

Ref. No.: GEECL/QHSE/2024/Sept/3511

September 20, 2024.

To,

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

Subject:

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

Reference: Consent To Operate Number WBPCB/4783919/2024 dated 12/02/2024.

Dear Sir,

We M/s. Great Eastern Energy Corporation Limited is submitting Environmental Statement in Form-V (for the financial year 2023-2024) 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, M/s. Great Eastern Energy Corporation Limited

Jairam K Shrinivasan

(Joint President -Operations & HR)

Enclosures:

1. Offline Environmental Statement (Form-V) FY-2023-2024.

[Form V]

(See rule 14)

Environmental Statement for the Financial year ending the 31st March' 2024

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	:	66101.13 MT of CBM FY-2023-24
(iv)	Year of establishment	:	2001
(v)	Date of the last environmental statement submitted	;	25th September 2023

PART - B

WATER & RAW MATERIAL CONSUMPTION

Water and River Material Consumption

(1) Water Consumption (M³/Day)

Process

75 m³/ day

Cooling

Not Applicable

Domestic

4 m³/ 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.



PART - C

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

Sr. No.	Pollutants	Concentration	Percentage of variation from prescribed standards with reason			
		Parameter	Observed Valve (Range)	CPCB Standard for discharge onshore	Standard as per CTO	All parameters are well within prescribed limits.
		pН	8.3 – 8.9	5.5 – 9.0	5.5 to 9.0	within presenced illines.
а		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 drilling process.				
	Water (Domestic)	Very low quantit is disposed by a	Not Applicable			
b	Stack Emission (DG Exhaust)	Parameter	Observed Value (Range)	Prescribed Standard (MoEF GSR 771 (E))		Stack Emission value is
		Particulate Matter gm/kwh	0.03 – 0.12	0.3		well within the prescribed limits stipulated by concerned regulatory authorities.
		Carbon monoxide gm/kwh	0.07 – 0.19	3.5		



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		
а	From process				
	Used Oil (Category – 5.1)	11286.00 litres	6573.00 litres		
b	Used Oil Filter (Category – 36.2)	391.00 Kg	29.00 kg		
С	Waste or residue containing oil (Category-5.2)	100.00 Kg	292.00 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 2023- 2024	Generation of Wastes	Method of disposal
Used Oil (Hazardous wastes)	6573.00 litres	Oil from gas generators, Compressors etc.	10120.00 Litres Sold to authorized recycler.
Used Oil Filter (Hazardous wastes)	292.00 Kg	Oil filter from gas generators, Compressors etc.	500.00 Kg disposal to CHWTSDF.
Waste or residue containing oil (Hazardous wastes)	29.00 Kg	Maintenance activity for operation	190.00 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.

GEECL has incurred Rs- 1,63,75,141.00 as recurring expenses in the financial year (2023 - 2024) 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- 42,73,519.00 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)

