



# GREAT EASTERN ENERGY CORPORATION LTD.

Ref.: GEECL/QHSE/2023/Sep/3355

25<sup>th</sup> September 2023

To,

The Member Secretary  
West Bengal State Pollution Control Board,  
Paribesh Bhawan  
Building -10 A, Block – LA,  
Sector- III, Salt Lake City,  
Kolkata - 700106

Sub: Submission of Environmental Statement for Exploration & Production of Coal Bed Methane in Raniganj (South) CBM, Block, West Bengal of Great Eastern Energy Corporation Ltd.


Ref.: Consent letter no. CO118225, Memo Number: 417 – WPBA/Red (Bwn) /Cont. (526) /06 dated 30.04.2019

Dear Sir,

We are submitting herewith Environmental Statement in Form – V (for the financial year 2022 – 2023) for our project Exploration & Production of Coal Bed Methane Gas in Raniganj (South) CBM block located in Paschim Bardhaman, Bankura and Purulia district of West Bengal.

Thanking you,

Yours Faithfully,  
For **Great Eastern Energy Corporation Ltd.**,

  
Jairam K Shrinivasan  
Joint President – Operations & HR

Enclosure:

1. Offline Environmental Statement (Form – V)
2. Online Environmental Statement submission copy Application No. 4295682



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## WEST BENGAL POLLUTION CONTROL BOARD

### FORM V

(See Rule 14)

Environmental Statement for the financial year ending on 31st March on or before 30th of September every year.

#### PART A

- (i) Name and address of the owner/ occupier of the industry operation or process : Jairam K Shrinivasan
- (ii) Industry category Primary-(STC Code) : RED, Oil and gas extraction including  
Secondary-(STC Code) : CBM (offshore & on extraction through drilling wells) -shore
- (iii) Production capacity : 79132.063 Tonnes
- (iv) Year of establishment : 2001
- (v) Date of the last environment statement submitted :

#### PART B

1. Water consumption m<sup>3</sup>/ d

Process : 75

Cooling :

Domestic : 4

Name of products	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year

2. Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit	
		During the previous financial year	During the current financial year

\*Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw material used.

#### PART C

Pollution discharged to environment/ unit of output.

Pollution	Quantity of pollutants discharged(mass/day)	Concentration of pollutants in discharges(mass/volume)	Percentage of variation from prescribed standards with reasons



[Form V]

(See rule 14)

Environmental Statement for the Financial year ending the 31<sup>st</sup> March' 2023

**PART – A**

(i)	Name & address of the Owner/ Occupier of the industry, operation, or process.	:	Mr. Y. K. Modi Great Eastern Energy Corporation Ltd. M-10, ADDA Industrial Area, P.O. – Ram Krishna Mission, Asansol – 713305, West Bengal
(ii)	Industry category	:	Red, Large
(iii)	Production Capacity	:	5000 SCMD / Well
(iv)	Year of establishment	:	2001
(v)	Date of the last environmental statement submitted	:	16 <sup>th</sup> September 2022

**PART - B**

**WATER & RAW MATERIAL CONSUMPTION**

**Water and River Material Consumption**

**(1) Water Consumption (M<sup>3</sup>/Day)**

Process	:	75 m <sup>3</sup> / day
Cooling	:	Not Applicable
Domestic	:	4 m <sup>3</sup> / day

**(2) Raw material consumption**

\*Name of the Raw Material : Not Applicable

\*Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.



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**PART - C**

Pollution discharged to environment/unit output generated (Parameter as specified in the "Consent to Operate" issued)

Sr. No.	Pollutants	Concentration of Pollutants in discharges (mass / volume)				Percentage of variation from prescribed standards with reason
		Parameter	Observed Value (Range)	CPCB Standard for discharge onshore	Standard as per CTO	
a	Water (CBM Produced water)	pH	8.3 – 8.9	5.5 – 9.0	5.5 to 9.0	All parameters are well within prescribed limits.
		Total Suspended Solids	<2.5- 98	100 mg/l	100 mg/l	
		BOD at 27°C for 3 days	<2.0- 15	30 mg/l	30 mg/l	
		COD	<4.0- 62	100 mg/l	250 mg/l	
		Oil & Grease	<1.4	10 mg/l	10 mg/l	
		No discharge of CBM produced water.				
	CBM Produced water is collected in onsite lined pit and reused in drilling process.					
	Water (Domestic)	Very low quantity of domestic effluent (<0.25 KLD) generated, which is disposed by adequately designed Septic Tank & Soak Pit.				Not Applicable
b	Stack Emission (DG Exhaust)	Parameter	Observed Value (Range)	Prescribed Standard {MoEF GSR 771 (E)}		Stack Emission value is well within the prescribed limits stipulated by concerned regulatory authorities.
		Particulate Matter gm/kwh	0.03 – 0.12	0.3		
		Carbon monoxide gm/kwh	0.07 – 0.19	3.5		



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**PART – D**

**Hazardous Wastes**

{As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 amended till date.}

S. No.	Hazardous Waste	Total Quantity (Kg)	
		During the previous financial year	During the current financial year
a	From process		
	Used Oil (Category – 5.1)	13621.00 litres	11286.00 litres
b	Used Oil Filter (Category – 36.2)	378.00 Kg	391.00 kg
c	Waste or residue containing oil (Category-5.2)	240.00 Kg	100.00 Kg

Used Oil, Used Oil filter & Waste or residue containing oil is stored in leak-proof PVC Barrels and disposed to CPCB Approved recycler

**PART – E**

**Solid Wastes**

Empty bags, Containers, Drums etc are the solid wastes generated which are internally re-used and not disposed otherwise.

**PART – F**

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

Description	Quantity during 2022-2023	Generation of Wastes	Method of disposal
Used Oil (Hazardous wastes)	11286.00 litres	Oil from gas generators, Compressors etc.	16660.00 Litres Sold to authorized recycler.
Used Oil Filter (Hazardous wastes)	391.00 Kg	Oil filter from gas generators, Compressors etc.	0 Kg disposal to CHWTSDf.
Waste or residue containing oil (Hazardous wastes)	100.00 Kg	Maintenance activity for operation	0 Kg disposal to CHWTSDf.
CBM drill cuttings(Solid Waste)	NIL (As there is no drilling activity during the year).	Coal fragments	On site storage in impervious double lined pit and used as hard surfacing.



## PART – G

### In respect of Pollution Abatement Measures taken on Conservation of Natural Resources and on the cost of Production

Steps taken by the Company for utilizing alternate sources of energy

The Company has devised its production lines keeping in view the objective of minimising energy loss and achieve maximum efficiency. In order to achieve optimum efficiency following steps of energy conservation has been implemented during the year under review:

- a) Grid power has been replaced with use of Gas Generators for providing power to run the Gas Gathering Station, Central Gathering Station, well sites.
- b) Gas Engine driven CNG Compressors are being introduced instead of Electric Motor driven compressors;

On-going steps towards Sustainable Development

- A sustainable source of clean reliable and affordable energy in form of coal bed methane is being provided in coal dependent region.
- Reducing Green Houses Gas Emission by extracting and supplying Coal Bed Methane which would otherwise be vented into the atmosphere during coal mining.
- Produced water in operation is being reused internally which reduce the need of water from the river or ground water.

Supporting to pollution prevention through poverty eradication with following measures:

- a) Rural employment generation
- b) Training / Skill development for sustainability transition.
- c) Supporting educational and literacy programs in poverty stricken tribal areas.
- d) Evening classes for senior citizens in remote villages.

GEECL has incurred Rs- 64,03,054.00 as recurring expenses in the financial year (2022 - 2023) for environmental & safety measures like monitoring of water, air, noise, Third party Audit for Environment and Safety Management System, Maintenance of disposal pit etc. and Rs- 49,65,642.00 for CSR activities like free medical camp, eye camp and blood donation etc.



## PART – H

### Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of Pollution

- Usages of VVFD (Variable voltage frequency drive) controlled pump operation;
- Operation strategy in placed is to continue to maximizes production from existing wells and to continue to pursue sales in the highly industrialised region of Asansol-Raniganj- Durgapur through our own dedicated pipelines networks this will enables to reduce dependence on fossil fuel and prevention of air pollution. The company is continuing to contribute towards improving the environment in this area through substitution of polluting fuel with the use of clean energy.
- GEECL is committed to improve safety and environment by strictly practising Environment Management System and Occupational, Health, Safety and Assessment Series Management System of company. Various programs are arranged such as World Environment Day.
- Diesel Gen sets are replaced by using the Gas Gen sets at well sites to protect the environment by reduction of emission.
- We have completed surveillance audit for IMS Certification (ISO 9001:2015, ISO14001:2015 & ISO 45001:2018) by SGS India.

## Part – I

### Any other particulars for improving the quality of the Environment

- Arresting Gas leakages from well head, valve and pipeline to save fuel & power.
- We have been able to positively impact the living standards in our operation area by building motorable and all weather access roads from villages this has made commuting easier by removing drudgery and saving times for the villagers, Who can now take their produce to the local market on time, thus enhancing the livelihood opportunities in the area.
- GEECL views itself as integral parts of the community in which it work with the business designed to not only create value for the company but also to make a positive contribution to the sustainable development of the local area.
- Regular thrust on conducting Monthly safety meeting, Mock drills and training to operational staff to increase awareness on prevention on Pollution and Work Place safety.
- We are an IMS Certified Company (ISO9001, ISO14001 & ISO45001 Certified)

