

EOGEPL/CBM-RG (E)/HSE/2018/571

Date: 16th July 2018

To,
Senior Environmental Engineer
West Bengal Pollution Control Board,
Barrackpore (Kankinara) Regional Office
Panpur More, Kalyani Express Way
P. O. - Narayanpur

Essar Oil and Gas Exploration and Production Limited AN 81 B Sector 2B Martin Luther King Road Bidhan Nagar Durgapur-713 212 West Bengal India

Corporate Identity Number: U11203GJ2016PLC091903

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Sub: Submission of Form V: Environmental Statement (FY 2017-18)

Dear Sir,

We are enclosed herewith the Environmental Statement for (FY 2017-18) of Raniganj East CBM Block-RG (E)-CBM-2001/1, Durgapur, West Bengal of Essar Oil and Gas Exploration and Production Limited, Durgapur.

Thanking you for your continued support,

With Best Regards,

For Essar Oil and Gas Exploration and Production Limited

C.D.Narayanswamy
Chief Operating Officer

Raniganj East, CBM Project-Durgapur

Enclosures: Form V: Environmental Statement of FY 2017-18

Copy to:

1. In charge, Durgapur Regional office. City Centre, Durgapur

2. Director, Eastern Regional Office, MOEF&CC, Bhubaneswar

Raniganj East CBM

Project-Durgapur

FORM-V (See rule 14)

Environmental Statement for the Financial year ending with 31st March 2017

PART- A

i. Name and address of the owner/occupier of the industry operation or process.

C D Narayanswamy – Chief Operating Officer, Raniganj CBM-Durgapur Essar Oil and Gas Exploration and Production Limited,

AN 81B Sector 2B Martin Luther King Road, Bidhan Nagar, Durgapur 713212

ii. Industry category Primary-(STC Code): Coal Bed Methane (Exploration & Production)
Secondary- (STC Code)

iii. Production Capacity- ~ 12,00,000 m3/day

iv. Year of establishment- Established in year 2008-09.

v. Date of the last environmental statement submitted: 16-06-2017

PART - B

Water and Raw Material Consumption:

i. Water consumption in m³/d

Process: Nil

Cooling: Not applicable

Domestic: 15 KL

Sr. No.	Name of Products	Process water consumption per unit of products				
		During the previous financial year	During the current financial year			
1	Coal Bed Methane	Nil	Nil			

ii. Raw material consumption

Sr.	Name of raw	Name of	Consumption of raw material per unit of Output During the previous financial year (2016-2017) During the current financial year (2017-2018)	
No.	materials*	Products		
1	Main raw material during drilling phase- Water based Mud		6 MT*51 wells=306 MT	No Drilling operation

^{*} 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 of output

(Parameter as specified in the consent issued)

Sr. No.	Parameter	Pollutants Quantity of	Concentration of	Percentage of variation from	
		Pollutants discharged	Pollutants discharged	prescribed standards with	
		(mass/day)	(mass/volume)	reasons	
Α	Water	Nil	Nil	-	
В	Air	Nil	Nil	-	

PART- D

HAZARDOUS WASTES

(as specified under Hazardous Wastes (Management & Handling Rules, 1989).

	Area		Total Quantity (Kg)		
Sr.		Hazardous Wastes	During the previous	During the current	
No	Alea	Tiazaidous Wastes	financial year	financial year	
			(2016-2017)	(2017-2018)	
1	From Process	Waste Oil/used oil	9870 litres	37955 litres	
		2. Oil contaminated Waste	4.47 MT	3.4 MT	
		3. Used Battery	Nil	195 nos	
2	From Pollution	Nil	Nil	Nil	
	Control Facilities	INIL	INII	IVII	

PART - E

SOLID WASTES:

Sr. No			Total Quantity (Kg)		
	Area	Solid Wastes	During the previous financial	During the current	
	is a		year	financial year	
Α		Waste Mud &			
	From Process	Drill Cutting	7650 MT	No drilling Operation	
	*	during drilling			
В	From Pollution Control		- n_		
6	Facilities				
	Quantity recycled		-	-	
	or re-utilized		4		
C	within the unit.		2		
	2. Solid				
×	Disposed				



PART - F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Sr. No.	Types of Waste	Quantity	Mode of Disposal
1	Hazardous Waste- Waste/used Oil	39900 Litres	Sold to authorize recycler. Address of recycler: 1. N K Company, J R Industrial Estate Vill- Banagram, Haran Molla Rd. PO- Rasapunja, PS Bishnupur 2. OM Industries 7 K M Stone, VPO Titoli Jind Road, Rohtak, Haryana
2	Oil contaminated waste	3.8 MT	Sent to TSDF, Haldia Address: West Bengal Waste Management Limited, J.I.no-103, Mouza-Purba Srikrishnapur, P.O & P.SSutahata, PIN-721635, Haldia, Dist-Purba Midnapur
3	Used battery	195 nos	M/s S K Royal Movers (Authorized dealer), Nachan Road , Bhiringi, Durgapur 13

PART- G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

- 1. Reuse of treated produced water in dust suppression and as utilities.
- 2. Conversion of all Diesel Generator sets to Gas based Generator Sets at well sites and facilities (i.e GGS 1, 2, 3, 4 and MCS).
- 3. Connected all well pads with GGS/MCS and Customer end with CGS through pipeline. Maximum Sale of Coal bed Methane Gas and minimized the Gas flaring.
- 4. Installation RO (5100 KLD) for the treatment of Produced water generated from CBM wells.
- 5. Oil & water separator installed in all Compressor stations as a precautionary measure.

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PART - H

Additional measures/investment proposal for environmental protection including abatement of pollution.

- Regular environmental monitoring through CPCB/NABL approved laboratory for Ambient Air and Noise Quality monitoring and DG set Stack emission monitoring, sampling and Analysis of Produced water, Ground water. The analysis and monitoring report was submitted with half yearly Environmental Clearance compliance report.
- 2. Three Bin waste Management System (different colour code) is developed at all the major site to segregate the waste generated at source.
- 3. Initiative stated for onsite bio manure from the food waste generated at site
- 4. Around 10,000 sapling planted at major facility was planned with all protection and maintenance measure to grow it with maximum survival rate.
- 5. Centralized RO plant capacity of 4000 KLD will be in the advance stage of construction will be started from this year.

PART - I

MISCELLANEOUS:

1. CSR activity:

Health

- ✓ OPD service provided with a team consisting of a 1 doctor, 1 nurse and 1 lab technician. A total of 640 health camps were conducted and total 8,344 OPDs, were conducted through regular MMU camps.
- ✓ This FY 4 Community Outreach Workers (COW) conducted various type of community
 awareness programmes (on prevention of anemia, AIDS, hygiene, nutrition, dehydration,
 menstrual hygiene, hand washing, family planning, youth meeting, tuberculosis and life skill
 education and all the special day (declared by WHO) celebration and other programs). Monthly
 thematic sessions were held to raise awareness on different health issues, total of 1,467 group
 meetings were held and the total beneficiaries are 11,950.
- ✓ Total outreach of the program was 20,294, out of which 11,950 participated in IEC Activities whereas 8,344 availed OPD services.
- ✓ School health checkup camps at 23 free primary schools. Total 979 students benefited through these camps.
- ✓ 2 awareness programs on adolescent issues for school drop-outs were organized. Total 19 students benefitted through these programs.
- ✓ Life skill training program held at 2 high schools. Total 164 students benefited through these services.
- ✓ Special day celebration with various activities (World Population Pay, National Nutrition Week, AIDS Day, Diabetes Day, Children's Day and Breast Feeding Week and World Health Day)
- ✓ Hemoglobin /anemia test camps in 25 villages. Total 433 villagers benefitted through these camps.

Education

- Essar supported Kuldiha, Malandighi and Parulia FP Schools with electrical items like celling fans and tube lights for the school students.
- ✓ Supported Kalikapur-Pratappur Tapoban Vidyapith High School with high & low desk benches for the school students.
- ✓ Essar supported Jatgoria FP School with basic infrastructure like book shelves teachers table and chairs.
- ✓ Supported Pratappur Anchalik (Regional) Annual Free Primary School Sports Meet
- ✓ Supported Laudoha and Kanksa Circle-level Annual Free Primary School Sports Meet
- ✓ Supported Durgapur Sub-Division (inter Junior High School) & Burdwan District Athletic Meet 2018.

Community Infrastructure and Development

- ✓ Drinking water supply by tanker. To address the problem of acute shortage of drinking water during the summer season EOGEPL supplied drinking water through tanker to villages in Pratappur Gram Panchayat. The villages were identified by the BDO of Laudoha block.
- ✓ Construction of rest room at burning ghat in Rakhitpur village under Kanksa block
- ✓ Construction of submersible pump with water tank at Muktidihi village under Bankua Distric

Sports & Cultural Activities

Sports

✓ Sport and cultural activities have been perceived to have immense impact on the youth of the society. Increasing engagement in such activities helps in channelizing their energy towards positivity. Thus, we protect and promote sports & culture within our catchment area by supporting tournaments, annual sports' meets and related events organized by the administration and local youth clubs. Supported 19 nos. of sports tournament (Cricket, Football, Kabaddi and sports kit distribution).

Cultural activities

- ✓ Cultural event at Jamgora village under Laudoha Block
- ✓ Blankets distribution program during winter at Akondara village under Kanksa block

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