

# मंगलूर रिफाइनरी एण्ड पेट्रोकेमिकल्स लिमिटेड MANGALORE REFINERY AND PETROCHEMICALS LIMITED

अनुसूची 'अ' के अंतर्गत भारत सरकार का उद्यम, SCHEDULE 'A' GOVT. OF INDIA ENTERPRISE. (ऑयल एण्ड नेचुरल गैस कॉरपोरेशन लिमिटेड की सहायक कंपनी, A SUBSIDIARY OF OIL AND NATURAL GAS CORPORATION LIMITED) आई.एस.ओ. 9001, 14001 एवं 50001 प्रमाणित कंपनी, AN ISO 9001, 14001 AND 50001 CERTIFIED COMPANY. सीआईएन/CIN : L23209KA1988GO1008959 / वेबसाइट Website : www.mrpl.co.in

L/MS/MoEF&CC/7516 29<sup>h</sup> May, 2024

The Director Ministry of Environment, Forest & Climate Change, 4<sup>th</sup> Floor, E&F Wing, Kendriya Sadan, Koramangala, Bengaluru – 560 034

Dear Sir,

### विषय Subject:- Submission of Compliance to the Diesel quality improvement project Environmental Clearance(s) along with monitoring data

Please find enclosed herewith point wise compliance to the following Environmental Clearance(s) issued to MRPL by Ministry of Environment, Forest & Climate Change (MoEF & CC), New Delhi.

1. Letter No. J-11011/8/2009-IA.II dated 23<sup>rd</sup> Dec 2009 (Diesel quality improvement project and expansion of the refinery to13.6 MMTPA)

धन्यवाद Thanking You,

भवदीय Yours sincerely,

मंगलूर रिफाइनरी एंड पेट्रोकेमिकल्स लिमिटेड For Mangalore Refinery & Petrochemicals Limited,

242210

एम.एस सुदर्शन M.S Sudarsan मुख्य महा प्रबंधक (स्वास्थ, संरक्षा एवं पर्यावरण) Chief General Manager (Health, Safety and Environment)

154



# पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय Ministry of Environment, Forest and Climate Change









## **View Compliance Report at Project Proponent Proposal Details Proposal No** F. No. J - 11011/8/2009 - IA II (I) dated 23-12-2009 Category Industrial Projects - 2 Name of Project Diesel Quality Improvement Project and expansion of the Refinery to 13.6 MMTPA Plot / Survey/ Khasra No. Village(s) Sub-District(s) State KARNATAKA District **MoEF File No** F. No. J - 11011/8/2009 - IA II (I) dated 23-12-2009 Name of the Entity/ **Corporate Office** Mangalore Refinery and Petrochemicals Limited **Entity's PAN** NA **Entity Name as per PAN** NA Entity details mentioned above is correct? Agree **Project KML** NA **Covering Letter**

**Covering Letter** 

## **Compliance Reporting Details**

**Reporting Year** 2023

Reporting Period

01 Jun(01 Oct - 31 Mar)

#### Remark(if any)

This compliance reported for the period 1st October 2023 to 31st March 2024

## **Details of Production and Project Area**

#### **Date of Commencement of Project/Activity**

24-12-2009

	Project Area as per EC Granted(ha.)	Actual Project Area in Possession(ha.)
Private	1592	1592
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	1592	1592

Sr.No.	Name of the Product	Units	As per EC Granted	As per CTO Granted	CTO ID	Valid Up To	Production during last financial year
1	Diesel	Million Tons per Annum (MTPA)	6.47	6.47	AW- 337260	30- 06- 2026	6.205322
2	Fuel Oil	Million Tons per Annum (MTPA)	0.37	0.37	AW- 337260	30- 06- 2026	0.292357
3	LPG	Million Tons per Annum (MTPA)	1.26	1.26	AW- 337260	30- 06- 2026	1.027834
4	ATF	Million Tons per Annum (MTPA)	2.04	2.04	AW- 337260	30- 06- 2026	2.090892

8 PM	PM View Compliance								
	5	Naphtha	Million Tons per Annum (MTPA)	1.771	1.771		AW- 337260	30- 06- 2026	1.051256
	6	Motor Spirit	Million Tons per Annum (MTPA)	1.96	1.96		AW- 337260	30- 06- 2026	2.265789
	7	Kerosene	Million Tons per Annum (MTPA)	0.05	0.05		AW- 337260	30- 06- 2026	0.049232
	8	Bitumen	Million Tons per Annum (MTPA)	0.19	0.19		AW- 337260	30- 06- 2026	0.125522
	9	Sulphur	Million Tons per Annum (MTPA)	0.31	0.31		AW- 337260	30- 06- 2026	0.187072
	10	Mixed Xylene	Million Tons per Annum (MTPA)	0.002	0.002		AW- 337260	30- 06- 2026	0.005676
	11	Pet Coke	Million Tons per Annum (MTPA)	1.12	1.12		AW- 337260	30- 06- 2026	0.816412
	12	Polypropylene	Million Tons per Annum (MTPA)	0.51	0.51		AW- 337260	30- 06- 2026	0.389065
	13	VGO	Million Tons per Annum (MTPA)	0.15	0.15		AW- 337260	30- 06- 2026	0.271852
	14	Fuel & Loss	Million Tons per Annum (MTPA)	2	2		AW- 337260	30- 06- 2026	1.894664
Со	Conditions								
	Specific Conditions								
	Sr.No.	Condition	Conditio	n Details		Status	s of Comp	liance,Re	emarks /

4, 3:38 PM	View Compliance					
	Heading		Reason and Supporti	ng Documents		
1	Statutory compliance	M/s Mangalore Refinery and Petrochemical Limited shall comply with new standards/norms for Oil Refinery Industry notified under the Environment (Protection) Rules. 1986 vide G.SR 186(E) dated 18th March 2008.	PPs Submission	MRPL is adhering to new standards for Oil Refinery Industry notified under the Environment (Protection) Rules, 1986 vide G.SR 186(E) dated 18th March 2008. Complied Attachment:NA		
2	AIR QUALITY MONITORING AND PRESERVATION	The project authorities make efforts to further reduce the SO2 emission less than the prescribed limits of 37.74 TPD for the existing capacity.	PPs Submission	Production and consumption of low sulphur internal Fuel Oil in the fired heaters is being ensured. The liquid fuel is consumed after consuming all the ultra-low sulphur Fuel Gas. Off gases generated from the process units are being utilized in the heaters to reduce fuel oil consumption and thereby reducing SO2 emission. Being Complied Attachment:NA		
3	MISCELLANEOUS	Supply of products from refinery shall not result in additional load due to tankers movements. Measures shall be taken to prevent the traffic	PPs Submission	MRPL is carefully monitoring that tankers movement should not		

3:38 PM		View	Compliance	
		congestion. Further, the truck owners for naphtha truck loading shall be informed to provide the truck with bottom loading capacity and for VOC recovery System.		lead to traffic congestion. Majority Industries have so far not switched over to bottom loading and also trucks with proper facility with bottom loading are less. We are also in the process of implementing VOC recovery system Being Complied Attachment:NA
4	Statutory compliance	The process emissions (SO2, NOx, HC, VOCs and Benzene) from various units shall conform to the standards prescribed by the AP State Pollution Control Board from time to time. At no time, the emission levels should go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit should be Immediately put out of operation and should not be restarted until the desired efficiency has been achieved. The above condition amended by MoEF vide letter no. F.No. J-11011/8/2009-IA II (I) dated 18.02.11 "as to be read by Karnataka State Pollution Control Board".	PPs Submission	Being complied with the stipulations of Karnataka State Pollution Control Board. As per the revised standards for refineries notified under the Environment (Protection) Rules dated 18th March 2008, we are monitoring SO2 and NOx in the stacks through on line analyzers. VOC (Hydrocarbon) is being checked through LDAR program and Benzene through our work environment monitoring.

			Compliance	
				Being Complied Attachment:NA
5	Statutory compliance	Ambient. Air quality monitoring stations, (PM10, /PM2.5, SO2, NOx, H2S, Mercaptan, NMHC, Ozone, Nickel and Benzene) should be set up in the Refinery complex in consultation with SPCB, and based on occurrence of maximum ground level concentration and down- wind direction of wind. The monitoring network must be decided based on modelling exercise to represent short term GLCs Continuous online stack monitoring equipment should be installed for measurement of SO2, NOx, CO and CO2. Low NOx burners should be installed with online analyzers. The above condition amended by MOEF vide letter no. F.No. J-11011/8/2009-IA II (I) dated 18.02.11 "No monitoring of Mercaptans in Ambient Air and CO2 in stacks".	PPs Submission	Two continuous ambient air quality monitoring system (CAAQMS) have been installed within the refinery which was finalized in consultation with Pollution Control Board.Manual AAQ Monitoring at 10 locations in and around the refinery is being carried out. Out of 10 locations, five are installed in the neighbouring villages and five inside the refinery. H2S and NMHC are monitored inside the refinery through one of the CAAQMS and Nickel is measured by AAQ. This project is for revamp of CDU-1 and GOHDS hence no additional stacks are provided. Complied Attachment:NA

, 3:38 PM		view	view Compliance			
6	Statutory compliance	The proponent shall upload the status of compliance of the stipulated EC conditions, including monitored data on their website and shall update the same periodically, It shall simultaneously be sent to the Regional and Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant namely; Particulate matter (PM10 /PM2.5, SO2, NOx, Benzene (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at the convenient location near the main gate of the Company in the public domain.	PPs Submission	Compliance to EC conditions is already uploaded in MRPL website. Monitored data is being sent to MoEF office. Digital Display Board at MRPL Cargo gate display Stack quality parameter, SO2, NOx, PM10, PM2.5, Ambient Air quality monitoring parameter, treated effluent quality monitoring parameter and % recycling of treated effluent water. Complied Attachment:NA		
7	Statutory compliance	Monitoring of fugitive emissions should be carried out as per the guidelines of CPCB by fugitive emission detectors and reports should be submitted to the Ministry's Regional Office at Bangalore, For control of fugitive emission all unsaturated hydrocarbon will be routed to the flare system and the flare system should be designed for smoke less burning.	PPs Submission	VOC monitoring is being carried out as per MoEF guidelines and monitoring is already extended to the revamp projects. Being Complied Attachment:NA		
8	Statutory compliance	Fugitive emissions of HC from product storage tank yards etc must be regularly monitored. Sensors for detecting HC leakage should also be provided at strategic locations. The company should use low sulphur fuel to minimize	PPs Submission	HC monitoring extended to new storage tanks yard. LDAR program is being carried out as per MoEF		

3:38 PM		view	Compliance	
		SO2 emission Sulphur recovery units should have efficiency of 99.5 %. Leak Detection and Repair programme should be implemented to control HC/VOC emissions; Work zone monitoring should be carried out near the storage tanks besides monitoring of HCs/VOCs in the work zone.		schedule. Low Sulphur fuel being used to minimise SOx emission. Since the project is only revamp of CDU-1 & GOHDS, the capacity of existing Sulphur Recovery Units is adequate to meet the revamp conditions. Being Complied Attachment:NA
9	Statutory compliance	The wastewater should be treated in the wastewater treatment plant and the treated effluent should meet the prescribed standards. Efforts should be made to recycle the treated effluent to achieve zero discharge. The RO plant shall be installed for reuse and conservation of water.	PPs Submission	Waste water generation due to revamp project is treated in the existing waste water treatment plants. Quality of the treated effluent always meets the prescribed standards. RO plant installed under the Phase-3 Refinery up gradation and expansion project. Complied Attachment:NA
10	Statutory compliance	The project authorities must strictly comply with the rules and regulation with regard to handling and disposal of Hazardous Wastes (Management. Handling and Trans Boundary Movement) Rules, 1989/ 2003/ 2008 wherever applicable.	PPs Submission	Hazardous Waste Rule is being followed and complied. Hazardous waste Authorization is obtained for Handling,

PM		View	View Compliance			
		Authorization from the State Pollution Control Board must be obtained for collection/ treatment/storage/disposal of hazardous wastes.		Storage and Disposal of Hazardous Waste from Karnataka State Pollution Control Board. Complied Attachment:NA		
11	Corporate Environmental Responsibility	The company should strictly follow all the recommendation mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP) for the oil refineries.	PPs Submission	Being strictly followed all the recommendation mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP) for the oil refineries. Complied Attachment:NA		
12	MISCELLANEOUS	The Company should take necessary measures to prevent fire hazards, containing oil spill and soil remediation on as needed. At place of ground flaring, the overhead flaring stack with knockout drums should be installed to minimize gaseous emissions during flaring.	PPs Submission	Noted and Complied. Flare gas recovery system installed to recover hydrocarbon flare gases which is connected to the fuel gas header for utilizing the same in process heaters. Complied Attachment:NA		
13	Risk Mitigation and Disaster Management	To prevent fire and explosion at Oil and Gas facility, potential ignition sources should be kept to a minimum and adequate separation distance between potential ignition	PPs Submission	Oil Industry Safety Directorate (OISD) standard being followed at the design stage		

PM		View	Compliance	
		sources and flammable material should be in place		itself to maintain adequate distance between potential ignition sources and flammable material. Complied Attachment:NA
14	Risk Mitigation and Disaster Management	The operators and lab room shall be shifted to safe location, as the predicted damage distance due to leaking pre- fractionators is 90 m only.	PPs Submission	Amended Environmental Clearance is obtained from MoEF vide letter dated 05.09.2012 with alternative mitigative measures. All the measures are complied. Complied Attachment:NA
15	Risk Mitigation and Disaster Management	Onsite and offsite DMP shall be updated to cover the additional facilities and the updated plans shall be implemented.	PPs Submission	DMP is amended for revamp projects. Complied Attachment:NA
16	Human Health Environment	Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.	PPs Submission	Health surveillance of workers was done by the respective contractors during the project execution time and records were maintained. Complied Attachment:NA

38 PM			view	View Compliance			
	17	GREENBELT	Greenbelt should be developed to mitigate the effect of fugitive emission all around the plant in a minimum 33% plant area in consultation with DFO as per CPCB guidelines	PPs Submission	Total project area of MRPL is around 1592 acres; Greenbelt area comprises of 196 types of tree species spread over 538 acres (33.8% Greenbelt area) including compensatory afforestation at Pilikula in 50 acres and at Bengre in 25 acres. Complied Attachment:NA		
	18	WATER QUALITY MONITORING AND PRESERVATION	The Company should undertake measures for rainwater harvesting to recharge the ground water and minimize fresh water consumption.	PPs Submission	Mangalore is experiencing more than six months of heavy rain fall. Ground water table is very high in this region and therefore rain water harvesting to recharge the ground water may not be feasible. Complied Attachment:NA		
	19	MISCELLANEOUS	Provision shall be made for the housing of construction labour 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 structures to be removed	PPs Submission	Revamp Project job completed and unit commissioned successfully. All the facilities were provided during the project stage as directed.		

https://parivesh.nic.in/compliance/api/view?compliance\_report\_id=71284984

after the completion of the project.

Complied Attachment:NA

## **General Conditions**

Sr.No.	Condition Heading	Condition Details	Status of Compliance,Remarks / Reaso and Supporting Documents	
1	Statutory compliance	The project authorities must strictly adhere to the stipulations made by the concerned State Pollution Control Board (SPCB) and the State Government and any other statutory body.	PPs Submission	Being complied. Being Complied Attachment:NA
2	MISCELLANEOUS	No further expansion or modification in the project shall be carried without prior approval of the Ministry of Environment and Forests, In case of deviations or alternations in the project proposal from those submitted to the Ministry for clearance. a fresh reference shall be made to the Ministry.	PPs Submission	Noted. No further expansion or modification in the project will be carried without prior approval of the Ministry of Environment, Forest and Climate Change. Complied Attachment:NA
3	MISCELLANEOUS	At no time, the emissions shall go beyond the prescribed standards. In the event of failure of any pollution control system, the respective facilities should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved. Provision of adequate height of stack attached to DG sets & flare is to be done	PPs Submission	Emission levels of the pollutants are always maintained within the permissible levels. Adequate height of stack attached to DG Sets and Flare is provided. Complied Attachment:NA
4	WATER QUALITY MONITORING AND PRESERVATION	Waste water shall be properly collected and treated so as to conform to the standards prescribed under EP Act & Rules and mentioned In the Consents provided by the relevant SPCB.	PPs Submission	Waste Water generated from the process units is being collected properly and routed through closed network to Waste Water

https://parivesh.nic.in/compliance/api/view?compliance\_report\_id=71284984

PM		View 0	Compliance	
				Treatment plant (WWTP). The same is treated to meet the standards prescribed under EP Act. Being Complied Attachment:NA
5	Noise Monitoring & Prevention	The overall noise levels in and around the premises shall be limited within the prescribed standards (75 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA I (night time).	PPs Submission	Noise levels near the boundary of the premises are within the prescribed limit. Being Complied Attachment:NA
6	MISCELLANEOUS	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended In 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the expansion project, if required. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.	PPs Submission	Necessary approvals from Chief Controller of Explosives are obtained before commissioning. On-site and Off- site Disaster Management Plans prepared. Complied Attachment:NA
7	MISCELLANEOUS	The project authorities will provide adequate funds as non-recurring and recurring expenditure 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	PPs Submission	Noted and Complied Complied Attachment:NA

		View C	Compliance	
		should not be diverted for any other purposes.		
8	MISCELLANEOUS	The company shall develop rainwater harvesting structures to harvest the run off water for recharge of ground water.	PPs Submission	n Mangalore is experiencing more than six months of heavy rain fall. Ground water table is very high in this region and therefore rain water harvesting to recharge the ground water may not be feasible. Complied Attachment:NA
9	MISCELLANEOUS	The stipulated conditions will be monitored by the concerned Regional Office of this Ministry/ Central Pollution Control Board/ State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly. It will also be displayed on the Website of the Company.	PPs Submission	n A six monthly compliance report and the monitored data is being submitted to MoEF/CPCB/KSPCE regional office and displayed on the Website of the Company. Complied Attachment:NA
10	MISCELLANEOUS	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e- mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	PPs Submission The same was carried out and information regarding this w submitted to Me & KSPCB. Complied Attachment:NA	
11	Statutory compliance	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad Municipal Corporation. Urban Local Body and the Local NGO, if any, from whom suggestions/representations if any were received while	Submission	There were no suggestions/representatior received from Zilla Parishad/ Municipal Corporation, NGO or any other local body. Complied Attachment:NA

		View 0	Compliance	
		processing the proposal. The clearance letter shall also put up on the website of the Company by the proponent.		
12	Statutory compliance	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http://www.envfor.nic.in This should 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 conceded and a copy of the same should be forwarded to the concerned Regional office of this Ministry.	PPs Submission	Noted and Complied. Complied Attachment:NA
13	Statutory compliance	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 EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.	PPs Submission	Environment Statement for refinery is being submitted for each financial year ending 31st March in Form-V to KSPCB regularly and same is being uploaded at MRPL website. Compliance to the EC conditions also uploaded at the website. Compliance letter dated 28/09/2022submitted to KSPCB. Complied Attachment:NA
14	MISCELLANEOUS	A separate environment management cell with full- fledged laboratory facilities to carry out various	PPs Submission	A separate Environmental Management Cell is already

8 PM			View C	Compliance	
			management and monitoring functions shall be set up under the control of a Senior Executive.		functioning in the refinery and is headed by Chief General Manager (CGM) Complied Attachment:NA
	15	MISCELLANEOUS	The 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 start of the project	PPs Submission	We have informed MoEF with the details vide our letter No. L/D/MoEF/4333 dated 18.02.2011 Complied Attachment:NA
	16	MISCELLANEOUS	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	PPs Submission	Noted. Complied Attachment:NA
	17	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.	PPs Submission	Noted. Complied Attachment:NA
	18	MISCELLANEOUS	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if We preferred within a period of 30 days as prescribed under Section II of the National and.Environment Appellate Authority Act, 1997	PPs Submission	Noted. Complied Attachment:NA
	19	MISCELLANEOUS	The above conditions will be enforced. Inter-ella under the provisions of the Water (Prevention & Control of Pollution) Act.1974, Air (Prevention & Control of Pollution) Act. 1981, the Environment. (Protection) Act. 1986. Hazardous Wastes (Management, Handling and Trans: boundary Movement) Rules, 2008 and the Public Liability Insurance	PPs Submission	Being complied. Being Complied Attachment:NA

Cover Letter Fro	m RO/SRO
information given and belief and I a misleading at any In addition to abo	nery and Petrochemicals Limited' hereby give undertaking that the data and in the filed compliance and enclosures are true to be best of my knowledge m aware that if any part of the data and information found to be false or stage, the clearance given to the project will be revoked at our risk and cost. ove, I hereby give undertaking that no activity such as change in project on, expansion, etc. has been taken up without due approval.
	<b>arks (if any)</b> Id the attachments [Last site visit report, Environment Statement FY 2022-23, I Noise Monitoring reports]
NA	port (if available) port Date (if available) hment (if any)
Document uploa	aded by the PP
	made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Karnataka or any other Court of Law relating to the subject matter.

Back