II
Description of Trade :MANUFACTURING KILN BURNT BRICKS
Gram panchayat acknowledges a sum of **Rs. 1500** (Rupees One Thousand Five Hundred Only)
From **RAJA BRICKS**
(Name of Trade)

Grant of this certificate shall not absolve the applicant from the requirement of procuring all the statutory clearances to be obtained from the appropriate authority before actual commencement of the trade. If any violation/default is noted later is, the certificate shall be liable to be cancelled and the trade/business shall be closed down with immediate effect.

This Certificate Is Electronically Generated

N.B.: Gram Panchayat has every right to cancel or revoke or not allowing renewal of registration at any time

Ref. Application Docket No. SSNOCPESP31243676N
https://prdeodb.wb.gov.in/



TEAM ENERGY SYSTEMS
Authorized Licence : Central Building Research Institute, Roorkee
S.C.F. 87, IInd Floor, Sector 4, Panchkula-134112
286-287, Ecotech-1 Extn, Near Kasna, Greater Noida-201306
Phone: 9213394753, 9335977744

Ref. No. –TEM/20/1124

Dated: 21/07/2022

Completion/Adequacy Certificate

Certified that **M/s Raja Bricks ~~Field~~, Mouza Jovramdanga, J.L. No. 41,Plot No. 80,87,115 & 126,P.S. Barabani,Distt. Paschim Bardhaman(West Bengal)** has received the civil engineering drawings for High Draught Zigzag Kiln designed by Central Building Research Institute, Roorkee and the party has constructed the Rectangular Brick kiln with Zigzag firing System.

It is further certified that the High- Draught brick kiln with Zig Zag type of firing meet the norms as prescribed by the Central Pollution Control Board.

For Team Energy Systems

TEAM ENERGY SYSTEMS TES Dir.

Authorised Signatory

NOTARY KOLKATA S.M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA

TEAM ENERGY SYSTEMS
Authorised Licensee : Central Building Research Institute, Roorkee
S.C.F. 87, IInd Floor, Sector 4, Panchkula - 134112
286-287, Ecotech-I, Extn. Near Kasna, Greater Noida-201306 (U.P.)
Phone : 9814023509, 9213394753
E-mail : suneet@teamengineers.com

Ref. No.-TEM/20/1124

Dated:11.11.2020

To whomsoever it may concern

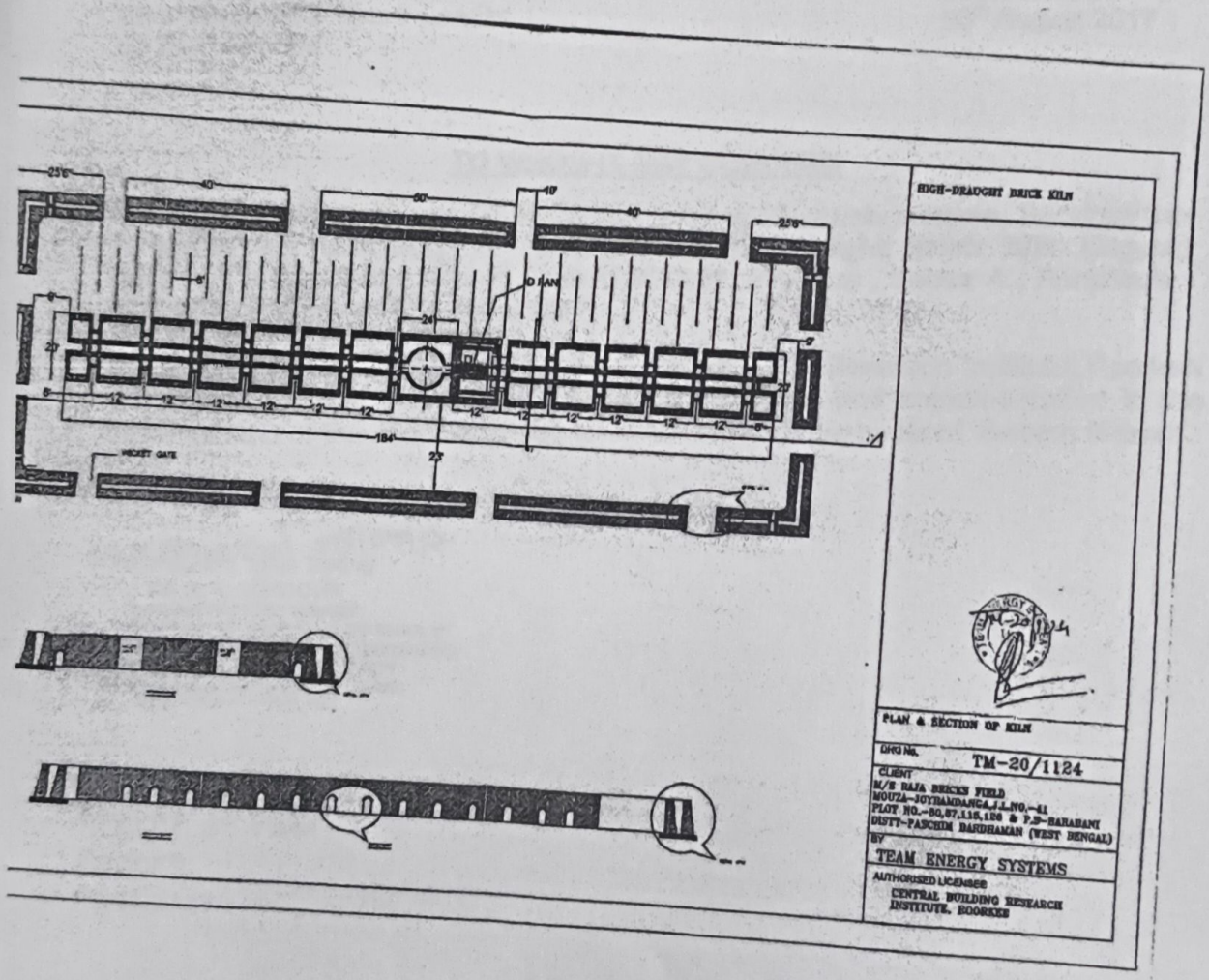
Certified that **M/S Raja Bricks ~~Field~~,Mouza–Joyramdanga,J.L No.-41,Plot No.-80,87,115,126 & P.S-Barabani & District-Paschim Bardhaman (West Bengal)** has received a set of Civil Engineering drawing as per drawing No. **20/1124** of High Draught Zigzag Brick kiln designed and developed by Central Building Research Institute, Roorkee proposed to be implemented at their Brick Kiln, **Mouza–Joyramdanga,J.L No.-41,Plot No.-80,87,115,126 & P.S-Barabani & District-Paschim Bardhaman (West Bengal)**

It is further certified that this type of High Draught brick kiln with Zigzag type of firing meets the norms as prescribed by the Central Pollution Control Board.

For Team Energy Systems

Authorized Signatory

NOTARY KOLKATA S.M. HASSAN Regn. No. 13789/18 GOVT. OF INDIA



29 ~~30~~

सी.एस.आई.आर.-केन्द्रीय भवन अनुसंधान संस्थान, रुड़की
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)
C.S.I.R.-CENTRAL BUILDING RESEARCH INSTITUTE
(A CONSTITUENT ESTABLISHMENT OF CSIR)
रुड़की-247667 (उत्तराखण्ड), भारत
ROORKEE- 247 667 (UTTARAKHAND), INDIA

Dr. A.K.Minocha
Chief Scientist & Group Leader
EST/CP Groups

EST/AKM/101
08th August 2017

TO WHOM IT MAY CONCERN

It is hereby informed that CSIR-Central Building Research Institute, Roorkee has transfered the technology of **"Design of High Draught Brick Kiln (Zig-zag system)"** to M/s Team Energy System SCO 87, 2nd Floor , Sector 4 , Panchkula - 134112 (Haryana) on 8th August 2017.

The above firm is authorised by CSIR- Central Building Research Institute, Roorkee to market the said technology for wide dissemination and implementation in the larger interest of the nation and also towards achieving the goals of 'Swatch Bharat".

(A.K.Minocha)
डॉ. अश्विनी कुमार मिनोचा
Dr. A. K. MINOCHA
मुख्य वैज्ञानिक / Chief Scientist
Group Leader, Environment Sc. & Tech. and Clay Products Group
CSIR-Central Building Research Institute

M/s Team Energy System
SCO 87, 2nd Floor
Sector 4
Panchkula -134112 (Haryana)

NOTARY
KOLKATA
S.M. HASSAN
Regn. No.
13789/18
GOVT. OF INDIA

FEASIBILITY REPORT

C.B.R.I. TECHNOLOGY

ON

POLLUTION CONTROL IN BRICK KILNS-ZIGZAG FIRING TECHNOLOGY IN NATURAL AND HIGH DRAUGHT BRICK KILNS

TEAM ENERGY SYSTEMS

Authorised Licenseef
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This Feasibility Report belongs to

M/S RAJA BRICKS FIELD

MOUZA–JOYRAMDANGA,J.L NO.-41,PLOT NO.-80,87,115,126

P.S-BARABANI

DISTRICT-PASCHIM BARDHAMAN (WEST BENGAL)

Dimension of High Draught Kiln

1.	Kiln Dimensions		
	- Length (Island)	:	56083mm
	- Width (Island)	:	6096mm
	- Height	:	3352 mm
2.	- Draught	:	50 mm water gauge
	- Discharge Capacity	:	425 cum
	- Fan	:	
3.	- Number of feeding holes in one row	:	14
4.	Chimney Details		
	- Height	:	32004 mm
5.	Cleaning interval of well and flue ducts (proposed)	:	One in fortnight
6.	Coal Consumption in one day (expected)	:	
	- Average	:	9-10 tonne per 1 lac bricks

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CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE - 247667

TECHNOLOGY ON POLLUTION CONTROL IN BRICK KILNS-ZIGZAG FIRING TECHNOLOGY IN NATURAL AND HIGH DRAUGHT BRICK KILNS

INTRODUCTION:

The growth of industrial, commercial and residential sector in our country is closely linked with the rate of production of important building materials, namely 'Bricks'. There are about 40000 fixed chimney brick kilns in India. The annual turnover of the brick industry is estimated to be Rs. 8000 crores.

The problems of brick kiln Industry are closely connected with the issue of sustainable development, energy efficiency and environment friendliness. The government of India has notified that solid particle emissions from brick kiln should not exceed 250 mg/Nm3 shortly. With these provisions, Large number of Fixed chimney Bull Trench kilns have to change over to Zigzag type of firing with natural or high draught design brick kiln.

Appreciating the concern for environment friendly brick production, Central Building Research Institute, Roorkee has designed and developed following for brick kiln industry:

- Design of Gravitational settling Chamber for existing fixed chimney brick kilns.
- Design of zigzag firing technology with natural and high draught.

CBRI has perfected both the designs by actually installing them at brick kilns across India. The performance of both the designs are under constant observation. Several kiln owners, journalists and environmentalists have witnessed the successful performance of our designs.

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1.2 EXECUTIVE SUMMARY

Team Energy Systems is authorised licensee of central building Research Institute(C.B.R.I.) Roorkee, a constituent establishment of CSIR,New Delhi. Team Energy Systems has been serving brick kiln industry for 18 years. Our endeavours has been for efficient technology in brick kiln industry. We have been constantly working with brick kiln owners associations for better combustion practices resulting in minimising fuel consumption and environment friendly technologies.

The scope of work for this project is outlined as follows:

- Taking dimensions of brick kiln including size of tunnels, no of holes and size of island.
- Providing detailed design and drawings for zigzag firing technology as per kiln size.
- Guidance to brick kiln owner regarding construction of kiln and zigzag firing

Fixed Chimney Bull's Trench Kiln:

Initially Bull Trench Kilns had movable metallic chimneys which were banned through an MOEF notification in 1996. The conversion to Fixed Chimney Bull Trench Kilns reduced the particulate matter as well as fuel use compared to moving chimney Bull Trench Kilns. Due to better combustion and fuel saving, most of brick kilns have converted their kilns to Fixed Chimney Bull Trench Kiln.

Fixed Chimney Bull Trench Kiln has a fixed chimney which is constructed at the Center of the kiln and is connected to various chambers through a central smoke tunnel. The central tunnel is then connected to approach tunnels and flue holes to different chambers of the kiln. The chamber which is under fire is connected to the central tunnel while other chambers are disconnected by using dampers. In this way the flue gases from the chamber under fire are removed by the chimney. The provision of chimney helps to create natural draught so that fresh air may enter the kiln to burn coal and produce heat.

Fixed Chimney Bull Trench Kiln also suffers from incomplete combustion of fuel indicated by high CO2 and CO concentration in flue gases. The emission through the chimney are primarily black in appearance due to unburnt particles besides obnoxious flue gases like SO2 and NO2, Moreover ,the thick black smoke and SO2 emission were more during the charging time and during idle time, almost grey smoke was emitted.

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Along with high energy consumption and emission an Fixed Chimney Bull Trench Kiln also produces a low percentage of class 1 bricks. Almost 60% bricks are class 1 and rest are class 2 and class 3. Non uniformity of temperature across the stack of bricks result in difference in quality of bricks.

ZIG ZAG FIRING TECHNOLOGY:

The zigzag firing concept was first introduced by Central Building Research Institute in the form of high draught kiln after thorough research by scientists on different kilns across India. High draught kiln has a induced fan which creates the draught required for fuel burning. The lack of electricity at most brick kilns sites became a major problem in adopting this technology. Some brick kilns adopted zigzag firing in natural draught Fixed Chimney Bull Trench Kiln. The natural draught zigzag kiln created better combustion but high draught is more efficient.

The zigzag is an improved version of Fixed Chimney Bull Trench Kiln. The main difference is the arrangement of bricks in chambers. The bricks are stacked in such a manner to form distinct chambers(-2.5 meter long) and guide the air flow in a zigzag path.Zigzag flow increases the air flow length and turbulence in the air,thereby resulting in improved combustion and heat transfer rate and uniform temperature across the kiln cross section.

In zigzag kilns, powdered coal is fed through feeding holes in small quantities and fuel feeding zone is six times longer than that of fixed chimney bull trench kiln. The longer fuel feeding zone alongwith turbulence created by zigzag air movement helps coal volatiles to mix with sufficient air thereby resulting in complete combustion and less pollution.

I) A Zigzag kiln emits-80% lower particulate matter and -85% lower Black carbon as compared to Bull trench kilns, This is mainly because of better combustion of fuel and settling of particulates in the kiln itself due to zigzag flow. Emission of CO2 and CO from the zigzag kiln is lower because of less consumption of fuel and improved combustion,

II) A Zigzag kiln consumes -20% less fuel as compared to fixed chimney bull trench kiln because of better combustion and heat recovery.

III) Zigzag firing kiln produces higher percentage of class 1 bricks

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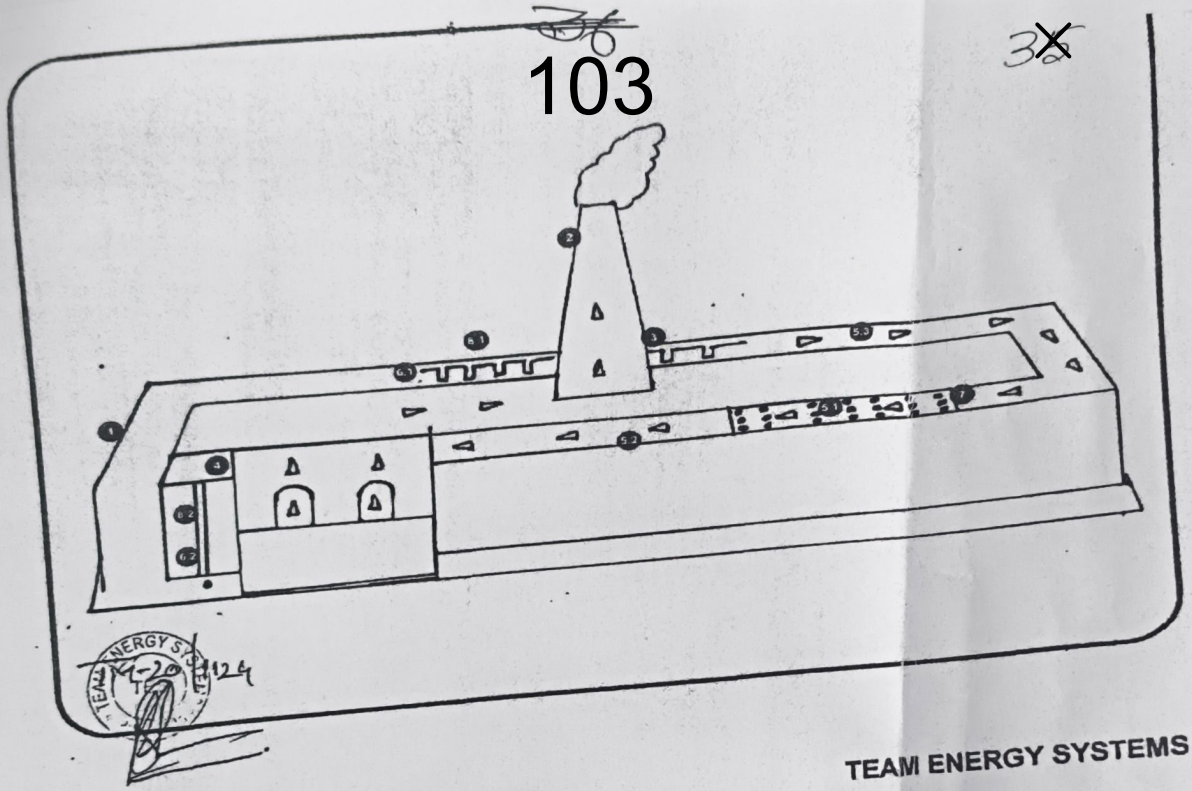

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1. High draught zigzag firing kiln is a moving fire kiln in which the fire moves in a closed rectangular circuit (central perimeter 120-140 meter) through the bricks stacked in the annular spaces between the outer and the inner wall of the kiln.

2. The chimney is usually of lower height (17-30 meter) and the kiln operates under the draught provided by a fan which draws the flue gases from the kiln and discharges it through the chimney. In the original design the chimney was located on one side of the kiln and was connected with the kiln through underground tunnel. However, in the modified designs the chimney is located at the centre of the kiln.

3. The bricks are stacked in such a manner to form distinct chambers (-2.5 meter long) and guide the air flow in a zigzag path. Zigzag flow increases the air flow length and turbulence in the air, thereby resulting in improved combustion and heat transfer rate and uniform temperature across the kiln cross section.

4 The kiln does not have a permanent roof and bricks stacked in the kiln are covered with a layer of ash and brick dust, which acts as a temporary roof and inhibits the heat loss as well as seals the kiln from leakages. The double layered outer wall with clay filled in between also reduces the heat loss.

5 There are three distinct zones in an operating high draught zigzag kiln.

5.1 Brick firing zone where the fuel is fed and combustion is happening.

5.2 Brick preheating zone (in front of firing zone) where green bricks are stacked and are preheated by the flue gases.

5.3 Bricks cooling zone (behind the firing zone) where fired bricks are cooled by the cold air flowing into the kiln.

6

6.1 Air inlet: Air enters the kiln from back end of the cooling zone which is kept open to allow air entrance.

6.2 Seal to guide flue gases: Front end of the preheating zone is sealed by a plastic sheet to guide the flue gas to the chimney through the flue gas duct system.

7 Firing zone extends to three chambers (-7.5meter) and solid fuels like firewood, agriculture residue atc are fed through the feed holes provided at the top of thekiln continuously by a single fireman standing at the top of the kiln.

8 The fire travels a distance of 2 chambers (-5 meter) in 24 hours and fires 15,000 to 40,000 bricks daily. Fired bricks are unloaded from the front of the brick cooling zone (B 1)

and an equivalent batch of green bricks is loaded ahead of the brick preheating zone (B2)

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HIGH DRAUGHT KILN

The Kiln is an archless, top.fed, coal fired continuous kiln in which the fire follows a zig-zag path. The kiln is divided into 32 chambers made through partition walls. Partition walls are built with unfired bricks, which get burnt along with the bricks set in the chamber, and are dismantled at the time of unloading bricks from the chamber. A chamber holds 15,000 bricks and normally two chambers are burned to obtain an output of 30,000 bricks per day. Overall dimensions of the kiln are 40.80 m x 18.90 m x 2.55 m. Each firing circuit is completed in 16 days producing 4.8 lakh bricks. In a chamber holding 15,000 bricks 18 feed holes are provided for feeding coal from top.

An induced draught fan located at the far end of the kiln creates draught. The discharging capacity of the fan is 425 m3/minute. It is worked by a 12 kw motor. The products of combustion, steam etc. are channelised through a system of flues and flow of gases is suitably controlled through cap dampers over the flue holes located in the outer wall. The damper shaft is provided with a hand wheel for easy operation from top of the wall. When in full firing order, the kiln operates on a draught of 50 + 5 mm (wg). During operation a very fast rate of fire travel of 17 to 18 metres per day is maintained which is three times as fast as traditional Bull's kiln. The kiln is highly fuel-efficient and the thermal efficiency is comparable with modern Hoffmann and tunnel kilns of equal capacities. Coal consumption is as low as 120 kg per thousand bricks (Calorific value 5,000 K cal/Kg). The Principal factors, which contribute to the attainment of high thermal efficiency of this kiln, can be summarised as follows:

Use of powerful I.D. fan, the strong draught produced by it, creates turbulence, which ensures efficient combustion of fuel through proper mixing of preheated air and fuel.

Fast removal of moisture from bricks in the drying and preheating chambers thus preventing moisture condensation in any part of the kiln.

Maintenance of exhaust flue gas temperature at as low as 90 to 100 C ensuring maximum recovery of heat from the waste gases.

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Specially designed pattern of brick setting ensuring uniform heat distribution within the setting as well as fast rate of heat transfer from one chamber to the next.Induced high draught within the kiln increases the length of preheating zone and decreases the size of cooling zone, allowing for faster operation of kilnHigh draught increase flue gas heat recovery hence increasing the preheating capacity of the kiln.

Induced high draught reduces the coal consumption and structural losses due to better propagation of fire travel within the combustion zone.

A high draught bull trench kiln using ID fan is more efficient than a normal kiln with natural draught in summer season when the ambient temperature is quite similar to the temperature of the flue gases inside the chimney. The reduced temperature gradient between the chimney flue gases and ambient air results in significant loss of pressure and slow propagation of fire travel within the kiln heating zones. The ID fan increases the draught inside the firing zone ensures substantial exhaust gases draught within the kiln operational zones.

Benefits of new energy efficient technology:

1. **Technical benefits**
   - Fuel saving
   - Improvement in product quality
   - Increase in production
   - Reduction in raw material consumption v
   - Reduction in waste bricks
2. **Monetary Benefits**
3. **Social Benefits**
   - Improvement in working environment
   - Improvement in workers skill
4. **Environment Benefits**
   - Reduction in effluent generation
   - Reduction in Green House Gas emission such as CO2,NO2etc
   - Reduction in other emission such as SO2 etc

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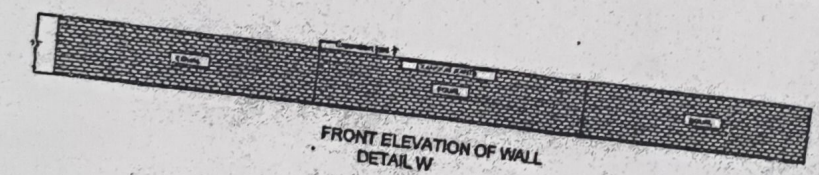
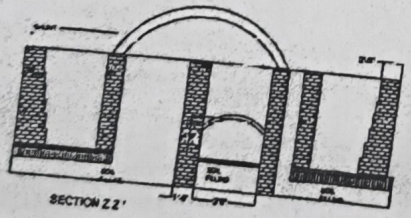


FRONT ELEVATION OF WALL
DETAIL W

FRONT ELEVATION OF MIYANA
DETAIL X



SECTION Z Z'

HIGH-DRAUGHT BRICK KILN

PLAN & SECTION OF KILN

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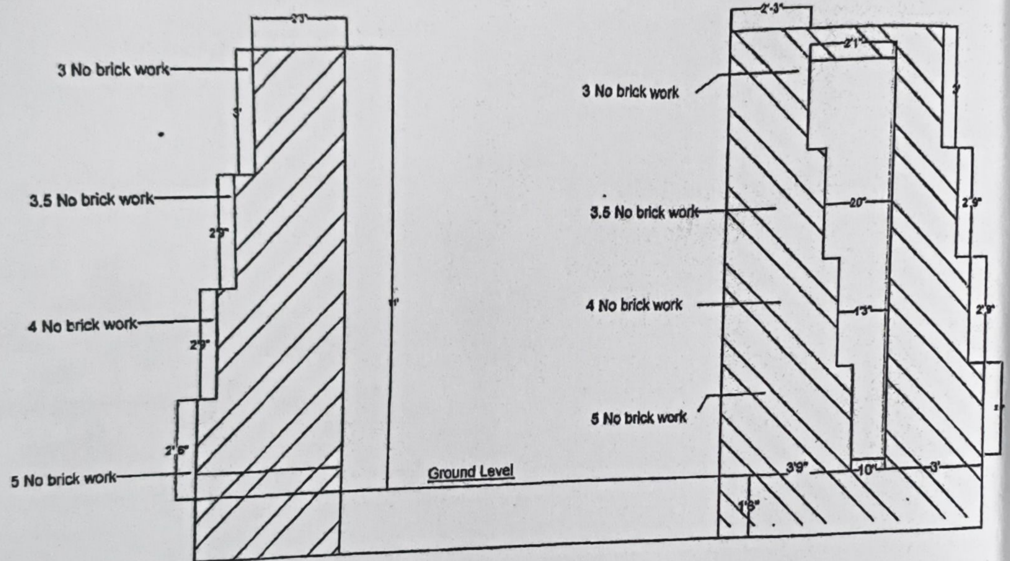

DETAILS OF INSIDE WALL
SECTION AT 1 1

DETAILS OF OUTER WALL
SECTION AT 1 1

DESIGN : HIGH DRAUGHT DOUBLE ZIG-ZAG KILN

HIGH DRAUGHT BRICK KILN

PLAN & SECTION OF KILN

DRG No. TM-20/1124

CLIENT
M/S RAJA BRICKS FIELD
MOUZA-JOYRAMDANGA,J.L NO.-41
PLOT NO.-60,67,115,126 & P.S-BARABANI
DISTT-PASCHIM BARDHAMAN(WEST BENGAL)

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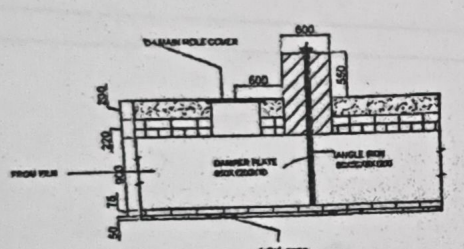
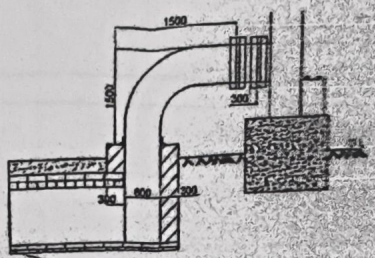
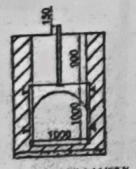
HIGH DRAUGHT BRICK KILN



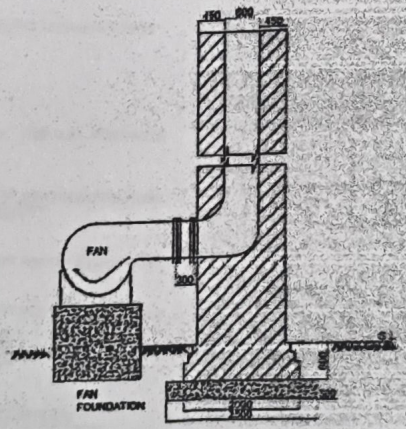
DETAIL OF MAIN FLUE



DETAILS OF FAN CONNECTION & FLUE



DETAIL OF PLATE DAMPER



DETAIL OF FAN & CHIMNEY CONNECTION

FLAN & SECTION OF KILN

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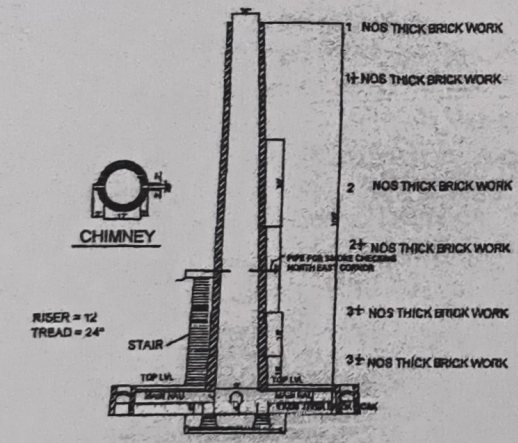

Longitudinal Section of Main Nali & Chimney

HIGH-DRAUGHT BRICK KILN

PLAN & SECTION OF KILN

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Before the National Green Tribunal
Eastern Zone Bench, Kolkata

O. A. No. 168 of 2025 (EZ)

Bitu Biswakarma
-Versus-
Central Pollution Control Board & Ors.
-And-
In the matter of:
Raja Brick Fields
... Respondent No. 7

AFFIDAVIT IN REPLY/ COUNTER AFFIDAVIT FILED BY MANAS RANJAN CHATTERJEE RESPONDENT NO. 7

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09 FEB 2026