

EOGEPL/ CBM-RG (E)/ HSE/2022/5397

1st December 2023

The Deputy Director General of Forest Ministry of Environment, Forests and Climate Change 1B/198 Broadway Road Sector- III, Salt Lake City Kolkata-700106, West Bengal Essar Oil and Gas Exploration and Production Ltd Essar House - Durgapur Village & Post Office – Molandighi Block - Kanksa Durgapur Sub-Division Dist. - Paschim Bardhhaman Durgapur – 713212 West Bengal India

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Sub: Submission Six-monthly Compliance Report of the Environmental Clearance (Phase-II and Amendment)) by Essar Oil Gas Exploration and Production Limited (EOGEPL) reg.

Ref: <u>Environmental Clearance of Phase-II vide F. No. J-11011/351/2009- IA II (I) dated 23.09.2011;</u> <u>Amendment dated 18.06.2012 and transfer of EC from EOL to EOGEPL dated 06.11.2017</u>

Respected Sir

We submit herewith the six-monthly compliance report for the period of April²³ to September²³, as stipulated conditions of prior environmental clearance vide F. No. J-11011/351/2009- IA II (I), dated 23rd September, 2011 and it's amendment dated 18th June 2012 granted by MoEF&CC to Essar Oil and Gas Exploration and Production Ltd., for the Pilot cum Production Phase (Phase-II) of CBM project activities.

Thank you for your continued support.

For Essar Oil and Gas Exploration and Production Limited

Warm Regards,

Vikram Goday Vice President & Head- Facilities Raniganj East, CBM Project-Durgapur

Enclosed: Annexure I, II, III, IV, V, VI, VII, VIII, IX



Copy to:

1. The Environmental Engineer, Durgapur Regional Office, WBPCB, Durgapur-713216

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ENERGY I INFRASTRUCTURE I METALS & MINING I SERVICES & TECHNOLOGY

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

S. No.	Conditions	Compliance Status
2.0	The Ministry of Environment & Forests has examined your application. It is noted that the proposal is for pilot- cum-production wells at Raniganj East Coal Bed Methane (CBM) Block RG (E)-CBM-2001/1 in Durgapur, West Bengal by Essar Oil Limited (E&P Division). The block is located in the coal ferrous zone (Raniganj Coal Field) of Burdwan, Birbhum and Bankura Districts in West Bengal. Durgapur Town is located at 2.6 km from project boundary and 3.7 km from the nearest proposed drilling well. Essar Oil Ltd. (EOL) has 100% ownership in the CBM Block and as Operator has signed a Production Sharing Contract (PSC) with the Government of India on 26 th July, 2002 for block RG (EAST)-CBM-2001/1. Petroleum Exploration License (PEL) for carrying out exploratory operation within the block has been granted by the Govt. of West Bengal on 29 th March, 2005 vide letter no. 185-CI/O/Coal/028.02/M1. Total area of CBM block is 500 km ² . The coordinates of the block are 23°22'10" – 23°41'12"N Latitude and 87°14'15" – 87°28'46" E Longitudes. Protected Forests (Durgapur PF & Ukhra PF) fall within the block. River Ajay and Damodar flow through the block area. No national park/wildlife sanctuary is located within the 10 km. Panagarh air base is located at 15 km from the block. Total cost of the project is Rs. 260.00 Crores. Following are the details of existing and proposed activities:	Complied with.
	existing phase-1 has been accorded by the Ministry vide letter no. J-11011/660/2007-IA (II)-I dated 6 th May, 2008.)	
	- 120 LKM of HRSS Seismic Survey (2D)	
	- 12 Nos. of Core hole drilling	
	- 15 Nos. of test well drilling.	
	Phase- II: (Proposed wells will be drilled in the area of 45 km ² out of total block area 500 km ²)	
	 90 Nos. of Pilot cum Production well drilling were proposed. Out of which, 32 wells are falling in the forest land of 14.24 ha. Essar Oil Ltd. vide letter no. EOI/CBM/ENV/07-11/01 dated 30th July, 2011 informed that 32 wells falling under forest land be kept out of purview of the EC. Thus only 58 nos. of Pilot cum Production well will be drilled. 	
	- 3 Nos. of Group Gathering Station (GGS)	
	- 40 km length of pipeline from GGS to Durgapur.	
	- Drilling well will not be carried out in the forest area.	

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

3.0	58 pilot-cum-production wells will be drilled up to a depth of 1000 m. Plot area for each pilot well will be 1.5-2.0 acres. Drilling will be done by truck mounted RD-20 Rig using water based mud upto 500 m depth and air mist drilling beyond 500 m. One cluster will have 40-50 wells and one Group Gathering Stations (GGSs) in area of 4-5 acres. Each well site will have a separator for initial separation of gas and water. Coal Bed Methane (CBM) will be transported by underground pipelines. Emergency gas flaring facilities will be provided at well site and GGSs. Expected total gas production from pilot wells will be about 5 Lakh m ³ /day. The compressed gas will be transported through underground pipeline & filled into cascade system cylinders for supply to final customers.	Complied with. Only 53 pilot-cum-production wells drilled up to target depth. Emergency gas flaring facilities has been provided at GGSs and MCS.
4.0	Air emissions from DG sets will be controlled by providing adequate stack height. Air emissions will be reduced by installing CBM gas based power generator sets. Flaring will be done during emergency as per the guidelines for flaring vide GSR (E) dt. April, 1996. Air drilling technique will be used to reduce water consumption. Water requirement for each pilot well will be 75 m ³ /well and sourced from local approved water suppliers. Produced water will be stored in pit for recycling/reuse (process, irrigation etc.) after treatment and solar evaporation. No effluent will be discharged outside the premises and 'Zero' discharge will be adopted. Drill cuttings will be stored in HDPE lined pits, treated and disposed in accordance with CPCB guidelines. Waste oil/used oil will be sent to authorized re-processors. Site closure and decommissioning will be initiated for wells not indicative of any commercially viable gas production. Wells will be plugged and abandoned by investing reluctant plugs (slurry of cements and water) at strategic location. Wells providing positive gas productions results will be converted to production wells.	Complied with. All wells are in production wells.
5.0	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 1 st , 14 th and 25 th Meeting held during 24 th -25 th July, 2009, 16 th -17 th September, 2010 and 28 th -30 th July, 2011 respectively.	Noted.
6.0	Public hearing/public consultation meeting was held on 26 th March, 2010.	Noted.
7.0	The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provision of EIA Notification dated 14 th September, 2006	Noted.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

	subject to strict compliance of the following specific and general conditions.	
Α.	Specific Conditions:	
i.	As proposed, Only 58 pilot-cum-production wells shall be drilled up to a depth of 1000 m. No additional wells shall be drilled without prior permission from this Ministry.	Only 53 pilot-cum-production wells has been drilled up to a depth of 1000 m.
ii	As proposed, no drilling of well and any construction work shall be carried out in forest land. No forest land shall be used for installation of Group Gathering Stations (GGSs) and pipeline laying in the proposed location.	All the facilities including well sites & Gas Gathering Stations are located outside the forest area.
iii	Recommendations of the State Forest Department shall be obtained regarding likely impact of the proposed plant on the surrounding protected forests viz. Durgapur PF & Ukhra PF and implemented.	The Conservator of Forests (South East Circle), Forest Department, West Bengal has carried out site Survey. The Additional PCCF, West Bengal forwarded his recommendations to the Additional PCCF, MoEF&CC (Eastern Regional Office). (A copy of the letter has already been submitted along with compliance report earlier).
iv	Compensation for the land acquisition to the land oustees, if any, and also for standing crop shall be paid as per the National Resettlement and Rehabilitation Policy (NRRP) 2007 or State Government norms. It may be ensured that compensation provided shall not be less than the norms of the NRRP, 2007.	Land acquisition has been conducted directly with the land owners and the compensation is paid as per the prevailing market rate. There is no involvement of Rehabilitation and Resettlement.
v	Prior permission from the Ministry of Defense shall be obtained regarding impact of proposed plant on Panagarh air base, if any.	Gas Gathering Station (GGS) and Main Compressor Station (MCS) have been installed as per the condition of the NOC sanctioned by Ministry of Defense (MoD).
vi	The surface facilities shall be installed as per the applicable codes and standards, international practices and applicable local regulations.	Surface facilities have been designed and installed as per applicable Code and Standard, i.e. OISD guidelines.
vii	Ambient air quality shall be monitored near the closest human settlements as per the National Ambient Air Quality Emission Standards (NAAQES) issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 for PM ₁₀ , PM _{2.5} , S0 ₂ , NOx, CO, CH ₄ , VOCs, HC, Non-methane HC etc. Efforts shall be made to improve the ambient air quality of the area.	Ambient Air Quality (AAQ) Monitoring being carried out by the NABL accredited laboratory at well sites near to the closest human settlements as per the Ambient Air Quality Emission Standards (NAAQES) issued by the Ministry vide G.S.R No. 826(E) dated 16th November, 2009 for PM ₁₀ , PM _{2.5} , S0 ₂ , NOx, CO, CH ₄ , VOCs, HC, Non-methane HC. The monitoring results of last six months, i.e. April' ²³ to September' ²³ refer to Annexure I.
viii	The company shall monitor data on methane and non- methane hydrocarbon at the drilling site, GGS, CGS and at the SV station from where the gas is supplied to the customers.	Methane and non-methane hydrocarbons are monitored. It is a part of the Ambient Air Quality Monitoring plan at major facilities (GGS, MCS) and villages. The monitoring results refer to Annexure I .

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

ix	Mercury shall also be analyzed in air, water and drill cuttings twice during drilling period.	Mercury is being analyzed in produced water, ambient air, where Mercury level is below detection of specified limit. The analysis results of Air (refer to Annexure I), Water (refer to Annexure II) .
x	The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The company shall take necessary measures to prevent fire hazards and soil remediation as needed. At the place of ground flaring, the flare pit shall be lined with refractory bricks and efficient burning system. In case of overhead flare stacks, the stack height shall be provided as per the regulatory requirements and emissions from stacks shall meet the MOEF/CPCB guidelines.	 The overhead flaring system has been installed as per OISD guidelines. The flare stack height is 30 m. for GGS and 50 m. for MCS. The measures delineated in the EIA/EMP are being maintained to prevent fire hazards. The following measures have been implemented. Installation of electrical equipment as per the approved hazardous zone classification as informed to DGMS. Major facilities like GGS, MCS, Warehouse etc. are well equipped with Fire hydrant system. Dry chemical fire extinguishers are available at site. Online methane gas analyzers (CH₄) are available. Flame proof type lighting fixtures, push buttons and switches are used at well pads and surface facilities.
xi	The company shall make the arrangement for control of noise from the drilling activity and DG sets by providing necessary mitigation measures such as proper acoustic enclosures to DG sets and meet the norms notified by the MoEF. Height of all the stacks/vents shall be as per the CPCB guidelines.	CPCB approved DG sets are in used which are incorporated with acoustic enclosure and adequate stack height. Regular noise monitoring is carried out at nearby localities. The results of noise monitoring refer to Annexure III .
xii	The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR. 546(E) dated 30'August, 2005.	Complied with.
xiii	Total fresh water requirement from local approved water suppliers shall not exceed 75 m ³ /day/well and prior permission shall be obtained from the concerned Authority and a copy submitted to the Ministry's Regional Office at Bhubaneswar. No ground water shall be used without permission of CGWA.	Complied with generated produced water is treated through RO system and fulfilled the water requirement for operation Ground water is used for potable purposes, where the permission is obtained from State Water Investigation Directorate (SWID), Govt. of West Bengal.
xiv	The produced water during drilling operations shall be collected in HDPE lined waste pit to prevent ground water contamination. Effluent shall be properly treated and treated effluent shall conform to CPCB standards. As	Produced water is collected & stored in adequate designed over surface Zn-Al tanks installed at all sites. In case of excess volume of water is stored HDPE lined pits. The produced

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April'²³ to September'²³)

	proposed, produced water may also be used in operational coal mines of Eastern Coal Fields for dust suppression, slurry activities and post-mining restoration efforts etc. Domestic effluent shall be disposed through septic tank followed by soak pit. No effluent shall be discharged outside the premises and 'zero' discharge shall be adopted	water is transported through pipelines to Reverse Osmosis (RO) plant for further treatment. Presently, RO plants having the capacity 8100 m ³ / day. The treated water is used in project and other activities and the balance permeate water is discharged to nearby stream as it is complying the specified discharge standards. Domestic effluent is treated in septic tank followed by soak pits.
xv	Water produced during drilling shall be reused in drilling of other core/test wells.	Complied with.
xvi	Reverse Osmosis plant shall be installed for further treatment of the wastewater in case the TDS is > 2000 mg/l and treated wastewater shall be reused or discharge on the land after meeting the norms.	Reverse Osmosis (RO) plants, total capacity of 8100 m ³ / day to treat the produced water generated from production wells. Produced water quality analysis result refer to Annexure II . RO Plant water quality monitoring results refer to Annexure IV . The treated water is used in project and other activities and the excess permeate water is discharged to nearby stream after complying with the specified discharge limit. Surface water quality monitoring results refer to Annexure V .
xvii	Ground water quality monitoring shall be done to assess if produced water storage or disposal has any effect.	The ground water quality monitoring has been carried out in pre-monsoon (May' ²³). The ground water analysis results refer to Annexure VI .
xviii	Drilling waste water including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining and evaporated or treated and shall comply with the notified standards for on-shore disposal. The treated waste water should be reused in other wells during drilling operations. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise secured land fill shall be created at the site as per the design of the secured shall be approved by the CPCB and obtain the authorization of the WBPCB. Copy of authorization or membership of TSDF shall be submitted to Ministry's Regional Office at Bhubaneswar.	Complied with. Membership Certificate has been obtained from West Bengal Waste Management Limited, Saltora, to use TSDF facility for disposing of hazardous waste. A copy of the membership certificate refer to Annexure VII .
xix	Only water based drilling mud shall be used. The drilling mud shall be recycled. Hazardous waste shall be disposed of as per Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers/re-processors.	Complied with. Hazardous wastes are being disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Oil contaminated waste, waste filters and silica gel disposed of through TSDF facility, Saltora which is operated by the authorized agency M/s

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April'²³ to September'²³)

		West Bengal Waste Management Ltd. through the Manifest Form 10
		Used oil is being sent to the authorized recycler, M/s Inspec Oils Ltd. through the Manifest Form 10.
		The Manifest Form 10 copy for the period of April' ²³ to September' ²³ refer to Annexure VIII.
хх	The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional	Land Subsidence Study conducted in July ²² and the report of the same has already been submitted with the previous six-monthly compliance report (period: April ²² to September ²²).
	Office at Bhubaneswar.	We also engaged NIT-Durgapur for carrying out subsidence study.
		The necessary preventive measures have taken in place to prevent fire hazards, oil spill and soil remediation as follows.
	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.	 Installation of electrical equipment as per approved hazardous zone classification as informed to DGMS.
		• Major facilities like GGS, MCS, Ware House etc. are well equipped with fire hydrant system
		• Dry chemical fire extinguishers are available at all well sites.
xxi		• Fixed and Portable type multi gas detectors are in used for work zone monitoring. Detectable gases are, CH4, O2, CO, H2S.
		• Flame proof type lighting fixtures, push buttons and switches are used at drill site and facilities.
		• Impervious lining, secondary containment and spill kits are ensured, whenever there is a possibility of soil contamination.
		The overhead flaring stack with knockout drums have been installed to minimize gaseous emissions during operation.
xxii	The project authorities shall install SCADA system with dedicated optical fiber based telecommunication link for safe operation of pipeline and Leak Detection System. Additional sectionalizing valves in the residential area and sensitive installations shall be provided to prevent the amount of gas going to the atmosphere in the event of pipeline failure. Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current	SCADA System has been installed and operational for monitoring of wells and Gas Gathering Station. Safe operation of the pipeline is ensured through the continuous motoring of parameter at the Control Room and regular patrolling.
		pigging facility has been provided and coating and impressed current cathodic protection

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

	cathodic protection system shall be provided to prevent external corrosion.	system also been provided along the length of pipeline to prevent the external corrosion.
		The design and laying of surface facilities have been confirmed to the standards of OISD.
xxiii	All the surface facilities including GGS, CGS and SV station shall be as per applicable codes and standards, international practices and applicable local regulations.	All the surface facilities including GGS, CGS and SV stations have been established as per applicable codes and standards of OISD.
xxiv	The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141. Pipeline wall thickness and minimum depth of burial at river crossing and casings at rails, major road crossings should be in conformity with ANSI/ASME requirements.	All the surface facilities and pipelines have been installed as per the ASME/ANSI B 31.8 and the standards of OISD.
xxv	Annual safety audit should be carried out for the initial three years by an independent agency and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operations and maintenance.	Safety audit is conducted annually by the competent certified agency every year and achieved certificates for the compliance of ISO 45001: 2018 and ISO 14001: 2015
xxvi	The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting non-destructive method (s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey should be carried out at regular intervals to ensure the adequacy of cathodic protection system.	Regular patrolling and inspection of laid pipeline are being carried out for detection of faults as per OISD guidelines. Pipeline operations shall be continuously monitored by adopting non- destructive methods of testing as envisaged in the EIA/EMP. Pearson survey and continuous potential survey being carried out at regular intervals, as per OISD Standard to ensure the adequacy of cathodic protection system. Pearson survey and continuous potential survey last conducted in the year 2019.
xxvii	The company shall develop a contingency plan for H_2S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H_2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.	H ₂ S is not present as per the analysis of gas tapped from the wells. However all the necessary safety measures are delineated as per the Emergency Response Plan. Gas detectors are ensured to check the presence of gases in the work zone. All workforce are ensured with the standard PPEs according to the job requirement. Self-contained breathing apparatus are provided as per the requirement.
xxviii	Adequate well protection system shall be provided like BOP or diverter systems as required based on the geological formation of the blocks.	Complied with.
xxix	Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well	Complied with.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

	bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.	
xxx	The top soil removed shall be stacked separately for reuse during restoration process	The top soil has been used for developing the green belt development field in the project facilities.
хххі	Emergency Response Plan shall be based on the guidelines prepared by OISO, DGMS and Govt. of India. Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be strictly followed.	Petroleum & Natural Gas Regulatory Board (PNGRB) approved Emergency Response & Disaster Management Plan (ERDMP) is operational.
xxxii	Project proponent shall comply with the environment protection measures and safeguards recommended in the EIA/EMP/risk analysis report/disaster management plan.	Environmental protection measures and safeguards recommended in EMP / Risk Analysis / Disaster Management Plan have been implemented and being maintained.
xxxiii	The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations.	Well will be abandoned and restoration of site to original condition shall be implemented, if found unsuitability of hydrocarbon extraction. Well will be fully abandoned in compliance with Indian Petroleum Regulations in the event of no economic quantity of hydrocarbon is found.
xxxiv	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	All employees have undergone pre-employment medical examination. Periodical occupational health surveillance is conducted as per the approved schedule of Directorate- General of Mine Safety (DGMS).
xxxv	In case the commercial viability of the project is established, the Company shall prepare a detailed plan for development of gas fields and obtain fresh environmental clearance from the Ministry.	Complied with another EC vide F. No. J- 11011/1491/2011-IA II (I), dated- 26 th February, 2013.
xxxvi	All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 26th March, 2010 shall be satisfactorily implemented.	Complied with.
xxxvii	Company shall adopt Corporate Environment Policy as per the Ministry's O.M. No. J-11 013/41/2006-1A.II (1) dated 26th April, 2011 and implemented.	Corporate Environment Policy has been framed and is being implemented and maintained.
xxxviii	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary	Complied with the hiring of local labor for project activities. However, we provided all the necessary infrastructure and facilities like porta- cabins, mobile toilets, septic tank & soak pit, safe drinking water, medical health care etc.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

	structures to be removed after the completion of the project	
В.	General Condition	
i	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	We are in compliance of the stipulations made by the State Pollution Control Board (SPCB), State Government and statutory bodies.
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any	Noted.
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	Compliance with OMR- 2017 and OISD guidelines and PESO approval obtained wherever applicable.
iv	The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 wherever applicable. Authorization from the State Pollution Control Board must be obtained for collections/ treatment/ storage/disposal of hazardous wastes.	We are in compliance with the rules and regulations regarding to handling and disposal of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. We obtained Hazardous Waste Authorization vide Memo No 205/2S (HW)-2449/2008, date-19/11/2018. Online authorization renewal application submitted to the West Bengal Pollution Control Board, Application No. – 3981486, Date-07/07/2023.
v	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	CPCB approved DG sets are in used which are incorporated with acoustic enclosure and adequate stack height. Regular noise monitoring is carried out at nearby localities. The results of noise monitoring refer to Annexure III .
vi	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	A dedicated environment management cell is functional for implementing the environment management plan at large. We conduct environmental monitoring by M/s Scientific Research laboratory, Kolkata (MoEF&CC recognized and NABL accredited).
vii	As proposed, Rs. 7.80 Crores earmarked for environment protection and pollution control measures shall be used	Compliance with.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

	to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	
viii	The Regional Office of this Ministry/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Six-monthly compliance report along with annexures is submitted with regularly. Last submission date- 01/06/2023.
ix	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent	Complied with.
x	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the WBPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NOx, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	The compliance report of environment clearance conditions including results of monitoring data is being uploaded on company's website and it is sent to the Regional Office of MOEF&CC and WBPCB at six-monthly basis The ambient air quality monitoring is carried out as per the NAAQS. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NOx, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) are monitored regularly and displayed at the main gate.
xi	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the WBPCB. The Regional Office of this Ministry /CPCB / WBPCB shall monitor the stipulated conditions.	We submit six-monthly compliance reports on the status of the compliance of the stipulated environmental conditions including results of environmental monitoring through e-mail to the Regional Office of MoEF&CC and in hard copy to Durgapur Regional Office of WBPCB.
xii	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	The environmental statement for the financial year (FY 2022-23) ending 31 st March 2023 in Form-V has been submitted to the Durgapur Regional Office of West Bengal Pollution Control Board and the same has been uploaded on the company's website. The copy of the environment statement (Form V) for the FY 2022-23 already submitted to Integrated Regional Office (IRO), Kolkata of MoEF&CC through e-mail.
xiii	The Project Proponent shall inform the public that. The project has been accorded environmental clearance by	Complied with.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

	the Ministry and copies of the clearance letter are available with the WBPCB and may also be seen at Website of the Ministry of Environment and Forests at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.	
xiv	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work	Complied with.
Ref:	Amendment of Environment Clearance vide F. No. J-11	011/351/2009- IA II (I) dated 18 th June, 2012
S. No.	Conditions	Compliance Status
2.0	It is noted that existing environmental clearance was accorded for 58 pilot-cum-production wells. Now, project proposal is to drill supporting wells (4 Nos.) on each of the existing/planned well pads to enable dewatering to achieve target gas production capacity of 500,000 m ³ /day. The depth of supporting wells will be 1000 m. All wells (main and support) will be connected to a single manifold at surface to provide a common line for extraction of water and gas. The common gas line will be connected to the nearest Gas Gathering Station and for further transportation to the customers. Since the dewatering load is distributed among these supporting wells will be operated with the same footprint, i.e. without the requirement for additional land or any significant additional environmental impact. This will also enable to minimize the environmental impact by reducing the number of movements of rigs etc., land required for construction of access roads, impact on water courses and better monitoring of ambient air quality & its impact.	Complied with.
3.0	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 31^{st} and 33^{rd} meetings held during $12^{th} - 13^{th}$ January, 2012 and $21^{st} - 22^{nd}$ March, 2012 respectively and committee recommended the project proposal for amendment in the existing environmental clearance in respect of addition of four support wells in each well pad to enable dewatering to achieve target production of 500,000 m ³ /day.	Complied with.
4.0	Since additional four support wells are to be drilled in the same well pad and no additional land is required, the Ministry has no objection for inclusion of 4 supporting wells of the support wells on each of the well pad in the existing project. However, compliance to the following conditions shall be ensured.	Noted.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

1	As proposed, supporting wells (4 nos.) on each pilot-cum- production wells (58 nos.) shall be drilled up to a depth of 1000m. No additional wells/support well shall be drilled without prior permission of this Ministry.	Complied with.
ii	Unit shall monitor ground water table within one Km radius of each well during pre-monsoon (i.e. May) and winter season (November). Trend analysis shall be carried out and report shall be submitted to the Ministry's regional office at Bhubaneswar.	Monitoring of ground water table has been carried out in May ²³ . The monitoring results refer to Annexure IX .
iii	Permission from CGWA for dewatering shall be obtained and submitted to the Ministry's Regional Office at Bhubaneswar.	"No Objection Certificate" regarding for the same has been obtained from State Water Investigation Directorate (SWID) and Water Resources Investigation & Development Department, Govt. of West Bengal. Copy of the permission has already been submitted with the earlier six-monthly compliance report.
iv	Smokeless flare shall be installed	Complied with, whereas we are approaching to zero flaring, During the period of April ^{'23} to September ^{'23} , we achieved ~0.025% flaring of total production as technical flaring.
v	All the measures shall be taken to control noise pollution during drilling process. Acoustic enclosure/barrier shall be installed.	CPCB approved DG sets are in used which are incorporated with acoustic enclosure to meet the specified noise limit. Earplug/earmuff also provided to the working personnel at site. Regular noise monitoring results refer to Annexure III.
vi	Any produced water shall be treated and recycled/reused within the project area. Any excess water shall be discharged after treatment and meeting the standards prescribed by the CPCB/SPCB. Regular water quality monitoring shall be carried out and monitoring report shall be submitted to the respective Regional Office of the MoEF.	Produced water is treated with Reverse Osmosis (RO) system. Treated water is being recycled/ reused in project & other activities. Excess permeate water is discharged to the nearby streams only after complying with the discharge limit. RO plant water quality monitoring results refer to Annexure IV . Also, the surface water quality monitoring results refer to Annexure V .
vi	Any produced water shall be treated and recycled/reused within the project area. Any excess water shall be discharged after treatment and meeting the standards prescribed by the CPCB/SPCB. Regular water quality monitoring shall be carried out and monitoring report shall be submitted to the respective Regional Office of the MoEF.	Produced water is treated with Reverse Osmosis (RO) system. Treated water is being recycled/ reused in project & other activities. Excess permeate water is discharged to the nearby streams only after complying with the discharge limit. RO plant water quality monitoring results refer to Annexure IV . Also, the surface water quality monitoring results refer to Annexure V .

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

vii	Approach road shall be constructed prior to the drilling	Approach road has been constructed wherever the access road is not available.
viii	Land subsidence shall be monitored regularly and monitoring report shall be submitted to CPCB, SPCB and respective Ministry's regional office	Land Subsidence Study conducted in July' ²² and the report of the same has already been submitted with the previous six-monthly compliance report (period: April' ²² to September' ²²). We also engaged NIT-Durgapur for carrying out subsidence study.
5.0	All the specific conditions and general conditions specified in the environmental clearance accorded vide Ministry's letter no.J-11011/351/2009-IA II (I) dated 23 rd September, 2011 shall be implemented	Compliance with.
6.0	Consent to Establish and Operate for the revised proposal shall be obtained from the W.B. Pollution Control Board	Compliance with the Consent to establish and Operate.
7.0	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures if required, if any.	Noted.
8.0	All other conditions also remain same.	Noted.
9.0	This issues with prior approval from the competent authority.	Noted.
10.0	You are requested to keep this letter with the Environmental Clearance accorded vide letter No J-11011/351/2009-IA II (i) dated 23 rd September, 2011.	Noted.
Ref: A	mendment of Environment Clearance vide F. No. J-1101	1/351/2009- IA II (I) dated 6 th November, 2017
2.	The Ministry had earlier issued environmental clearance for Pilot-cum-Production wells at Raniganj East Coal Bed Methane (CBM) Block RG (E)-CBM-2001/1 in Durgapur (West Bengal) in favour of M/s Essar Oil Limited (E&P Division) vide letter dated 23 rd September, 2011, followed by amendment therein vide letter dated 18 th June, 2012.	Noted.
3	M/s Essar Oil Limited has demerged its Exploration and Production (E&P) Division, which has now been transferred to a newly created wholly owned subsidiary namely M/s Essar Oil and Gas Exploration and Production Ltd., and thus necessitating transfer of all requisite approvals in the name of new company.	Complied with.

RG (East)-CBM-2001/1 (Phase-II) Six-monthly Environment Clearance Compliance Report

(April²³ to September²³)

4	M/s Essar Oil Limited has given No Objection Certificate for transfer of environmental clearance granted vide letter dated 23 rd September, 2011 and the amendment dated 18 th June, 2012 in the name of M/s Essar Oil and Gas Exploration and Production Limited.	Noted.
5	M/s Essar Oil and Gas Exploration and Production Limited has submitted an affidavit to abide by the terms and conditions stipulated in the environment clearance dated 23 rd September, 2011 and the amendment dated 18 th June, 2012 issued in the name of M/s Essar Oil Limited.	Noted.
6	As per the relevant provisions of the EIA Notifications, 2006, the environmental clearance to the project 'Pilot- cum-Production Wells' at Raniganj East Coal Bed Methane (CBM) Block RG (E)-CBM-2001/1 in Durgapur (WB) granted by the Ministry vide letter No. J- 11011/351/2009-IA-II(I) dated 23 rd September, 2011 read with amendment dated 18 th June, 2012 is hereby transferred from M/s Essar Oil Limited (E&P Division) to M/s Essar Oil and Gas Exploration and Production Limited, on the same terms and conditions under which prior environmental clearance was initially granted and for the same validity period.	Noted.
7	This issues with approval of the competent authority.	Noted.

ANNEXURE I

Name o	f Location	1			М	CS					GGS	5-01		
M	onth	-												
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	29.92	45.82	43.40	27.25	25.25	34.42	39.47	40.78	28.50	27.11	24.49	28.53
PM 10	µg/m³	100 (24 hrs.)	65.50	79.72	79.55	60.93	53.04	65.63	74.47	75.62	54.16	61.59	59.83	58.04
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	24.41	24.70	24.65	23.93	22.78	23.87	25.86	24.44	21.00	24.52	23.07	23.07
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.71	4.89	4.88	4.66	4.03	4.05	4.89	5.18	4.43	4.83	4.25	4.26
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.438	0.418	0.426	0.412	0.402	0.348	0.460	0.554	0.436	0.416	0.384	0.344
Hydrocarbon	mg/m ³	NIL	1.54	1.68	1.92	1.64	1.18	1.34	1.48	1.46	1.59	1.38	1.38	1.02
Mercury	mg/m ³	NIL		<0.002			<.002			<0.002			<0.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<0.003	<.003	<.003	<0.003	<0.003	<0.003	<0.003	<.003	<0.003
VOC's	µg/m³	NIL		2.89			2.33			2.72			2.58	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.37			0.10			0.30			0.10	
Ammonia	µg/m³	400 (24 hrs.)		29.14			22.62			26.08			24.52	
Ozone	µg/m³	180 (1 hr.)		40.16			31.26			37.91			33.74	
Lead	µg/m³	1 (24 hr.)		0.10			0.05			0.07			0.07	
Nickel	ng/m ³	20 (Annual)		10.71			5.68			8.23			6.95	
Arsenic	ng/m ³	6 (Annual)		1.32			0.95			1.21			1.09	
Benzene	µg/m³	5 (Annual)		1.63			1.14			1.49			1.31	

Name o	f Location				GGS	6- 02					PAR	ULIA		
M	onth	-												
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	37.86	45.18	41.56	29.60	25.20	28.02	38.41	43.33	27.22	24.69	25.41	40.51
PM 10	µg/m³	100 (24 hrs.)	72.07	78.17	70.34	62.63	57.39	58.86	75.38	75.85	61.43	47.56	59.74	79.61
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	26.22	26.33	24.41	24.94	23.10	23.92	26.89	26.25	22.21	23.41	22.18	22.08
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.77	5.30	4.71	4.82	4.35	4.31	4.86	4.95	4.27	4.41	4.37	4.35
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.452	0.446	0.434	0.414	0.392	0.342	0.438	0.446	0.412	0.424	0.396	0.372
Hydrocarbon	mg/m ³	NIL	1.64	1.63	1.74	1.54	1.27	0.98	1.54	1.51	1.64	1.42	1.42	1.55
Mercury	mg/m ³	NIL		<0.002			<.002			<0.002			<.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<.003	<.003	<.003	<0.003	<0.003	<0.003	<0.003	<.003	<.003
VOC's	µg/m³	NIL		2.81			2.49			2.78			2.65	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.34			0.10			0.33			0.10	
Ammonia	µg/m³	400 (24 hrs.)		28.29			23.39			27.18			23.92	
Ozone	µg/m³	180 (1 hr.)		39.23			32.39			38.16			33.14	
Lead	µg/m³	1 (24 hr.)		0.09			0.06			0.08			0.07	
Nickel	ng/m ³	20 (Annual)		10.18			6.08			9.07			7.71	
Arsenic	ng/m ³	6 (Annual)		1.27			1.01			1.28			1.15	
Benzene	µg/m³	5 (Annual)		1.59			1.22			1.55			1.37	

Name o	f Location	I			SARASW	ATIGUNJ					PRAT	PPUR		
M	onth													
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	28.81	44.87	36.12	36.53	33.70	35.47	48.23	44.57	23.80	27.30	24.16	34.2
PM 10	µg/m³	100 (24 hrs.)	51.15	77.53	68.22	68.91	73.53	72.94	90.41	80.50	51.02	56.93	52.65	77.59
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	24.68	24.40	24.21	24.51	24.53	24.73	25.14	26.27	23.78	22.16	23.63	22.34
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.58	5.43	4.65	4.70	4.49	4.65	4.73	5.00	4.74	4.26	4.13	4.55
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.404	0.438	0.422	0.402	0.426	0.384	0.440	0.446	0.386	0.408	0.388	0.376
Hydrocarbon	mg/m ³	NIL	1.36	1.58	1.70	1.72	1.64	1.38	1.38	1.71	1.24	1.22	1.13	1.51
Mercury	mg/m ³	NIL		<0.002			<.002			<0.002			<0.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<.003	<.003	<.003	<0.003	<0.003	<0.003	<0.003	<0.003	<.003
VOC's	µg/m³	NIL		2.74			2.84			2.86			2.29	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.32			0.28			0.36			0.10	
Ammonia	µg/m³	400 (24 hrs.)		27.64			27.55			29.77			22.07	
Ozone	µg/m³	180 (1 hr.)		38.72			36.24			39.97			31.02	
Lead	µg/m³	1 (24 hr.)		0.08			0.10			0.11			0.05	
Nickel	ng/m ³	20 (Annual)		9.89			9.94			10.73			5.37	
Arsenic	ng/m ³	6 (Annual)		1.26			1.32			1.34			0.88	
Benzene	µg/m³	5 (Annual)		1.53			1.58			1.67			1.04	

Name o	f Location	l			BAI	ISIA					JAMO	GORA		
M	onth	-												
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	45.86	47.68	24.23	24.50	27.92	32.69	45.26	48.84	21.67	24.82	25.55	30.72
PM 10	µg/m³	100 (24 hrs.)	85.77	86.32	53.56	48.72	62.78	60.39	89.23	89.46	51.54	53.65	62.54	59.32
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	25.14	26.56	21.19	22.09	22.89	21.95	24.10	26.02	22.26	21.22	23.66	22.77
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.82	4.83	4.15	4.35	4.31	4.07	4.57	5.34	4.38	4.15	4.55	4.28
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.418	0.428	0.396	0.424	0.388	0.352	0.452	0.436	0.392	0.412	0.408	0.352
Hydrocarbon	mg/m ³	NIL	1.52	1.86	1.38	1.36	1.35	1.09	1.5	1.97	1.29	1.52	1.4	1.06
Mercury	mg/m ³	NIL		<0.002			<0.002			<0.002			<0.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<0.003	<0.003	<.003	<0.003	<0.003	<0.003	<0.003	<0.003	<.003
VOC's	µg/m³	NIL		3.15			2.46			3.26			2.54	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.44			0.20			0.49			0.21	
Ammonia	µg/m³	400 (24 hrs.)		32.89			25.09			34.15			25.38	
Ozone	µg/m³	180 (1 hr.)		43.81			34.51			44.79			34.12	
Lead	µg/m³	1 (24 hr.)		0.16			0.08			0.18			0.08	
Nickel	ng/m ³	20 (Annual)		13.05			8.16			14.46			8.02	
Arsenic	ng/m ³	6 (Annual)		1.59			1.07			1.68			1.10	
Benzene	µg/m³	5 (Annual)		1.88			1.30			1.95			1.33	

Name o	f Location	I			KUL	DIHA					JATG	ORIA		
M	onth	-												
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	33.75	40.59	39.02	31.05	42.39	30.60	45.30	47.03	40.44	31.56	30.52	29.08
PM ₁₀	µg/m³	100 (24 hrs.)	55.98	73.91	73.60	63.89	84.69	62.89	83.88	80.81	73.50	60.36	60.92	56.53
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	24.47	25.35	24.36	23.64	24.35	23.88	27.12	26.16	24.11	24.71	23.28	25.02
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.79	5.00	4.65	4.45	4.90	4.46	4.88	5.34	4.98	4.24	4.43	4.93
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.398	0.406	0.418	0.398	0.432	0.370	0.462	0.454	0.418	0.402	0.398	0.338
Hydrocarbon	mg/m ³	NIL	1.28	1.39	1.85	1.68	1.75	1.27	1.56	1.77	1.81	1.42	1.44	0.93
Mercury	mg/m ³	NIL		<0.002			<0.002			<0.002			<0.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<0.003	<0.003	<.003	<0.003	<0.003	<0.003	<0.003	<0.003	<.003
VOC's	µg/m³	NIL		2.63			3.03			2.95			2.62	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.28			0.31			0.40			0.21	
Ammonia	µg/m³	400 (24 hrs.)		25.33			28.64			30.06			24.68	
Ozone	µg/m³	180 (1 hr.)		36.24			38.17			41.25			33.53	
Lead	µg/m³	1 (24 hr.)		0.06			0.12			0.12			0.07	
Nickel	ng/m ³	20 (Annual)		7.48			10.28			11.24			7.29	
Arsenic	ng/m ³	6 (Annual)		1.16			1.44			1.45			1.12	
Benzene	µg/m³	5 (Annual)		1.44			1.71			1.72			1.40	

Name o	f Location				Gopalpur V	Narehouse					KANT	ABERIA		
M	onth													
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	30.90	40.65	40.10	26.38	26.83	33.73	39.79	47.19	46.08	32.16	28.05	38.01
PM ₁₀	µg/m³	100 (24 hrs.)	74.45	82.19	72.36	56.55	58.12	61.25	77.38	84.66	83.94	65.97	66.41	73.33
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	24.43	24.49	25.04	23.17	23.41	23.69	26.12	24.83	24.37	23.58	22.74	23.38
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.69	5.08	4.94	4.64	4.41	4.36	4.76	5.05	4.95	4.70	4.20	4.09
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.452	0.448	0.436	0.426	0.398	0.352	0.428	0.438	0.436	0.422	0.390	0.364
Hydrocarbon	mg/m ³	NIL	1.60	1.27	1.77	1.44	1.33	1.19	1.48	1.82	1.98	1.58	1.51	1.42
Mercury	mg/m ³	NIL		<0.002			<.002			<0.002			<.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<.003	<.003	< 0.003	<0.003	<0.003	<0.003	<0.003	<.003	<.003
VOC's	µg/m³	NIL		2.6			2.51			3.03			2.7	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.24			0.10			0.42			0.23	
Ammonia	µg/m³	400 (24 hrs.)		24.16			23.18			31.38			36.44	
Ozone	µg/m³	180 (1 hr.)		35.02			32.57			42.33			35.88	
Lead	µg/m³	1 (24 hr.)		0.06			0.06			0.14			0.09	
Nickel	ng/m ³	20 (Annual)		6.82			6.57			11.79			9.08	
Arsenic	ng/m ³	6 (Annual)		1.09			1.04			1.50			1.22	
Benzene	µg/m³	5 (Annual)		1.38			1.27			1.78			1.47	

Name o	f Location	1			NAC	HAN					SARI	INGA		
M	onth													
Parameter	UoM	NAAQS LIMIT	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
PM _{2.5}	µg/m³	60 (24 hrs.)	41.38	39.62	27.34	23.67	33.20	47.52	48.68	45.96	24.96	33.23	26.51	32.81
PM ₁₀	µg/m³	100 (24 hrs.)	81.95	75.21	54.70	45.36	70.34	80.43	89.31	85.58	52.30	66.72	66.78	60.06
Nitrogen Dioxide	µg/m³	80 (24 hrs.)	25.97	26.83	24.61	22.61	22.50	21.39	26.69	25.88	22.21	24.80	23.75	24.76
Sulphur Dioxide	µg/m³	80 (24 hrs.)	4.82	4.98	4.85	.4.45	4.33	4.29	4.98	5.05	4.37	4.73	4.53	4.53
Carbon Monoxide	mg/m ³	4 (1 hr.)	0.448	0.438	0.404	0.412	0.402	0.388	0.452	0.438	0.386	0.392	0.386	0.340
Hydrocarbon	mg/m ³	NIL	1.70	1.42	1.47	1.42	1.59	1.64	1.64	1.9	1.33	1.6	1.54	1.14
Mercury	mg/m ³	NIL		<0.002			<.002			<0.002			<.002	
Hydrocarbon as Non Methane	mg/m ³	NIL	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
VOC's	µg/m³	NIL		2.67			2.8			3.09			2.73	
Benzo(a)Pyrene	ng/m ³	1 (Annual)		0.31			0.26			0.46			0.24	
Ammonia	µg/m³	400 (24 hrs.)		25.82			27.06			32.11			26.17	
Ozone	µg/m³	180 (1 hr.)		36.88			36.77			43.06			35.37	
Lead	µg/m³	1 (24 hr.)		0.07			0.10			0.15			0.09	
Nickel	ng/m ³	20 (Annual)		8.02			9.45			12.38			8.89	
Arsenic	ng/m ³	6 (Annual)		1.19			1.30			1.57			1.26	
Benzene	µg/m³	5 (Annual)		1.46			1.53			1.83			1.49	

ANNEXURE II

	MONTH								Apr-	23					
S. No.	Parameter	Unit	Onshore Discharge Standards	EDD-08-D1 (SAMBON)	EDP-01-D2 (JATGORIA)	EDI-036-V (AKANDARA)	EDI-068-D1 (AKANDARA)	EDI-120-D3 (HAKRI)	EDT-042-D1 (SARASWATIGUNJ)	EDI-071-D3 (MALANDIGHI)	EDG-074-D2 (PARULIA)	EDG-075-D1 (PARULIA)	EDD-406-D2 (JAMGORA)	EDD-406-D3 (JAMGORA)	EDG-077-D5 (KAMALPUR)
1	рН		5.5-9.0	8.42	8.38	8.46	8.37	7.96	7.80	8.34	8.48	8.39	7.97	8.37	8.41
2	Temperature	deg. C	40 deg. C	35.7°C	36.3°C	37.4°C	37.4°C	35.7°C	36.3°C	37.4°C	37.4°C	34.7°C	37.4°C	37.4°C	36.3°C
3	Suspended Solids	mg/l	100	13	3	2	29	32	8	12	<2	<2	<2	<2	4
4	Total Dissolved Solids	mg/l	2100	2928	1292	4532	6038	7354	4784	8960	2492	1480	672	762	2232
5	Chlorides	mg/l	600	890	166	1575	3131	2936	2085	3758	180	295	128	105	492
6	Sulphates	mg/l	1000	3.3	<2.5	13.8	<2.5	10.6	8.60	12.5	5.9	3.4	<2.5	4.8	6.7
7	BOD, 3 Days at 27ºC	mg/l	30	3	<2	<2.0	<2.0	3	<2	2	<2	<2	<2	<2	<2
8	COD	mg/l	100	14.0	<8	<8	12.0	10.0	<8	9.0	<8	<8	<8	<8	<8
9	Oil & Grease	mg/l	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	6	4.9	6.1	3.85	2.9	1.75	3.62	0.98	1.4	0.39	0.53	1.95
13	Total Chromium	mg/l	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	0.1	0.041	0.036	0.017	0.029	0.043	0.018	0.036	0.017	0.014	0.017	0.012	0.026
15	Copper	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		0.85	<0.01	<0.01	3.71	5.86	1.45	1.86	0.75	0.63	0.41	0.5	0.97

	MONTH								May-	23						
S. No.	Parameter	Unit	Onshore Discharge Standards	EDI-042-D5 (SARASWATIGUNJ)	EDI-038-D4 (SARASWATIGUNJ)	EDI-039-D4 (SARASWATIGUNJ)	EDI-070-D4 (GHATAKDANGA)	EDI-070-D5 (GHATAKDANGA)	EDI-034-D6 (AKANDARA)	EDI-046-D2 (AKANDARA)	EDI-046-D3 (AKANDARA)	EDI-046-D4 (AKANDARA)	EDI-034-D5 (AKANDARA)	EDC-072-D9 (PARULIA)	EDG-240-D2 (PARULIA)	EDN-184-D1 (GOPALPUR)
1	рН		5.5-9.0	8.41	8.50	8.47	8.17	7.94	8.39	8.89	8.37	8.69	8.71	8.80	8.65	8.35
2	Temperature	deg. C	40 deg. C	34.1°C	35.4°C	33.1°C	34.1°C	34.9°C	36.1°C	35.1°C	35.3°C	35.5°C	34.4°C	34.4°C	29.5°C	33.9°C
3	Suspended Solids	mg/l	100	12	14	<2	31	9	26	7	6	19	42	3	17	33
4	Total Dissolved Solids	mg/l	2100	8790	5492	4792	7790	8946	7214	4830	5368	4894	6316	3328	1292	2756
5	Chlorides	mg/l	600	4465	2140	1725	2984	3846	2890	1475	1680	1750	2625	760	172	1240
6	Sulphates	mg/l	1000	11.8	9.1	8.5	10.5	12.60	8.7	7.6	11.5	9.1	9.30	7.6	5.90	7.80
7	BOD, 3 Days at 27ºC	mg/l	30	5.6	4.1	<2	2	2	<2	<2	<2	2	2	<2	3	5
8	COD	mg/l	100	21.0	18.0	%	9.0	8.0	8.0	<8	8.0	10	11	<8	15	2
9	Oil & Grease	mg/l	10	<5.0	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2.1	1.81	1.35	1.95	2.43	1.75	0.91	1.63	1.54	2.11	1.41	0.78	0.86
13	Total Chromium	mg/l	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	0.1	0.041	0.033	0.026	0.027	0.031	0.024	0.015	0.022	0.012	0.049	0.024	0.036	0.019
15	Copper	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
18	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.1
19	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		0.86	1.73	0.29	4.65	2.25	3.3	1.63	1.1	2.75	6.84	0.42	4.43	1.46

	MONTH								Jun-2	3					
S. No.	Parameter	Unit	Onshore Discharge Standards	EDI-041-D4 (GHATAKDANGA)	EDI-038-D5 (SARASWATIGUNJ)	EDE-303-D2 (JATGORIA)	EDD-023-D3 (GOPEDANGA)	EDD-022-D1 (GOPEDANGA)	EDD-364-V1 (AKANDARA)	EDD-301-V1 (JATGORIA)	EDD-03-D6 (BANGORIA)	EDD-244-D1 (NACHAN)	EDI-032-D6 (AKANDARA)	EDN-162-D2 (VALUKANDA)	EDD-407-D1 (JAMGORIA)
1	рН		5.5-9.0	8.49	8.56	8.46	8.89	8.5	8.65	8.68	8.74	8.61	8.59	7.88	8.65
2	Temperature	deg. C	40 deg. C	34.9°C	35.5°C	33.8°C	35.5°C	35.6°C	36.8°C	34.8°C	36.9°C	35.1°C	33.2°C	37.2°C	36.2°C
3	Suspended Solids	mg/l	100	8	17	36	21	<2	7	4	5	8	6	29	<2
4	Total Dissolved Solids	mg/l	2100	5192	4860	2536	1984	1682	2194	1962	2882	3634	4232	8776	1204
5	Chlorides	mg/l	600	2165	1735	205	94	152	126	462	740	950	1148	4670	67
6	Sulphates	mg/l	1000	8.5	7.0	5.6	7.30	4.6	5.8	4.7	5.5	6.0	7.90	10.40	6.60
7	BOD, 3 Days at 27ºC	mg/l	30	<2	<2	14	<2	<2	<2	<2	<2	<2	6	<2	<2
8	COD	mg/l	100	<8	<8	42.0	\$	*	<8	*	<8	<8	18	<8	<8
9	Oil & Grease	mg/l	10	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2.02	1.89	1.33	0.87	0.62	1.08	1.45	0.71	1.21	0.79	2.42	0.51
13	Total Chromium	mg/l	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	0.1	0.027	0.021	0.018	0.019	0.012	0.024	0.011	0.026	0.030	0.190	0.033	0.011
15	Copper	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		1.03	1.52	1.26	4.81	0.47	1.18	0.91	0.43	0.98	0.64	5.26	0.38

	MONTH								Jul	-23					
S. No.	Parameter	Unit	Onshore Discharge Standards	EDI-70-D6	EDI-037-D7 (Akandara)	EDI-037-D9 (Akandara)	EDI-047-D6 (Akandara)	EDI-032-D6 (Akandara)	EDI-032-D7 (Akandara)	EDI-046-D1 (Akandara)	EDH-044-D1 (Akandara)	EDD-407-D1 (Jamgora)	EDG-074-D2 (Parulia)	EDG-075-D1 (Parulia)	EDG-077-D5 (Kamalpur)
1	рН		5.5-9.0	8.48	8.13	7.90	7.84	8.52	8.49	8.41	7.95	8.37	8.58	8.41	8.62
2	Temperature	deg. C	40 deg. C	31.7°C	32.7 C	33.4°C	32.3°C	32.1°C	31.8°C	31.2°C	32.1°C	34.4°C	35.2°C	36.7°C	36.3°C
3	Suspended Solids	mg/l	100	42	63	21	57	31	12	17	3	2	<2	<2	<2
4	Total Dissolved Solids	mg/l	2100	7892	6016	5468	5572	3566	4270	4218	946	1214	2520	1506	2178
5	Chlorides	mg/l	600	3830	2985	2484	2618	792	1540	1530	450	121	305	265	375
6	Sulphates	mg/l	1000	11.1	10.3	9.0	9.8	6.2	8.50	7.9	3.6	5.8	6.3	7	8.2
7	BOD, 3 Days at 27ºC	mg/l	30	2	3	<2	3	2	<2	2	<2	<2	<2	<2	<2
8	COD	mg/l	100	9.0	11.0	8.0	12.0	9.0	8.0	10.0	8	\$	<8	<8	*
9	Oil & Grease	mg/l	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	<.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2.46	1.92	1.33	0.62	0.38	0.94	0.91	0.62	0.78	1.87	0.77	1.24
13	Total Chromium	mg/l	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	0.1	0.027	0.018	0.016	0.016	0.012	0.020	0.023	0.016	0.011	0.017	0.011	0.019
15	Copper	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		2.41	1.85	1.03	1.56	1.25	0.78	0.88	0.45	0.37	0.21	0.37	0.29

	MONTH								Aug	-23					
S. No.	Parameter	Unit	Onshore Discharge Standards	EDE-005-D2 (Jatgoria)	EDE-002- V1(Jatgoria)	EDI-039-D3 (Saraswatiganj)	ED1-047-D6 (Akandara)	EDD-032- D2(Akandara)	EDH-033-V1 (Labnapara)	EDH-029-D5 (Dhabani)	EDI-027-V1 (Kantaberia)	EDD-009-D3 (Khatgoria)	EDD-074-D2 (Bangoria)	EDC-072-D6 (parulia)	EDC-413-D6 (Parulia)
1	рН		5.5-9.0	8.63	8.52	8.38	8.35	8.48	8.71	8.37	8.42	8.45	8.48	8.39	8.37
2	Temperature	deg. C	40 deg. C	31.7°C	31.2°C	34.0°C	32.2°C	34.4C	32.9°C	31.1°C	31.1°C	31.9°C	29.7°C	31.5°C	29.4°C
3	Suspended Solids	mg/l	100	7	10	<2	46	<2	4	21	33	<2	<2	<2	3
4	Total Dissolved Solids	mg/l	2100	2174	2050	3776	3962	5164	2994	7162	3572	1678	1650	2388	2282
5	Chlorides	mg/l	600	250	190	1145	1450	1965	660	3816	1425	135	80	180	104
6	Sulphates	mg/l	1000	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	6.8	4.50	<2.5	<2.5	5	<2.5
7	BOD, 3 Days at 27ºC	mg/l	30	<2	<2	<2	2	<2	<2	<2	3	<2	<2	<2	<2
8	COD	mg/l	100	<8	<8	<8	10.0	<8	<8	9	11	<8	<8	<8	<8
9	Oil & Grease	mg/l	10	<5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	4.65	1.79	1.94	1,7	3.7	0.98	5.1	2.1	4.4	0.76	1.65	1.93
13	Total Chromium	mg/l	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	0.1	0.016	0.022	0.030	0.042	0.012	0.026	0.033	0.046	0.021	0.014	0.02	0.025
15	Copper	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		0.69	0.32	0.24	7.82	0.18	0.52	4.62	5.15	0.14	0.18	0.24	0.39

	MONTH								Sep	b-23					
S. No.	Parameter	Unit	Onshore Discharge Standards	EDD-011-D2 (Bangoria)	EDD-403-D2 (Khatgoria)	EDD-020-V1 (JAMBON)	EDD-021-D3 (Jambon)	EDD-013-D2 (Jatgoria)	EDE-061-D1 (Jatgoria)	EDE-025-V1 (Jatgoria)	EDE-019-D1 (Jatgoria)	EDE060-V1 (Jatgoria)	EDE-48-V1 (Jatgoria)	EDE-43-D1 (Jatgoria)	EDI-037-D9 (Akandara)
1	рН		5.5-9.0	8.37	8.34	8.46	8.40	8.49	8.52	8.56	8.45	8.41	8.39	8.38	8.43
2	Temperature	deg. C	40 deg. C	31.6°C	32.2°C	32.3°C	31.4 C	29.8 C	29.6°C	29.6°C	28.9°C	29.7°C	29.5°C	29.7 C	34.2°C
3	Suspended Solids	mg/l	100	<2	<2	<2	<2	<2	<2	<2	<2	4	<2	3	14
4	Total Dissolved Solids	mg/l	2100	1886	1094	2580	2254	2360	2114	2034	1924	1940	2246	1792	7512
5	Chlorides	mg/l	600	362	103	550	110	535	325	225	190	250	310	430	3915
6	Sulphates	mg/l	1000	5.1	4.2	5.9	4.1	5.5	4.90	4.9	3.7	3.00	5.2	4.0	10.4
7	BOD, 3 Days at 27ºC	mg/l	30	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	<2
8	COD	mg/l	100	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	9.0	<8
9	Oil & Grease	mg/l	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	0.71	0.98	1.08	1.09	0.68	0.87	0.73	0.54	0.45	0.92	0.58	1.89
13	Total Chromium	mg/l	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	0.1	0.015	0.012	0.022	0.017	0.021	0.013	0.018	0.012	0.011	0.024	0.027	0.033
15	Copper	mg/l	0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		0.24	0.18	0.31	0.42	0.52	0.33	0.19	0.26	0.73	0.31	0.93	3.48

ANNEXURE III

Ambient Noise Monitoring Report of CBM Raniganj Project

by Essar Oil and Gas Exploration and Production Ltd.

(Period: Apr'23 to Sep'23)

	Ambien	t Noise Monitorin	g Result	
	DAY	TIME	NIGHT	TIME
Location	Limit as per the EC, dBA	Noise Level (Leq) dBA	Limit as per the EC, dBA	Noise Level (Leq) dBA
KULDIHA [EDN # 099]	75	52.08	70	48.02
MCS- MALANDIGHI	75	58.22	70	52.37
SARASWATIGUNJ [EDI # 039]	75	59.88	70	47.36
GOPALPUR WAREHOUSE	75	58.35	70	49.18
GGS#002 NEAR MAIN GATE SECURITY ROOM	75	60.81	70	51.08
JAMGORA [EDP # 406]	75	55.62	70	40.26
NACHAN [EDD – 053]	75	59.43	70	52.24
PRATAPPUR [EDD # 049]	75	55.45	70	48.66
JATGORIA [EDD – 005]	75	58.96	70	52.78
KANTABERIA [EDD-012]	75	59.18	70	51.76
PARULIA [EDC-413]	75	61.12	70	51.86
KHATGORIA [GGS # 001]	75	59.74	70	51.92
BANSIA [EDD – 411]	75	60.12	70	47.87
LABNAPARA [EDH # 064]	75	61.54	70	52.07
SARENGA	75	60.44	70	51.79

ANNEXURE IV

	Ν	/lonth		-						Арі	r-23					
					G	GS-01 R	0	E	DD-50 R	0	E	DH-64 R	0	E	DN-99 R	0
S. No.	Parameter	Unit	Onshore Discharge Standards	CPCB Limit for Discharge	Inlet	Outlet	Reject									
1	рН		5.5-9.0	5.5 to 9.0	7.74	7.68	7.57	7.75	7.83	7.42	7.58	7.12	7.25	7.20	7.74	7.62
2	Temperature	deg. C	40 deg. C		32.7°C	32.5°C	33.9°C	28.9°C	30.2°C	29.1°C	29.5°C	32.1°C	29.3°C	30.6°C	29.2°C	31.8°C
3	Suspended Solids	mg/l	100	100	4	<2	7	<2	<2	4	8	2	11	5	<2	9
4	Total Dissolved Solids	mg/l	2100		3072	1138	3878	2884	1446	3724	7652	948	16120	6392	1740	8568
5	Chlorides	mg/l	600		1208	419	1315	1043	587	1560	3215	490	6140	3025	520	3185
6	Sulphates	mg/l	1000		6.3	5.0	7.5	5.3	4.6	6.20	6.9	4	8.0	7.2	5.9	9.20
7	BOD	mg/l	30	30	<2	<2	<2	<2	<2	<2	<2	<2	2	<2	<2	<2
8	COD	mg/l	100	250	<8	<8	<8	<8	<8	<8	<8	<8	10.0	<8	<8	9.00
9	Oil & Grease	mg/l	10	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2	1.1	0.71	1.35	0.92	0.61	0.97	0.7	0.53	0.82	1.4	0.93	1.62
13	Total Chromium	mg/l	1	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	2	5	0.016	0.014	0.019	0.024	0.017	0.031	0.012	<0.01	0.017	0.018	0.013	0.024
15	Copper	mg/l	0.2	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		3	0.51	0.35	0.83	0.28	0.2	0.47	0.91	0.54	1.13	0.61	0.33	0.79

	Ν	/lonth		-						Ma	y-23					
					G	GS-01 R	0	E	DD-50 R	0	E	DH-64 R	0	E	DN-99 R	0
S. No.	Parameter	Unit	Onshore Discharge Standards	CPCB Limit for Discharge	Inlet	Outlet	Reject									
1	рН		5.5-9.0	5.5 to 9.0	7.1	6.93	7.35	7.45	7.15	6.98	7.15	6.96	6.75	7.43	7.11	7.54
2	Temperature	deg. C	40 deg. C		34.7°C	33.7°C	35.7°C	32.6°C	31.8°C	32.0°C	30.9°C	34.5°C	31.2°C	29.5°C	31.8°C	32.3°C
3	Suspended Solids	mg/l	100	100	5	<2	7	4	<2	6	8	<2	9	7	<2	10
4	Total Dissolved Solids	mg/l	2100		2784	1294	3842	2836	1340	4482	12514	876	14210	6674	1680	9102
5	Chlorides	mg/l	600		1140	509	1620	1086	535	1865	6980	376	6645	3075	590	3480
6	Sulphates	mg/l	1000		3.6	<2.5	4.7	5.3	3.1	6	9.6	4.3	10.8	8.6	4.7	9.80
7	BOD	mg/l	30	30	<2	<2	<2	<2	<2	<2	2	<2	3	<2	<2	2
8	COD	mg/l	100	250	<8	<8	<8	<8	<8	8.0	10.0	<8	12.0	8.0	<8	9
9	Oil & Grease	mg/l	10	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2	0.89	0.062	0.97	1.10	0.71	1.32	1.8	0.61	1.93	0.99	0.53	1.45
13	Total Chromium	mg/l	1	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	2	5	0.016	0.011	0.024	0.014	0.012	0.016	0.021	0.014	0.029	0.026	0.017	0.034
15	Copper	mg/l	0.2	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		3	0.82	0.36	0.95	0.59	0.22	0.68	1.08	0.51	1.17	0.94	0.48	0.97

	Ν	/lonth		-						Jun	-23					
					Ģ	GS-01 R	0	E	DD-50 R	0	E	DH-64 R	0	E	DN-99 R	0
S. No.	Parameter	Unit	Onshore Discharge Standards	CPCB Limit for Discharge	Inlet	Outlet	Reject									
1	рН		5.5-9.0	5.5 to 9.0	7.80	7.71	7.90	7.48	7.70	7.31	7.21	7.02	6.97	7.48	7.2	7.68
2	Temperature	deg. C	40 deg. C		31.8°C	33.7°C	34.3°C	33.7°C	30.4°C	32.4°C	30.2°C	31.1°C	31.7°C	35.6°C	32.9°C	34.3°C
3	Suspended Solids	mg/l	100	100	4	<2	6	4	<2	7	3	<2	8	6	2	9
4	Total Dissolved Solids	mg/l	2100		3614	1698	4824	2896	1492	4168	5162	1210	10092	6120	1680	9980
5	Chlorides	mg/l	600		1320	580	1760	935	510	1465	1872	405	3915	2168	584	3775
6	Sulphates	mg/l	1000		5.8	4.1	6.30	4.8	2.8	5.2	7.1	4.8	9.00	9.6	6.2	10.8
7	BOD	mg/l	30	30	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2
8	COD	mg/l	100	250	<8	<8	8	<8	<8	<8	<8	<8	8.0	<8	<8	9.0
9	Oil & Grease	mg/l	10	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2	1.05	0.61	1.22	0.73	0.31	0.85	1.45	0.72	1.98	1.33	0.45	1.85
13	Total Chromium	mg/l	1	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	2	5	0.015	0.012	0.018	0.022	0.016	0.026	0.016	0.011	0.024	0.019	0.015	0.023
15	Copper	mg/l	0.2	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		3	0.48	0.22	0.64	0.55	0.22	0.72	0.39	0.18	0.91	0.75	0.4	1.13

	Ν	/lonth		-				-		23	Jul			-		
					Ģ	GS-01 R	0	E	DD-50 R	0				E	DN-99 R	0
S. No.	Parameter	Unit	Onshore Discharge Standards	CPCB Limit for Discharge	Inlet	Outlet	Reject	Inlet	Outlet	Reject	Inlet	Outlet	Reject	Inlet	Outlet	Reject
1	рН		5.5-9.0	5.5 to 9.0	7.63	7.84	7.90	7.77	7.80	7.62	7.55	7.42	7.30	7.28	7.98	8.62
2	Temperature	deg. C	40 deg. C		33.8°C	31.6°C	33.5°C	32.9°C	31.7°C	32.1°C	29.20	30.1°C	29.1°C	33.5°C	29.7°C	29.6°C
3	Suspended Solids	mg/l	100	100	<2	<2	4	4	<2	7	3	<2	8	5	<2	8
4	Total Dissolved Solids	mg/l	2100		2810	1362	4392	2632	1294	4068	4346	1304	8344	6342	1642	8368
5	Chlorides	mg/l	600		670	318	890	495	287	810	910	430	2143	1888	475	2598
6	Sulphates	mg/l	1000		6.4	24.0	7.0	5.1	3.2	7.00	8.2	4.9	9.1	9.2	5.8	10.4
7	BOD	mg/l	30	30	<2	<2	<2	<2	<2	<2	<2	<2	2	<2	<2	<2
8	COD	mg/l	100	250	<8	<8	<8	<8	<8	<8	<8	<8	9.0	<8	<8	<8
9	Oil & Grease	mg/l	10	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2	0.05	0.82	1.48	0.75	0.49	1.1	1.5	0.82	1.77	1.55	0.091	1.83
13	Total Chromium	mg/l	1	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	2	5	0.018	0.011	0.022	0.014	0.011	0.019	0.028	0.020	0.033	0.023	0.017	0.029
15	Copper	mg/l	0.2	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		3	0.43	0.25	0.91	0.64	0.3	0.87	0.73	0.42	1.05	0.86	0.33	1.2

	Ν	/lonth		-						23-	Aug					
					G	iGS-01 R	0	E	DD-50 R	0	E	DH-64 R	0	E	DN-99 R	0
S. No.	Parameter	Unit	Onshore Discharge Standards	CPCB Limit for Discharge	Inlet	Outlet	Reject	Inlet	Outlet	Reject	Inlet	Outlet	Reject	Inlet	Outlet	Reject
1	рН		5.5-9.0	5.5 to 9.0	7.27	7.51	7.35	7.54	7.36	7.14	7.97	7.69	7.02	6.92	7.24	7.57
2	Temperature	deg. C	40 deg. C		29.8°C	29.5°C	29.9°C	29.1°C	29.9°C	29.9°C	28.3°C	27.4°C	28.4°C	31.1°C	28.4°C	31.4°C
3	Suspended Solids	mg/l	100	100	4	<2	6	2	<2	5	5	<2	7	4	<2	6
4	Total Dissolved Solids	mg/l	2100		2996	1242	4110	3180	1518	4310	4640	820	6270	6422	1740	8432
5	Chlorides	mg/l	600		1955	405	1436	1160	570	1520	1430	304	2145	2246	582	2975
6	Sulphates	mg/l	1000		6.8	4.2	7.5	5.8	3.2	7.00	8.3	5.1	9.20	9	5.2	10.3
7	BOD	mg/l	30	30	<2	<2	<2	<2	<2	<2	<2	<2	2	<2	<2	2
8	COD	mg/l	100	250	<8	<8	<8	<8	<8	<8	<8	<8	9	8.0	<8	9.0
9	Oil & Grease	mg/l	10	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2	0.71	0.48	0.93	0.86	0.53	0.92	1.04	0.68	1.11	1.54	0.81	1.5
13	Total Chromium	mg/l	1	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	2	5	0.018	0.013	0.022	0.019	0.012	0.023	0.027	0.015	0.033	0.031	0.027	0.037
15	Copper	mg/l	0.2	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		3	0.41	0.22	0.59	0.33	0.17	0.78	0.49	0.3	0.86	0.44	0.26	0.7

	Ν	/lonth								Sep	-23					
					Ģ	GS-01 R	0	E	DD-50 R	0	E	DH-64 R	0	E	DN-99 R	0
S. No.	Parameter	Unit	Onshore Discharge Standards	CPCB Limit for Discharge	Inlet	Outlet	Reject									
1	рН		5.5-9.0	5.5 to 9.0	7.95	7.58	7.34	7.45	7.80	7.63	7.53	7.76	7.88	6.97	7.41	7.28
2	Temperature	deg. C	40 deg. C		31.2°C	32.8°C	29.9°C	30.4°C	30.5°C	29.3°C	28.1°C	29.3°C	28.8°C	33.1°C	29.8°C	32.9°C
3	Suspended Solids	mg/l	100	100	5	<2	7	3	<2	5	4	<2	8	5	<2	6
4	Total Dissolved Solids	mg/l	2100		2886	1664	4106	3692	1398	4792	5028	858	8652	6658	2040	8420
5	Chlorides	mg/l	600		648	415	1130	990	470	1520	1942	396	3145	2334	592	3652
6	Sulphates	mg/l	1000		6.3	5.2	7.40	3.9	<2.5	4.70	4.6	<2.5	8.5	8.9	4.8	10.4
7	BOD	mg/l	30	30	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
8	COD	mg/l	100	250	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8.0
9	Oil & Grease	mg/l	10	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
10	Phenolic Compounds	mg/l	1.2	1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
11	Sulphides	mg/l	2	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
12	Fluorides	mg/l	1.5	2	1.4	0.61	1.62	0.79	0.45	0.91	1.05	0.87	1.14	0.95	0.7	1.12
13	Total Chromium	mg/l	1	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Zinc	mg/l	2	5	0.022	0.019	0.024	0.017	0.015	0.018	0.024	0.019	0.027	0.027	0.022	0.031
15	Copper	mg/l	0.2	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Nickel	mg/l	3	3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
17	Lead	mg/l	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Mercury	mg/l	0.01	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
19	Cyanide	mg/l	0.2	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
20	Hexavalent Chromium	mg/l	0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
21	Iron	mg/l		3	0.48	0.27	0.61	0.53	0.22	0.78	0.39	0.16	0.75	0.55	0.3	0.92

ANNEXURE V

	Month						Ap	r.'23			
S. No.	Parameter	Unit	CPCB Limit for Discharge of Environmental Pollutants (Inland surface water)	Kunur Nala Upstream Near GGS#1	GGS#001 (R.O Discharge)	EDH- 64(Discharge)	Kunur Nala Downstream between EDH 58 & 64	Kunur Nala Downstream RLI - AKANDARA	EDN-99 RO DISCHARGE	EDD-50 RO DISCHARGE	Kunur Nala Downstream Near Kuldiha Bridge
1	рН		5.5 to 9.0	8.36	8.41	8.35	8.46	8.02	8.33	8.40	8.34
2	Temperature	°C		34.6°C	34.2°C	30.3°C	31.2°C	31.1°C	30.2°C	33.3°C	28.9°C
3	Total Suspended Solids	mg/l	100	<2	2.3	<2	9	6.00	<2	3	<2
4	Biochemical Oxygen Demand	mg/l	30	<2	<2	<2	<2	<2	<2	<2	<2
5	Chemical Oxygen Demand	mg/l	250	<8	<8	<8	<8	<8	<8	<8	<8
6	Oil & Grease	mg/l	10	<5	<5	<5	<5	<5	<5	<5	<5
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8	Sulphides (as S ₂) in mg/l	mg/l	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
9	Fluoride	mg/l	2.0	0.63	0.71	0.75	1.35	0.43	0.95	1.1	0.61
10	Total Chromium	mg/l	2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
11	Zinc	mg/l	5.0	0.012	0.015	0.021	0.018	0.017	0.023	0.022	0.029
12	Copper	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13	Nickel	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
15	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
17	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
18	Nitrate Nitrogen(as N),mg/L	mg/l	10	0.91	2.45	1.85	1.22	0.52	2.83	1.65	2.11
19	Vanadium	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Iron	mg/l	3	0.25	0.49	0.68	1.12	2.01	0.91	0.62	0.75
21	Manganese	mg/l	2	<0.05	<0.05	<0.05	0.054	0.071	<0.05	<0.05	<0.05
22	Dissolved Phosphate	mg/l	5.0	0.06	0.09	0.1	0.18	0.08	0.18	0.11	0.14
23	Selenium	mg/l	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24	Cadmium(as Cd)	mg/l	2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Total Arsenic (as As)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
26	Free Ammonia(as NH3)	mg/l	5.0	0.29	0.37	0.31	0.66	0.17	0.17	0.44	0.2
27	Total Kjeldahl Nitrogen (as N)	mg/l	100	3.9	4.7	3.8	6.3	4.9	2.4	5.6	3.1
28	Ammoniacal Nitrogen(as N)	mg/l	50	2.4	3.1	2.6	4.4	3.3	1.7	3.7	2
29	Total Residual Chlorine	mg/l	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	Colour	Hazen Units	Colourless	<5	<5	<5	<5	<5	<5	<5	<5
31	Odour		Odourless	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

	Month						Ma	y.'23			
S. No.	Parameter	Unit	CPCB Limit for Discharge of Environmental Pollutants (Inland surface water)	Kunur Nala Upstream Near GGS#1	GGS#001 (R.O Discharge)	EDH- 64(Discharge)	Kunur Nala Downstream between EDH 58 & 64	EDN-99 RO DISCHARGE	EDD-50 RO DISCHARGE	RLI - AKANDARA	Kunur Nala Downstream Near Kuldiha Bridge
1	рН		5.5 to 9.0	8.38	8.42	8.36	8.40	8.48	8.39	8.34	8.12
2	Temperature	°C		31.9°C	33.8°C	30.3°C	36.0°C	32.1°C	31.6°C	36.7°C	35.3°C
3	Total Suspended Solids	mg/l	100	4	<2	<2	6	7	<2	12	<2
4	Biochemical Oxygen Demand	mg/l	30	<2	<2	<2	<2	<2	<2	2	<2
5	Chemical Oxygen Demand	mg/l	250	<8	<8	<8	8	8	<8	10	<8
6	Oil & Grease	mg/l	10	<5	<5	<5	<5	<5	<5	<5	<5
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8	Sulphides (as S ₂) in mg/l	mg/l	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
9	Fluoride	mg/l	2.0	0.43	0.57	0.35	0.78	0.92	0.66	0.21	0.18
10	Total Chromium	mg/l	2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
11	Zinc	mg/l	5.0	0.017	0.024	0.018	0.012	0.028	0.032	0.012	0.01
12	Copper	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13	Nickel	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
15	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
17	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
18	Nitrate Nitrogen(as N),mg/L	mg/l	10	0.71	0.45	0.86	1.15	0.33	1.83	1.3	0.62
19	Vanadium	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Iron	mg/l	3	1.05	0.54	0.28	1.33	1.65	0.68	1.22	0.43
21	Manganese	mg/l	2	<0.05	<0.05	<0.05	<0.05	0.067	<0.05	<0.05	<0.05
22	Dissolved Phosphate	mg/l	5.0	0.1	1.12	<0.01	0.03	0.09	0.17	0.41	0.27
23	Selenium	mg/l	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24	Cadmium(as Cd)	mg/l	2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Total Arsenic (as As)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
26	Free Ammonia(as NH3)	mg/l	5.0	0.41	0.25	0.26	0.44	0.35	0.19	0.42	0.08
27	Total Kjeldahl Nitrogen (as N)	mg/l	100	4.8	3.6	4	5.3	4.8	2.6	5.1	2.9
28	Ammoniacal Nitrogen(as N)	mg/l	50	3.4	2.1	2.2	3.7	2.5	1.6	4.2	1.4
29	Total Residual Chlorine	mg/l	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	Colour	Hazen Units	Colourless	<5	<5	<5	<5	<5	<5	<5	<5
31	Odour		Odourless	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

	Month			Jun.'23							
S. No.	Parameter	Unit	CPCB Limit for Discharge of Environmental Pollutants (Inland surface water)	Kunur Nala Upstream Near GGS#1	GGS#001 (R.O Discharge)	EDH- 64(Discharge)	Kunur Nala Downstream between EDH 58 & 64	Kunur Nala Downstream RLI - AKANDARA	Kunur Nala Downstream Near Kuldiha Bridge	EDN-99 RO DISCHARGE	EDD-50 RO DISCHARGE
1	рН		5.5 to 9.0	8.68	8.74	8.47	8.70	7.91	8.34	7.98	8.51
2	Temperature	°C		35.3°C	35.3°C	31.7°C	33.3°C	33.3°C	35.4°C	33.2°C	33.9°C
3	Total Suspended Solids	mg/l	100	3	<2	4	<2	7	5	<2	<2
4	Biochemical Oxygen Demand	mg/l	30	<2	<2	<2	<2	<2	<2	<2	<2
5	Chemical Oxygen Demand	mg/l	250	<8	<8	<8	<8	<8	<8	<8	<8
6	Oil & Grease	mg/l	10	<5	<5	<5	<5	<5	<5	<5	<5
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8	Sulphides (as S ₂) in mg/l	mg/l	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
9	Fluoride	mg/l	2.0	0.49	0.81	0.55	0.57	0.32	0.47	0.69	0.62
10	Total Chromium	mg/l	2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
11	Zinc	mg/l	5.0	0.019	0.022	0.015	0.026	<0.01	0.019	<0.01	0.029
12	Copper	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13	Nickel	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
15	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
17	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
18	Nitrate Nitrogen(as N),mg/L	mg/l	10	0.61	1.42	2.4	0.74	0.79	0.63	1.16	1.63
19	Vanadium	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Iron	mg/l	3	0.52	0.33	0.56	0.18	0.75	0.49	0.22	0.24
21	Manganese	mg/l	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
22	Dissolved Phosphate	mg/l	5.0	0.09	0.14	0.07	0.19	0.05	0.11	0.31	0.11
23	Selenium	mg/l	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24	Cadmium(as Cd)	mg/l	2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Total Arsenic (as As)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
26	Free Ammonia(as NH3)	mg/l	5.0	0.59	0.35	0.36	0.4	0.07	0.28	0.1	0.28
27	Total Kjeldahl Nitrogen (as N)	mg/l	100	4.0	2.4	4.6	3.7	3.2	4.9	2.8	3.1
28	Ammoniacal Nitrogen(as N)	mg/l	50	2.7	1.6	2.6	1.8	1.8	3.1	1.9	2
29	Total Residual Chlorine	mg/l	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	Colour	Hazen Units	Colourless	<5	<5	<5	<5	<5	<5	<5	<5
31	Odour		Odourless	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

	Month			Jul.'23							
S. No.	Parameter	Unit	CPCB Limit for Discharge of Environmental Pollutants (Inland surface water)	Kunur Nala Upstream Near GGS#1	GGS#001 (R.O Discharge)	EDH- 64(Discharge)	Kunur Nala Downstream between EDH 58 & 64	RLI - AKANDARA	EDN-99 RO DISCHARGE	EDD-50 RO DISCHARGE	Kunur Nala Downstream Near Kuldiha Bridge
1	рН		5.5 to 9.0	8.39	8.39	7.94	7.78	7.98	7.68	8.45	8.01
2	Temperature	°C		32.5°C	33.4°C	29.1°C	29.2°C	29.3°C	29.5°C	32.6°C	29.6°C
3	Total Suspended Solids	mg/l	100	<2	<2	<2	11	9	<2	<2	8
4	Biochemical Oxygen Demand	mg/l	30	<2	<2	<2	<2	<2	<2	<2	2
5	Chemical Oxygen Demand	mg/l	250	<8	<8	<8	8	<8	<8	<8	9
6	Oil & Grease	mg/l	10	<5	<5	<5	<5	<5	<5	<5	<5
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8	Sulphides (as S ₂) in mg/l	mg/l	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
9	Fluoride	mg/l	2.0	0.49	0.49	0.23	0.478	0.91	0.57	1.04	0.19
10	Total Chromium	mg/l	2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
11	Zinc	mg/l	5.0	0.019	0.019	0.024	0.016	0.012	0.014	0.014	<0.01
12	Copper	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13	Nickel	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
15	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
17	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
18	Nitrate Nitrogen(as N),mg/L	mg/l	10	1.06	1.06	0.35	0.62	0.48	2.15	1.63	0.78
19	Vanadium	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Iron	mg/l	3	<0.1	<0.1	0.52	1.05	0.97	0.43	0.15	0.83
21	Manganese	mg/l	2	<0.05	<0.05	<0.05	0.053	<0.05	<0.05	<0.05	<0.05
22	Dissolved Phosphate	mg/l	5.0	0.08	0.08	0.1	0.07	0.09	0.12	0.11	0.05
23	Selenium	mg/l	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24	Cadmium(as Cd)	mg/l	2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Total Arsenic (as As)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
26	Free Ammonia(as NH3)	mg/l	5.0	0.2	0.2	0.05	0.06	0.09	0.03	0.17	0.12
27	Total Kjeldahl Nitrogen (as N)	mg/l	100	2.1	2.1	2.1	3.7	4.9	1.9	2.8	4.2
28	Ammoniacal Nitrogen(as N)	mg/l	50	1.7	1.7	1.2	2	1.8	1	1.2	2.3
29	Total Residual Chlorine	mg/l	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	Colour	Hazen Units	Colourless	<5	<5	<5	<5	<5	<5	<5	<5
31	Odour		Odourless	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

	Month			Aug.'23							
S. No.	Parameter	Unit	CPCB Limit for Discharge of Environmental Pollutants (Inland surface water)	Kunur Nala Upstream Near GGS#1	GGS#001 (R.O Discharge)	EDH-64 RO (Discharge)	Kunur Nala Downstream between EDH 58 & 64	Kunur Nala Downstream RLI - AKANDARA	EDN-99 RO DISCHARGE	EDD-50 RO DISCHARGE	Kunur Nala Downstream Near Kuldiha Bridge
1	рН		5.5 to 9.0	8.40	8.49	8.35	8.33	7.96	7.91	8.37	7.84
2	Temperature	°C		29.3°C	30.4°C	27.5	27.1°C	27.7°C	28.3°C	28.8°C	27.6°C
3	Total Suspended Solids	mg/l	100	232	<2	8	11	5	<2	<2	4
4	Biochemical Oxygen Demand	mg/l	30	<2	<2	<2	2	<2	<2	<2	<2
5	Chemical Oxygen Demand	mg/l	250	<8	<8	9	9	<8	<8	<8	<8
6	Oil & Grease	mg/l	10	<5	<5	<5	<5	<5	<5	<5	<5
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8	Sulphides (as S ₂) in mg/l	mg/l	2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
9	Fluoride	mg/l	2.0	0.48	0.61	0.53	0.32	0.25	0.68	0.84	0.18
10	Total Chromium	mg/l	2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
11	Zinc	mg/l	5.0	0.01	0.013	0.019	0.01	0.017	0.039	0.11	0.012
12	Copper	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13	Nickel	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
15	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
17	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
18	Nitrate Nitrogen(as N),mg/L	mg/l	10	0.54	0.48	1.85	0.24	0.48	1.93	1.02	0.22
19	Vanadium	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Iron	mg/l	3	1.85	0.12	0.79	0.95	0.55	0.30	0.20	0.46
21	Manganese	mg/l	2	0.05	<0.05	<0.052	0.05	<0.05	<0.05	<0.05	<0.05
22	Dissolved Phosphate	mg/l	5.0	0.08	0.05	0.11	0.1	0.08	0.17	0.06	0.04
23	Selenium	mg/l	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24	Cadmium(as Cd)	mg/l	2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Total Arsenic (as As)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
26	Free Ammonia(as NH3)	mg/l	5.0	0.36	0.34	0.46	0.49	0.16	0.07	0.34	0.07
27	Total Kjeldahl Nitrogen (as N)	mg/l	100	4.3	3.1	5.5	6.2	4.6	3.2	3.7	3.7
28	Ammoniacal Nitrogen(as N)	mg/l	50	3	2.4	3.8	4.9	3.1	1.8	2.8	2.5
29	Total Residual Chlorine	mg/l	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	Colour	Hazen Units	Colourless	<5	<0.1	<5	<5	<5	<5	<5	<5
31	Odour		Odourless	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

	Month			Sep.'23							
S. No.	Parameter	Unit	CPCB Limit for Discharge of Environmental Pollutants (Inland surface water)	GGS#001 (R.O Discharge)	Kunur Nala Upstream Near GGS#1	EDD-50 RO DISCHARGE	Kunur Nala Downstream between EDH 58 & 64	EDH-64 RO (Discharge)	RLI ankandara	Kunur Nala Downstream Near Kuldiha Bridge	EDN-99 (RO Discharge)
1	рН		5.5 to 9.0	8.42	7.92	8.40	8.33	7.86	7.9	7.68	7.75
2	Temperature	°C		31.10	29.9 C	30.3 C	29.3 C	28.2 C	32.0 C	30.4 C	30.5 C
3	Total Suspended Solids	mg/l	100	<2	9	<2	3	<2	6	11	<2
4	Biochemical Oxygen Demand	mg/l	30	<2	<2	<2	<2	<2	<2	<2	<2
5	Chemical Oxygen Demand	mg/l	250	<8	<8	<8	<8	<8	<8	9	<8
6	Oil & Grease	mg/l	10	<5	<5	<5	<5	<5	<5	<5	<5
7	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8	Sulphides (as S ₂) in mg/l	mg/l	2.0	<5	<5	<0.5	<5	<5	<0.5	<5	<5
9	Fluoride	mg/l	2.0	0.72	0.18	0.45	0.24	0.51	0.18	0.33	0.82
10	Total Chromium	mg/l	2.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
11	Zinc	mg/l	5.0	0.018	<.01	0.021	<.01	0.016	<0.01	<.01	0.022
12	Copper	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
13	Nickel	mg/l	3.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Lead	mg/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
15	Mercury	mg/l	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
16	Cyanide	mg/l	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
17	Hexavalent Chromium	mg/l	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
18	Nitrate Nitrogen(as N),mg/L	mg/l	10	3.8	0.72	3.29	<0.05	0.42	0.62	1.2	0.44
19	Vanadium	mg/l	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Iron	mg/l	3	0.25	0.95	0.35	0.47	0.29	0.82	1.2	0.4
21	Manganese	mg/l	2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
22	Dissolved Phosphate	mg/l	5.0	0.13	0.03	1.46	0.48	1.72	0.85	1.93	0.56
23	Selenium	mg/l	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
24	Cadmium(as Cd)	mg/l	2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
25	Total Arsenic (as As)	mg/l	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
26	Free Ammonia(as NH3)	mg/l	5.0	0.24	0.11	0.2	0.09	0.06	0.1	0.06	0.06
27	Total Kjeldahl Nitrogen (as N)	mg/l	100	2.9	3.8	2.2	1.9	2.3	3.1	3.9	2.5
28	Ammoniacal Nitrogen(as N)	mg/l	50	2	2.8	1.7	1.1	1.6	2.5	2.1	1.4
29	Total Residual Chlorine	mg/l	1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
30	Colour	Hazen Units	Colourless	<5	<5	<5	<5	<5	<5	<5	<5
31	Odour		Odourless	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable

ANNEXURE VI

			S:10	500 -2012	Bansia	Kalikapur	Nachan	Bargoria	Jatgoria	Kantaberia	Dhabani	Akandara	Labnapara	Saraswatiganj	Ghatakdanga	Sarenga	Gopalpur
S. No.	Parameter	Unit	Desirable	Permissible limit	Village	village	Village	Village	Village								
	Colour		limit	45													
1	coloui	Hazen	5	15	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2			0.3-0.3	No relaxation	7.58	7.12	7.6	6.81	7.02	6.97	7.53	/.14	6.8	6.83	6.92	7.22	7.08
3	Turblatty, NTO	NTU	1	5	<1	<1	3	4	4.5	3.3	<1	<1	<1	<1	<1	<1	1.3
4	Total Dissolved Solids	mg/l	200	2000	318	62	466	30	204	66	122	38	296	198	32	298	226
5	lotal Suspended Solids,	mg/l			<2	<2	2	2	8	3	<2	<2	<2	<2	<2	<2	<2
6	Total Alkalinity as CaCO ₃	mg/l	200	600	295	35	334	19	27	23	39	16	16	31	19	120	35
7	Total Hardness	mg/l	200	600	139	36	317	16	59	28	40	20	127	115	16	218	135
8	Aluminium (as Al)	NTU	0.03	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.012	<0.01
9	Ammonia (as total ammonia -N)	mg/l	0.5	No relaxation	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
10	Anionic Detergents (as MBAS)	mg/l	0.2	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
11	Barium (as Ba)	mg/l	0.7	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
12	Boron (as B)	mg/l	0.5	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
13	Calcium (as Ca)	mg/l	75	200	33	8	76	3	14	6	11	5	30	27	5	52	32
14	Chloride (as Cl)	mg/l	250	1000	12	7	63	6	78	15	24	6	129	74	7	53	49
15	Copper (as Cu)	ma/l	0.05	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
16	Fluoride (as F)	mg/l	1	1.5	0.31	<0.05	0.41	<0.05	<0.05	<0.05	0.24	<0.05	0.33	<0.05	<0.05	0.33	0.19
17	Free Residual Chlorine	ma/l	0.2	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
18	Iron (as Fe)	ma/l	1	No relaxation	<0.1	<0.1	0.33	0.48	2.63	0.91	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.18
19	Magnesium (as Mg)	ma/l	30	100	14	4	31	2	6	3	3	2	13	12	<2	21	14
20	Manganese (as Mn)	ma/l	0.1	0.3	<0.05	<0.05	0.057	<0.05	0.175	0.063	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
21	Mineral Oil	ma/l	1	No relaxation	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
22	Nitrate (as NO ₂)	ma/l	45	No relaxation	2.47	<0.5	3.37	<0.5	2.45	7.8	<0.5	<0.5	3.15	3.15	<0.5	5.27	2.6
		iiig/i	70	No relaxation	2.41	-0.0	0.01	-0.0	2.40	1.0	-0.0	-0.0	0.10	0.10	-0.0	0.21	2.0
23	Phenolic Compounds (as C.H.OH)	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001
24	Sulphate (as SO)	ma/l	200	400	0.0	<0 F	40.5	<2 F	<25	<2 F	<2 F	<25	40	(2.5	<25	<2 F	2.0
24	Silver (as Ag)	mg/i	0.1	No relayation	9.0	NZ.J	10.5	NZ.J	12.J	NZ.J	NZ.J	12.J	4.9	×2.5	<2.J	NZ.J	3.0
25	Sodium (as Na)	mg/i	0.1	NOTEIAAduon	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
20	Solonium (as Na)	mg/i			60	10	103	8	53	12	31	1	60	49	4	41	21
2/		mg/l	0.01	No relaxation	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
28	Cadmium (as Cd)	mg/l	0.003	No relaxation	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
29	Cyanice (as CN)	mg/l	0.05	No relaxation	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
30	Lead (as PD)	mg/l	0.01	No relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
31	mercury (as Hg)	mg/l	0.001	No relaxation	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
32	Total Arsenic (as As)	mg/l	0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
33	Polynuclear aromatic hydrocarbons (as PAH)	mg/l	0.0001	No relaxation	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
34	Pesticide Residues	mg/l	0.01	No relaxation	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
25	Testal Celliferra Count	CFU/100	Shall not be	detectable in any	Abaant	Absort	Abaant	Abaant	Abaant	Absent							
35	l otal Coliform Count,	mL	100	ml sample	Absent	Absent	Absent	Absent	Absent								
36	Odour		Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
37	Polychlorinated Biphenyls	mg/l	0.0005	No Relaxation	Not Detectable	Not Detectable	Not Detectable	Not Detectable	Not Detectable								
38	Chloramines	us/cm	4	No Relaxation	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
39	Molybdenum	mg/l	0.07	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
40	Sulphide,mg/L	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
41	Electrical Conductivity at 25° C,	µmhos/c m			540	104	780	52	362	120	215	70	510	350	60	510	390
42	Phosphorus(as P)	mg/l			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
43	Nickel	mg/l	0.02	No Relaxation	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
44	Total Chromium	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
45	Zinc	ma/l	5	15	0.024	0.018	0.019	<0.01	0.017	<0.01	0.013	<0.01	0.017	0.01	<0.01	0.022	0.014

ANNEXURE VII



MEMBERSHIP CERTIFICATE

THIS IS TO CERTIFY THAT M/S.ESSAR OIL AND GAS EXPLORATION AND PRODUCTION LIMITED HAVING ITS UNIT AT B-2, VILL & P.O.-GOPALPUR, GOPALPUR SARENGA ROAD, P.S.-KANKSHA, DURGAPUR-713212 IS A REGISTERED LIFETIME MEMBER OF **INTEGRATED COMMON HAZARDOUS WASTE TREATMENT STORAGE AND DISPOSAL FACILITY (ICHW-TSDF)** AT JL. 80, VILL. PABAYAN, P.S. SALTORA, DIST.- BANKURA, WEST BENGAL- 722158. OPERATED BY WEST BEMGAL WASTE MANAGEMENT LTD.

THE MEMBERSHIP IS WBWML/HZW/HzW/DGPR/E-004 AND VALID TILL 31st March 2024.

WEST BENGAL WASTE MANAGEMENT LIMITED

West Bengal Waste Management Limited (A Division of Re Sustainability Limited)

Site Address: CHW-TSDF at: Plot No.- 80, Vill.-Pabayan, P.S.: Saltora, Dist.- Bankura, West Bengal 722 158, India Registered Office: Level 11, Aurobindo Galaxy,

Hyderabad Knowledge City,

Hitech City Road, Hyderabad-500 081. India. CIN No. U74140TG1994PLC018833 **PROJECT HEAD**

T: +91 74777 96110 E: wbwml.saltora@resustainability.com resustainability.com

ANNEXURE VIII

FROM 10 FIGURE PARTY AND THE PROVINCE OF THE PROVINCE		WEST	Storage
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FROM 10 WEST BENGAL WASTE MANAGEMENT LIMITED WEST BENGAL WASTE MANAGEMENT LIMITED MANIFEST FOR HAZARDOUS AND OTHER WASTE 1 Sender's name and mailing address (Including Phone No. and e-mail): 1 Sender's name and mailing address (Including Phone No. and e-mail): 2 Sender's authorization No.: 2 Sender's name and address (Including Phone No. and e-mail) 4 Transporter's name and address (Including Phone No. and e-mail) 5 Type of vehicle: 6 Transporter's neglistration No.: 7 Vehicle registration No.: 1 The of vehicle: 6 Transporter's neglistration No.: 1 Address Management Limited 8 Receiver's name and mailing address (Including Phone No. and e-mail) 9 Receiver's name and mailing address (Including Phone No. and e-mail) 9 Receiver's name and mailing address (Including Phone No. and e-mail) 10 Vehicle registration No.: 11 Total quantily No. <td colspan="</td> <td></td> <td></td> <td>and Comu</td>			and Comu
WEST BENGAL WASTE MANAGEMENT LIMITED UR: Playar, R.S.: Salkan, Bit: Sa	1		FROM 10 2nd Copy
Viii: Pabayan, P.S. : Salon, Die: : : : : : : : : : : : : : : : : : :	1	WEST BENGAL W	VASTE MANAGEMENT LIMITED
MANNEEST FOR HAZARDOUS AND OTHER WASTE 1 Sender's name and mailing address (including Phone No. and e-mail): 2 Sender's authorization No.: 3 Manifest Document No.: 4 Transporter's name and address (including Phone No. and e-mail): 4 Transporter's name and address (including Phone No. and e-mail): 5 Type of vehicle : 6 Transporter's name and address (including Phone No. and e-mail) 7 Vehicle registration No.: 8 Receiver's name and mailing address (including Phone No. and e-mail) 9 Receiver's name and mailing address (including Phone No. and e-mail) 9 Receiver's name and mailing address (including Phone No. and e-mail) 9 Receiver's name and mailing address (including Phone No. and e-mail) 9 Receiver's authorization No.: 324 2 5 C H W - 4531 / 2022 10 West Bangu Maste Management Limited Wit: Phagyan, P.S. (Salton, Dati: Hankura, Pin : 722 158 Moile: 90020333777779101 11 Total (quantity No of Containers :		Vill, : Pabayan, P. S. : S	Saltora, Dist. : Bankura, Pin : 722 158, West Bengal.
1 Sender's name and mailing address (including Phone No. and e-mail): Production LTD Mot AND LANT. With APD POST-3 Mot ANDDLANT. DIST-3 P Assettim B URDWAP. 713212 2 Sender's authorization No.: 1 373 4 Transporter's name and address (including Phone No. and e-mail): West Bengal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist Bankura, Pin. 722 158 (including Phone No. and e-mail): 5 Type of vehicle: Ferdet/Tanker/Special Vehicle) 6 Transporter's name and mailing address (including Phone No. and e-mail): USE Salyon, P. S.: Salion, Dist Bankura, Pin. 722 158 (bit : Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (including Phone No. and e-mail): 7 Vehicle registration No.: USE Salyon, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wit: Pabyan, P. S.: Salion, Dist: Bankura, Pin. 722 158 (bit : Bangal Waste Management Limited Wore Salion Bangal Waste Management Limited Wit: Pabyan, P. S.: Sali		MANIFESTFOR	HAZARDOUS AND OTHER WASTE
1 Sender's name and mailing address (including Phone No. and e-mail): District Property Prove No. 13212 2 Sender's authorization No. : 1 573 3 Manifest Document No. : 1 573 4 Transporter's name and address (including Phone No. and e-mail): 1 573 5 Trype of vehicle : Presson P.S. Salton, Dist: Bankura, Pin: 722 168 (Mobile: 500283363/477776110 6 Transporter's negistration No. : 1 14 7 Vehicle registration No. : 1 14 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited Wit: Playaya, P.S. : Salton, Dist: Bankura, Pin: 722 168 (Mobile: 50028303747777610 9 Receiver's name and mailing address (including Phone No. and e-mail) US 32 1 N c 2 9 Receiver's authorization No. : 32 4 2 5 C H W) - 45 3 1 / 2022 10 Waste description :			ESSAN OTL AND WAS EXPLORATION PAP
1 P35* P PASHIM BURDANM. 113/12 2 Sender's authorization No.: 205 [25 (H W) - 2449] 2002 3 Manifest Document No.: 1 4 Transporter's name and address (including Phone No. and e-mail) West Bengal Waste Management Limited VII: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin : 722 158 Mobile : 900280307/4777801010 5 Type of vehicle: General Waste Management Limited VII: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin : 722 158 Mobile : 900280307/47778010 6 Transporter's registration No.: 1/1/15 3/ N Ø 62 7 Vehicle registration No.: 1/1/15 3/ N Ø 62 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited VII: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin : 722 158 Mobile : 900280303/47771810 9 Receiver's authorization No.: 3/2 (2 S C H W) - 4/5 3 1/2022 10 Waste description : Most mailor generalisability.com 11 Total quantity Most mailor generalisability.com 12 Physical form : (Solid/Semi-Solid/Sludge/Oily/Tarry/Slury/Liquid) 13 Special handling instructions and additional information : I hereby declare that the contents of the consignment are fully and accurate decorded and are nall acquotized, packed, matked and nam and are labeled and are nall acquotized, packed, matked an	1	Sender's name and mailing address (including Phone No. and e-mail) :	VILL AND POST -> MOLANDICANI,
2 Sender's authorization No.: 1 205 [25 [H W] - 24449] 2008 3 Manifest Document No.: 1 573 4 Transporter's name and address (including Phone No. and e-mail) West Bengal Waste Management Limited VII: Pabayan P. S.: Sallora, Dist.: Bankura, Pin:: 722 158 6 Type of vehicle : (#extTanker/Special Vehicle) 6 Transporter's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited VII: Pabayan, P. S.: Sallora, Dist.: Bankura, Pin:: 722 158 7 Mehicle registration No.: I-MD(E)X/06 7 Mehicle registration No.: I-MD(E)X/06 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited VII: Pabayan, P. S.: Sallora, Dist.: Bankura, Pin:: 722 158 9 Receiver's authorization No.: ISA [2 S (H W) - 4S 31 / 2022 10 Waste description : ISA [2 S (H W) - 4S 31 / 2022 11 Total quantity No of Containers : ISO [Solid/Studge/Oily/Tarry/Sturry/Liquid) 13 Special handling instructions and additional information : Interbaryan A tested and are in all respecies in proper conditions for transport by reaccording to papicable National Government Regulations. 14 Interbaryan Scind I Singnature Day Month <td></td> <td>(including)</td> <td>DIST > PASCHIM BURDWAR, 115212</td>		(including)	DIST > PASCHIM BURDWAR, 115212
3 Manifest Document No.: 1 573 4 Transporter's name and address (including Phone No. and e-mail) West Bengal Waste Management Limited Will: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin: 722 158 Mobile: 900280338/7477789110 5 Type of vehicle : Freesiver's name and mailing address (including Phone No. and e-mail) IMD (E)/X06 6 Transporter's registration No.: IMD (E)/X06 IMD (E)/X06 7 Vehicle registration No.: IMD (E)/X06 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited Will: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin: 722 158 Mobile: 90028336/74779510 9 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited Will: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin: 722 158 Mobile: 90028336/74779510 9 Receiver's name and mailing address (including Phone No. and e-mail) Wost Bengal Waste Management Limited Will: Pabayan, P.S.: Saltora, Dist.: Bankura, Pin: 722 158 Mobile: 90028336/74779510 10 Vaste description : IMS A (Including Phone No. and e-mail) 11 Total quantity	2	Sender's authorization No. :	205 25 (HW) - 2449 2008
4 Transporter's name and address (including Phone No. and e-mail) West Eengal Waste Management Limited Wit: Papayar, P.S.: Salawira, Pin: 722 168 Mobile: 9002083387477796110 5 Type of vehicle : GHectXTanker/Special Vehicle) 6 Transporter's negistration No.: 1-MD(E)XX06 7 Vehicle registration No.: 1-MD(E)XX06 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited Wit: Falawar, P.S.: Salawire, Pin: 722 158 Mobile: 9002083387477795110 9 Receiver's authorization No.: 24 (2 S C H W) - 45 3 1 / 2022 10 West description :	3	Manifest Document No. :	1 573
4 Transporter's name and address (including Phone No. and e-mail) Viii. : Pabayan, P. S. : Saltora, Det. : Bankura, Pin : 722 168 5 Type of vehicle : (HextoTanker/Special Vehicle) 6 Transporter's registration No. : IMDE :: 000283337477798110 7 Vehicle registration No. : IMDE :: 000283337477789110 8 Receiver's name and mailing address (including Phone No. and e-mail) Viii: ?abayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 168 9 Receiver's authorization No. : IMDE :: 000283337477789110 9 Receiver's authorization No. : IMDE :: 000283337477789110 9 Receiver's authorization No. : IMDE :: 000283337477789110 10 Wasta description : Image: None : Image: None : 11 Total quantity No of Containers : Nos : Image: Nos : Image: Nos : 12 Physical form : (Solid/Somi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Sol-i+ ? Short. Hum glaves, numbers, numbe		Transmission and address	West Bengal Waste Management Limited
E-mail: wbwnt.saltors@resustainability.com 5 Type of vehicle: 6 Transporter's registration No.: 1 AMD(E)/X06 7 Vehicle registration No.: 8 Receiver's name and mailing address (including Phone No. and e-mail) 9 Receiver's authorization No.: 9 Receiver's authorization No.: 9 Receiver's authorization No.: 10 Waste description: 11 Total quantity No of Containers : 12 Physical form : 13 Special handling instructions and additional information : 14 Sender's Certificate 14 Signature 14 Signature 15 Signature 16 Signature 17 Signature 16 Signature 16 Signature 17 Signature 18 Signature 19 Signature 10 Signature 11 Signature 12 Young	4	(including Phone No. and e-mail)	Vill. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158 Mobile : 9002983363/7477796110
5 Type of vehicle : Hard Tanker/Special Vehicle) 6 Transporter's registration No. : 1-MD(E)/X/06 7 Vehicle registration No. : I/JE_3 N 0262 8 Receiver's name and mailing address (ncluding Phone No. and e-mail) West Bangal Waste Management Limited Will : Fabayan, P. S. : Saltora, Dist : Bankure, Pin : 722 158 Mobile : 5002853037477759110 9 Receiver's authorization No. : 32 2 s (HW) - 4531/2022 10 Waste description :		(E-mail : wbwml.saltora@resustainability.com
6 Transporter's registration No.: 1-MD(E)X/06 7 Vehicle registration No.: US 3/ N 2002 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited Will, Padayan, P. S.: Saltora, Dist.: Bankura, Pin: 722 158 Mobile : 5002693337/4777910 9 Receiver's authorization No.: 32/ 2 s (H W) - 4531/2022 10 West description :	5	. Type of vehicle :	(Huck/Tanker/Special Vehicle)
7 .Vehicle registration No. : UIS 30 N 2002 8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited WII: Phayan, P.S. Statora, Dist. Bankura, Pin : 722 158 Mobile : 900288363/7477796110 E-mail : whomil.aallon@resustainability.com 9 Receiver's authorization No. : 32 2 s (H W) - 4/531/2022 10 Waste description : 33 2 s (H W) - 4/531/2022 11 Total quantity No of Containers :	6 .	Transporter's registration No. :	1-MD(E)/X/06
8 Receiver's name and mailing address (including Phone No. and e-mail) West Bengal Waste Management Limited VIII. 'Pabayan, P. S. 'Saltora, Dist.' Bankure, Pin: '722 158 Mobile: 900298333747776101 9 Receiver's authorization No. : 32 2 S (HW) - 4531/2022 10 Waste description :	7	.Vehicle registration No. :	WB 31 N0062
8 Receiver's name and mailing address (including Phone No. and e-mail) VIII. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158 9 Receiver's authorization No. : 32 2 S H & D - 45 3 I / 2022 10 Waste description :			West Bengal Waste Management Limited
1 Mobile : 90/229/25/2014 / 1796 110 2 Receiver's authorization No.: 32 3 Receiver's authorization No.: 32 10 Waste description :	8	(including Phone No, and e-mail)	Vill. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158
9 Receiver's authorization No.: 32 2 s C H W) - 4531/2022 10 Waste description :		(more and a month)	E-mail : wbwml.saltora@resustainability.com
10 Waste description :	9	Receiver's authorization No. :	34 25 (HW) - 4531/2022
11 Total quantity No of Containers :	10	Waste description :	
11 No of Containers : Nos. Nos. Nos. 12 Physical form : (Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) 13 Special handling instructions and additional information : Solid Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) 13 Special handling instructions and additional information : I hereby declare that the contents of the consignment are fully and accurate described above by proper shipping categorized, packed, marked and nam and are labeled and are in all respects in proper conditions for transport by roe according to applicable National Government Regulations. 14 Signature Day Month Year 14 Signature Day Month Year 15 Signature Day Month Year 16 Signature Day Month Year 17 Signature Day Month Year 18 Signature Day M	11	Total guantity	4.300 manuf Cotton wask 21-3 TON
12 Physical form : (Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Llquid) 13 Special handling instructions and additional information : Solid / Sheet. Hand Sheet		No of Containers :	Nos with the all the
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15 Image: Signature 24052023 16 Signature Day Month 16 Signature Day Month 16 Signature Day Month 1. White Colour forwarded to WBPCB by HzW Sender. 2. Yellow Colour retained by HzW sender. 3. Pink Colour forwarded to WBPCB by HzW Sender. 3. Pink Colour forwarded to WBPCB by HzW Sender. 2. Yellow Colour retained by HzW sender. 4. Orange Colour retained by HzW sender. 6. Green Colour forwarded to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver.		Name and Statio	Signature Day Month Year
16 Signature Day Month Year 16 Sustainability Signature Day Month Year 1. White Colour forwarded to WBPCB by HzW Sender. 2. Yellow Colour retained by HzW sender. 4. Orange Colour retained by HzW sender. 3. Pink Colour retained by HzW Receiver. 6. Blue Colour retained by HzW sender. 6. Blue Colour retained to sender after disposal by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver.	15		111 24052023
Image: Substainability Signature Day Month Year 16 Substainability Signature Day Month Year 1. White Colour retained by HzW Receiver. Signature Day Month Year 1. White Colour retained by HzW Receiver. Signature Day Month Year 1. White Colour retained by HzW Receiver. Signature Day Month Year 1. White Colour retained by HzW Receiver. Signature Day Month Year 1. White Colour retained by HzW Receiver. Signature Signature Signature Signature 1. White Colour retained by HzW Receiver. Signature Signature Signature Signature 1. White Colour retained by HzW Receiver. Signature Signature Signature Signature 1. White Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. Blue Colour returned to sender after disposal by HzW Receiver. 1. Gree Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. Signature 17 Signature Signature Signature 18 Signature Signatu		C Pustainability T	amight 10 23
16 Signature Day Month Year 1. White Colour forwarded to WBPCB by HzW Sender. 2. Yellow Colour retained by HzW sender. 3. Pink Colour retained by HzW Receiver. 6. Orange Colour retained by HzW sender. 6. Green Colour forwarded to WBPCP after disposal by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver.		Received certificate for receipt hazardo	bus and other wastes :
16 Name and Stand Signature Day Month Year 1. White Colour revealed to WBPCB by HzW Sender. 2. Yellow Colour retained by HzW sender. 3. Pink Colour retained by HzW Receiver. 4. Orange Colour retained by HzW sender. 5. Green Colour forwarded to WBPCP after disposal by HzW Receiver. 6. Blue Colour retained by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver. 5 F F F F F		A RANGE AND A R	Olimation Design and the second second
1. White Colour Tooverded to WBPCB by HzW Sender. 3. Pink Colour retained by HzW Receiver. 5. Green Colour forwarded to WBPCP after disposal by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver.	16	Name and Stamp	Signature Day Month Year
1. White Colour forwarded to WBPCB by HzW Sender. 2. Yellow Colour retained by HzW sender. 3. Pink Colour retained by HzW Receiver. 4. Orange Colour retained by transporter. 5. Green Colour forwarded to WBPCP after disposal by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver. 1. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver.		Sustainatifity	
 Wind Colour retained by HzW Sender. Pink Colour retained by HzW Receiver. Green Colour forwarded to WBPCP after disposal by HzW Receiver. Green Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver. 			
5. Green Colour forwarded to WBPCP after disposal by HzW Receiver. 7. Grey Colour returned to SPCB of the HzW Sender (in case the Sender is in another Site) by HzW Receiver.	1.	Pink Colour retained by HzW Receiver.	 Yellow Colour retained by HzW sender. 4. Orange Colour retained by transporter.
tive of the second seco	5. 7.	. Green Colour forwarded to WBPCP after disposal b . Grey Colour returned to SPCB of the HzW Sender (y HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Recei (in case the Sender is in another Site) by HzW Receiver.
tive and the second sec			
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ct	U	
	N	5	

		FROM 10	2nd Copy
	WEST BENGAL W	ASTE MANAG	EMENT LIMITED
	Vill, : Pabayan, P. S. : S	altora, Dist. : Bankura, Pin : 72	22 158, West Bengal.
	MANIFEST FOR I	HAZARDOUS AND G	OTHER WASTE
	Sender's name and mailing address (including Phone No. and e-mail) :	ESSAR OIL AN PRODUCTION L' VILL AND POST 4 DIST -) PASE	HAM BURDWAN, 713315 TO MOLUNDIGHT ID MAS ETPLORATION AND
5	Sender's authorization No. :	205 /25 (HI	W) - 2449 2008
3	Manifest Document No. :	1 605	
4	Transporter's name and address (including Phone No. and e-mail)	West Bengal Waste M Vill. : Pabayan, P. S. : Salt Mobile : 9002983363/747 E-mail : wbwml.saltora@m	lanagement Limited tora, Dist. : Bankura, Pin : 722 158 7796110 esustainability.com
5	Type of vehicle :	(Truck/Tanker/Special V	/ehicle)
6	Transporter's registration No. :	1-MD(E)/X/06	
7	.Vehicle registration No. :	MISON	0097
8	Receiver's name and mailing address (including Phone No, and e-mail)	West Bengal Waste Ma Vill. : Pabayan, P. S. : Salt Mobile : 9002983363/7477 E-mail : wbwml.saltora@re	anagement Limited tora, Dist. : Bankura, Pin : 722 158 7796110 esustainability.com
9	Receiver's authorization No. :	34/2S(HW)-4	531/2022
10	Waste description :	men bran	e filter
11	Total quantity No of Containers :	0.570 70	m3 or MT Nos.
12	Physical form :	(Solid/Semi-Solid/Sluc	dge/Oily/Tarry/Slurry/Liquid)
13	Special handling instructions and additional information :	sale to shoe,	Halmots, Hond geoves
	Sender's Certificate	I hereby declare that the c described above by prope and are labeled and are in a according to applicable Nat	contents of the consignment are fully and accurately or shipping categorized, packed, marked and name all respects in proper conditions for transport by road tional Government Regulations.
14	Name and Stampt PROJECTS	Signature	Day Month Year
	131 -	12A	0 8 0 8 2 0 2 3
	Transporter acknowledgement of receipt	of Wastes :	
15	Name and Stamp	Signature	Day Month Year
	Sustainability S		08082023
	Receiver's certificate of teching hazardou	is and other wastes '	т. И
16	Name and Stamp	Signature	Day Month Year
	White Colour forwards to UDDOD to USU0		
3. 5. 7.	Vinite Colour forwarded to WBPCB by HzW Sender. Pink Colour retained by HzW Receiver. Green Colour forwarded to WBPCP after disposal by Grey Colour returned to SPCB of the HzW Sender (in	2. Ye 4. O HzW Receiver. 6. Bi n case the Sender is in another	allow Colour retained by HzW sender. range Colour retained by transporter. lue Colour returned to sender after disposal by HzW Receiver. Site) by HzW Receiver.
	Sch Sch	S S S	

			FROM 10 2nd Copy
		WEST BENGAL W	ASTE MANAGEMENT LIMITED
		Vill, : Pabayan, P. S. : Sa	altora, Dist. : Bankura, Pin : 722 158, West Bengal.
		MANIFEST FOR H	AZARDOUS AND OTHER WASTE
		and the same and mailing address	PRODUCTION LTD
		(including Phone No. and e-mail) :	VILL AND POST & MOLAN OJANS
	1	and the Market States	205 125 /H/W) - 2464 12008
	2	Sender's authorization No. :	
1	3	Manifest Document No. :	West Rengel Waste Management Limited
/	4	Transporter's name and address (including Phone No. and e-mail)	Vill. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158 Mobile : 9002983363/7477796110 E-mail : wbwml.saltora@resustainability.com
	5	Type of vehicle :	(Truck/Tanker/Special Vehicle)
	6	Transporter's registration No. :	1-MD(E)/X/06
	7	Vehicle registration No. :	WB 3IN 0098
	8	Receiver's name and mailing address (including Phone No. and e-mail)	West Bengal Waste Management Limited Vill. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158 Mobile : 9002983363/7477796110 E-mail : wbwml.saltora@resustainability.com
	9	Receiver's authorization No. :	34/2S (HW)- 4531/2022
	10	Waste description :	WASTE ETLYER
	11	Total quantity No of Containers :	
	12	Physical form :	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
	13	Special handling instructions and additional information :	Soutett Share, Helimits, Hand glavos
		Sender's Continent	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping categorized, packed, marked and name and are labeled and are in all respects in proper conditions for transport by road according to applicable National Government Regulations.
•		Name and Stamp Crs	Signature Day Month Year
		Transporter acknowledgement of receipt	of Wastes :
	15	Name and Stamp	Signature Day Month Year 0 8 0 8 2 0 2 3
t		Receiver's certificate for receipting ardou	us and other wastes :
	16	Name and Stamp S	Signature Day Month Year
	1	White Colour forwarded to WBPCB by HzW Sender	2. Yellow Colour retained by HzW sender.
	3	Pink Colour retained by HzW Receiver.	4. Orange Colour retained by transporter. 6. Blue Colour retained to sender offer denoted by HzW Persiver.
	7	Grey Colour returned to SPCB of the HzW Sender (in	n case the Sender Is in another Site) by HzW Receiver.
		VVa Sch Ph	In Co E Ta Ph Co

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FROM 10

WEST BENGAL WASTE MANAGEMENT LIMITED Vill, : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 156, West Bengal. MANIFEST FOR HAZARDOUS AND OTHER WASTE

	1	Sender's name and mailing address (including Phone No. and e-mail) :	ESSAR OTL AND LAS EXPLORATION AND PRODUCTION LTD VILLAND DOST & MOLANDINNIZ DIST & Reschim Burdwan, 713212
J	2	Sender's authorization No. :	205 125 (HIW) - 2449 2008
r	3	Manifest Document No. :	1 600
	4	Transporter's name and address (including Phone No. and e-mail)	West Bengal Waste Management Limited Vill. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158 Mobile : 9002983363/7477796110 E-mail : wbwml.saltora@resustainability.com
F	5	. Type of vehicle :	(Truck/Tanker/Special Vehicle)
Γ	6	Transporter's registration No. :	1-MD(E)/X/06
F	7	Vehicle registration No. :	W 8 31N 0098
	8	Receiver's name and mailing address (including Phone No. and e-mail)	West Bengal Waste Management Limited Vill. : Pabayan, P. S. : Saltora, Dist. : Bankura, Pin : 722 158 Mobile : 9002983363/7477796110 E-mail : wbwml.saltora@resustainability.com
F	9	Receiver's authorization No. :	34/25 (HW)-4531/2022
F	10	Waste description :	Cotton waste
-	11	Total quantity No of Containers :	
1	12	Physical form :	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
-	13	Special handling instructions and additional information :	Safety Shoe, Hand gloves. Helmets
		Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping categorized, packed, marked and name and are labeled and are in all respects in proper conditions for transport by road according to applicable National Government Regulations.
	4	Name and Stamp Adup	Signature Day Month Year
┝	-	Transporter State	of Wheelers :
		Transporter acknowledgement of receipt	or wastes :
		Name and Stamp	Signature Day Month Year
1	5	Sustainability	
		153 - 15 M	0000000000
		Receiver's certificate for receipt hazardou	us and other wastes :
		Name and Stamp	Signature Day Month Year
1	6		
-	1.	White Colour forwarded to WBPCB by HzW Sender.	2. Yellow Colour retained by HzW sender.
	3. 5.	Pink Colour retained by HzW Receiver. Green Colour forwarded to WBPCP after disposal by	4. Orange Colour retained by transporter. HzW Receiver. 6. Blue Colour returned to sender after disposal by HzW Receiver.
	7.	Grey Colour returned to SPCB of the HzW Sender (in	n case the Sender is in another Site) by HzW Receiver.
	•	Ph Tot	

ORIGINAL FOR RECIPIENT

	FORM 10		
	[See rule 19 (1)]		
MANIFEST	FOR HAZARDOUS AND	OTHER	WASTE

[RSSON Qil and Ras Explosation
1.	(including Phone No. and e-mail)		and production lignilia
	,		Dusgapus. 713212.
2.	Sender's authorisation No.	:	25/25(HW) - 2449/2008
3.	Manifest Document No.	1	
4.	Transporter's name and address : (including Phone No. and e-mail)		A 122 phase M. Block. A. Kalyan
5.	Type of vehicle	:	(Truck / Tanker / Special Vehicle)
6.	Transporter's registration No.	:	182/28 (HW)- 2545/2009
7.	Vehicle registration No.	:	
8.	Receiver's name and mailing address (including Phone No. and e-mail)		Inspec onla Linniled. A/122, Phase: M. Block A Kalyanti Nadia
9.	Receiver's authorisation No.		182/28 (HW). 2545/2009.
10.	Waste description	:	- Dsed onl-
11.	Total quantity No. of Containers	•	2400 LTR m ³ or MT/145 Nos.
12.	Physical form :		- (Solid J. Semi - Solid J. Sludge / Oily / Tarry / Slurry / Liquid)
•13.	Special handling instructions and additional information		Hardle
14.	Sender's Certificate		I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
	Name and stamp Signature :	Mc	onth Day Year
	A A A A A A A A A A A A A A A A A A A	6	8 19 2022
15.	Transporter acknowledgement of receipt of Wastes		
	Name and stamp: 2 to Signature: Month Datapapart	Mo	Day Year 8 Roc
16.	Receiver's certification for receipt of hazardous and	other w	aste
	Name and stamp : Signature :	Мо	onth Day Year
-			the second s

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	MANIFEST FOR HAZARDA	JUSA	ND OTHER WASTE
	inder's name and mailing address including Phone No. and e-mail)		AND PRODUCTION LTD AND PRODUCTION LTD WILL AND POST -> MOLANDINHI DIST -> PASCHIM BURDWAN, 713212
1	Sender's authorisation No.	:	205/25 (HW) -2449/2008
3.	Manifest Document No.	:	
4.	Transporter's name and address: (including Phone No. and e-mail)		Jelui Road, Rishna, P.D. Mollovber P.S. Dankuni, Dist-Hooghly Pin-712250
5.	Type of vehicle	:	(Truck / Tanker / Special Vehicle)
6.	Transporter's registration No.	:	03/25(40)-3591/2019
7.	Vehicle registration No.	:	WB 97 1134
8.	Receiver's name and mailing address (including Phone No. and e-mail)	:	FEXSUS Lub Delli Road, Rishra, PO. Mollarber RS. Dankuni Distritiogen 4. Pin-712250
9.	Receiver's authorisation No.	:	03/23(HW)-3591/2019.
10.	Waste description	:	- Used ail
11.	Total quantity	:	1400 LTR m ³ or MT
	No. of Containers	:	7 Drum Nos.
12.	Physical form	:	(Solid / Semi- Solid / Sludge / Oily / Tarry / Slurry / Liquid)
13.	Special handling instructions and additional information	:	Handle with care
4.	Sender's Certificate		I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
	Signature :	Mor	Day Year 0 6 0 7 2 2 3
5.	Transporter acknowledgment of receipt of Waster		
	Name and standollarber Signature : Dist-Hooghly Jagater Dhale	Mor	Day Year 0 6 0 7 2 0 2 3
_			
6.	Receiver's certification for receipt of hazardous and	other w	aste

FORM 10 [See rule 19 (1)]

	MANIFEST FOR HAZARDOUS AND OTHER WASTE							
1	Sender's name and mailing address (including Phone No. and e-mail)		ESSAR OTL AND LAS EXPLORATION AND PRODUCTION LTP WILL AND POST > MOLANDINHI DIST & DASCHIM DURDWAN, 713,212					
2	Sender's authorisation No.	:	205/25 (HIW) - 2449/2008					
3	Manifest Document No.	:						
4.	Transporter's name and address: (including Phone No. and e-mail)		TEXSUS LUB Decki Road Ristura P.O. Mollarber RS: Pankuni Dizt-Hospher Pon F17250					
5.	Type of vehicle	:	(Truck / Tanker / Special Vehicle)					
6.	Transporter's registration No.	:	03/25(HW)-3591/2019					
7.	Vehicle registration No.	:	WB 1936629					
8.	Receiver's name and mailing address (including Phone No. and e-mail)	:	TEXSUS 246 DechiRoad, Rishra, Ro. Mallorber P.S. Pankuni, Dirot-Hooghy- Pin-712250					
9.	Receiver's authorisation No.	:	03/25(40)-3591/2019					
10.	Waste description	:	- Les ed ail-					
11.	Total quantity No. of Containers	:	8000 21 m or MT 40 gr uma Nos.					
12.	Physical form	:	(Solid / Semi- Solid / Sludge / Oily / Tarry / Slurry / Liquid)					
13.	Special handling instructions and additional information	:	Handle With Pare					
14.	Sender's Certificate	:	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.					
	Name and stamp Signature :	Mor	th Day Year					
15.	Transporter acknowledgment of receipt of Wastes							
	Name and stamp S LUB Signature : Dist-Hooghly-7 12 20 That	Mor	th Day Year					
16.	Receiver's certification for receipt of hazardous and	Receiver's certification for receipt of hazardous and other waste						
	Name and stamp : Signature :	Mor	hth Day Year					

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FORM 10 [See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE							
1	Sender's name and mailing address (including Phone No. and e-mail)		ESSAR OIL AND LAS EXPLORATION AND PRODUCTION LTD VILL AND POST & MOLANDINHI DIST & PASCHIM BURDWAN, 713212				
2.	Sender's authorisation No.	:	205 125 (414) -2449 /2008				
3.	Manifest Document No.	:					
4.	Transporter's name and address : (including Phone No. and e-mail)		NID Phase UL BLOOK A Kalean				
. 5.	Type of vehicle	:	(Truck / Tarker / Special Vehicle)				
6.	Transporter's registration No.	:	182/28(412)-2545/2004				
7.	Vehicle registration No.	:	WB194 0236, WB191 2365				
8.	Receiver's name and mailing address (including Phone No. and e-mail)		Also, Phase MI. Block A. Kalpani, Nadia				
9.	Receiver's authorisation No.		182/25 (AN)-2545/2009.				
10.	Waste description	:	- Used oil-				
11.	Total quantity No. of Containers	:	15,600 m3 or MT/ 140 78 Dru Nos.				
12.	Physical form		4801id / Sefni - 801id / Sludge / Olly / Tarfy / Slufry / Liquid)				
•13.	Special handling instructions and additional information		Handling with Care				
14.	Sender's Certificate		I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.				
	Name and stamp Signature :	Mc O	DayYear833123				
15.	Transporter acknowledgement of receipt of Wastes						
	Name and stamp : Signature :	Mc (Day Year 9 31				
16.	Receiver's certification for receipt of hazardous and c	other w	aste				
	Name and stamp : Signature :	Mo	onth Day Year				

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FORM 10 [See rule 19 (1)]

	FORM 10							
[See rule 19 (1)]								
-	MANIFEST FOR HAZARDOUS AND OTHER WASTE							
- /	Sender's name and mailing address (including Phone No. and e-mail)	ESSAR OIL AND GAS EXPLORATION AND PRODUCTION LTD WILL AND POST-MOLANDIGHT DIST-PACCHIM BURDWAN-7/32/2						
2.	Sender's authorisation No.	205/25 (H/W)-2449/2008						
3.	Manifest Document No.							
4.	Transporter's name and address : (including Phone No. and e-mail)	A/122, phase-III Block-A. Kalyoni						
5.	Type of vehicle :	(Truck / Tanker / Special Vehicle)						
6.	Transporter's registration No. :	182/25 (474)-2545/2009,						
7.	Vehicle registration No. :	WB=W1K=1856.						
8.	Receiver's name and mailing address (including Phone No. and e-mail)	103pæ 0593 Linenlæð Anze, phase: M Block-A- Kælyany: Nadía.						
9.	Receiver's authorisation No.	Ation, Phase-M. Block A Keelya						
10.	Waste description :	- Used oil -						
11.	Total quantity : No. of Containers :	11800 m ³ or MT/245						
12.	Physical form	(Solid / Semi - Solid / Sludge / Oily / Tarry / Slurry / Liquid)						
•13.	Special handling instructions and additional information	Handling with Case						
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.						
	Vame and stamp Signature :	Month Day Year 09 21 2023						
15.	Transport and a selected gement of receipt of Wastes							
	Name Signature : Menue Dasgupti	Month Day Year 0 9 2 1 2 0 2 3						
16.	Receivers dertification for receipt of hazardous and other	er waste						
	Name and stamp : Signature :	Month Day Year						

ANNEXURE IX

Ground Water Level Report of Surrounding Areas of CBM Ranigan project

by Essar Oil and Gas Exploration and Production Ltd.

(Period: Apr.²³ - Sep.²³)

S. No.	Location	Latitude	Longitude	Parapet wall height (Meter)	Well Diameter (Meter)	Depth to Water from Parapet top (Meter)	Depth to Water below ground level (Meter)
1	Nachan	23°36'42.4"N	87°19'58.9"E	0.6	1	2.59	1.99
2	Kalikapur	23°37.46.4"N	87°20.15.1"E	0.66	1.85	3.14	2.48
3	Dhabani	23°35'51.9"N	87°22.0.85"E	0.93	1.8	3.09	1.29
4	Bansia	23°37.34.3"N	87°19'00.1"E	0.76	0.97	3.53	2.77
5	Labnapara	23°35'05.36N	87°22'15.8"E	1.2	1.5	12.21	11.01
6	Akandara	23°34'46.1"N	87°23'0.13"E	0.6	1.85	6.5	4.65
7	Saraswatiganj	23°35'22.6"N	87°24'78.4"E	0.45	1.75	5.28	4.83
8	Ghtakdanga	23°34'14.7"N	87°24'30.8"E	0.83	2.4	5.53	4.7
9	Sarenga	23°31'36.22"N	87°24'58.12"E	1.1	1.67	4.11	3.1
10	Gopalpur	23°30'63.9"N	87°23'40.8"E	0.5	1.53	4.01	3.51
11	Jatgoria	23°36'97.3"N	87°23'43.2"E	0.6	1.8	4.44	3.84
12	Kantaberia	23°36'82.9"N	87°22'24.2"E	0.83	1.3	3.93	3.1
13	Bargoria	23°37'58.0"N	87°21'39.7"E	0.7	2.5	3.53	2.83
14	Khatgoria	23°30'05"N	87°31'41"E	0.76	1.77	4.49	3.73

ANNEXURE IX