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## ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ",

4 ಮತ್ತು 5ನೇ ಅಂತಸ್ತು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್,  
 ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ

"Parisara Bhavan"

4th & 5th Floor, # 49, Church Street,  
 Bangalore - 560 001, Karnataka, INDIA

NO. PCB/426/CFE/08/ 247

TO:  
 The Managing Director  
 M/s Mangalore Refinery & Petrochemicals Ltd.,  
 Post: Kuthethoor Via Katipalla  
 Mangalore - 575 030.

Sir,

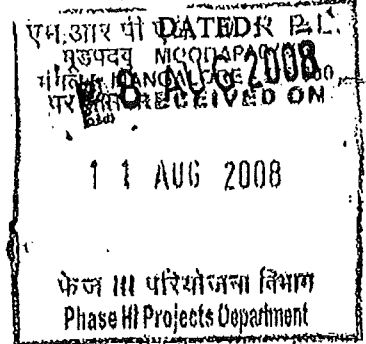
Sub: Establishment of Phase-III Unit of MRPL to expand the Crude Oil Processing capacity from 12.5 Million TPA to 15.5 Million TPA at Kuthethoor, Mangalore, D.K. District, in an area of 444 Acres in Survey Numbers as per Annexure-IV.

- Ref: 1. CFE application along with the inspection report of Regional Officer, KSPCB, Mangalore, Vide No: 474 dated: 14.05.2008.  
 2. Environmental Clearance issued by MoEF for the proposed MSEZ project including MRPL-III Phase activity vides No: 21-383/2007- IA-III dated: 03.04.2008.  
 3. Proceedings of the 33<sup>rd</sup> Consent Committee meeting held on 27.06.2008.

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With reference to the above, it is to be informed that, the Board hereby accords consent for establishment under the Water (Prevention & Control of Pollution) Act 1974, and the Air (Prevention & Control of Pollution) Act 1981, for establishment of Phase-III Unit of MRPL to expand the Crude Oil Processing capacity from 12.5 Million TPA to 15.5 Million TPA at Kuthethoor, Mangalore, D.K. District, in an area of 444 Acres in Survey Numbers as per Annexure-IV, subject to the following conditions.

1. This consent for establishment is valid for a period of Five years from the date of issue.
2. The applicant shall not undertake expansion/diversification without the prior consent of the Board.
3. The applicant shall obtain necessary license/clearance from other relevant statutory agencies before taking up construction.
4. The applicant shall comply with all the conditions stipulated in the Environmental Clearance issued by MoEF on 03.04.2008.
5. ~~The applicant shall comply with all the observation/ suggestions made during the TAC meetings of the Board while deliberating for proposed MSEZ project.~~
6. The applicant shall adhere to all the observations/suggestions made in the REIA report and Environmental Management Plan suggested in the REIA report.
7. The applicant shall comply with all the observations/suggestions made during the environmental public hearing and visit of Technical Committee of the Expert Committee for



8. The details of proposed activity are as follows.

**MRPL Phase-III Refinery:**

The list of process units proposed in Phase-III Refinery project.

Sl. No.	Unit Name	Design Capacity
1.	CDU/VDU-III	3.00 MMTPA
2.	DCU	3.00 MMTPA
3.	Petro FCC/PRU/FCCU NSU	2.2 / 0.72 / 0.8 MMTPA
4.	DHDT	3.7 MMTPA
5.	CHT (Coker Heavy Gas oil Hydrotreater)	0.65 MMTPA
6.	H <sub>2</sub> Generation Unit	70 kTPA
7.	SULPHUR Block	3x185 TPD
8.	LOBS FPU/LOBS	0.60 / 0.15 MMTPA
9.	CPP (Power/Steam)	84.0 MW / 606 TPH
10.	LPG, ATF/Kero Mercapton Treatment Unit	0.5 MMTPA
11.	Revamp of Existing HCU s to operate in once through mode.	To produce hydrotreated feed to PFCCU.
12.	Utilities	Appropriate facilities, meeting the requirement of above mentioned units.
13.	Offsites	Appropriate facilities to cater to above units.

**I. WATER CONSUMPTION:**

1. The total water requirement shall be met from Nethravathi River.

Description	Water Consumption in m <sup>3</sup> /hr		Waste water generation in m <sup>3</sup> /hr		Remarks
	Existing	Proposed quantity for Phase-III	Existing	Proposed quantity for Phase-III	
Domestic	60	10	269	8	
	241	172		173	

AVOID USE OF PLASTICS - BE 'ECO' FRIENDLY

“ಪಾಸ್ತ್ ಲಕ್ಷಣಗಳನ್ನು, ಪರಿಸರ ಹಾನಿ ಕಡಿಮೆ”

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Description	Water Consumption in m <sup>3</sup> /hr		Waste water generation in m <sup>3</sup> /hr		Remarks
	Existing	Proposed quantity for Phase-III	Existing	Proposed quantity for Phase-III	
Quenching/ Cooling	-	25	-	-	
Gardening	50	15	-	-	
Condensate from tank bottom	-	-	40	-	
<b>Total</b>	<b>1182*</b>	<b>1416</b>	<b>464</b>	<b>288</b>	

\* Includes water given to M/s. BASF (32 m<sup>3</sup>/hr), HPCL (18 m<sup>3</sup>/hr) and HGIL (1 m<sup>3</sup>/hr).

## II. WATER POLLUTION CONTROL:

1. The discharge from the premises of the applicant shall pass through terminal manhole/manholes where from the Board shall be free to collect samples at any time in accordance with the provisions of the Act or Rules made there under.
2. the applicant shall recycle 219 m<sup>3</sup>/hr of treated trade effluent from the existing effluent generation and 8 m<sup>3</sup>/hr used for chemical preparation and the balance 237 m<sup>3</sup>/hr shall be discharged into Arabian Sea.
3. From the proposed effluent generation, 114 m<sup>3</sup>/hr shall be recycled for cooling tower make up and 15 m<sup>3</sup>/hr shall be used for gardening. Balance 159 m<sup>3</sup>/hr shall be discharged to MSEZ final discharge line.
4. The existing quantity of effluent generated from the process shall be treated in the WWTP-I and II for domestic and industrial treatment plants and the trade effluent generated from the proposed Phase-III project shall be treated in the WWTP-III.
5. There shall be no bypass or discharge of effluents outside the factory premises under any circumstances.
6. The flow diagram of proposed ETP shall be as per Annexure-I.
7. The treated trade effluent shall conform to the standards as stipulated in Annexure -II (A), II (B) & II (C).

## III. WATER CESS:

1. The industry shall comply with the provisions of Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act, 1977, and 2003.

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**IV. AIR POLLUTION CONTROL:**

1. The discharge of emissions from the premises of the applicant shall pass through the air pollution control equipment and discharged through stacks/chimneys mentioned in Annexure-III where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under.
2. The stacks shall have port holes and platforms as per the guidelines specified to facilitate monitoring of emissions.
3. The industry shall ensure that the ambient air quality in its premises shall conform to the National Ambient Air Quality Standards specified in Environment (Protection) Rules.
4. The industry shall upgrade/modify/replace the control equipments if they are found inadequate to meet the standards stipulated. Prior permission of the Board shall be obtained for the same.
5. The applicant shall provide Suitable control measures for storage and handling of Carcinogenic solvents like Benzene.
6. All the storage tanks shall have protective roof seals.
7. The applicant shall provide continuous monitoring systems for Volatile Petroleum Hydro Carbons/VOCs in the ambient air to control fugitive emissions.
8. The stack heights shall be such that there should be effective dispersion of pollutants to ensure that the maximum cumulative GLC shall meet NAAQM standards in all the seasons.
9. The applicant shall make Suitable provisions in plant layout to upgrade the pollution control systems as and when the technology improves.
10. The applicant shall provide online AAQM Stations in all the 4 directions.

**V. NOISE POLLUTION CONTROL:**

1. The industry shall ensure that the ambient noise levels within its premises shall not exceed the limits i.e. 75 dB(A) Leq during day time and 70 dB(A) Leq during night time as specified in the Environment (Protection) Rules.

**VI. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:**

1. The industry shall collect, treat and dispose off all solid waste generated from the process other than wastes covered under the Hazardous Waste (Management & Handling) Rules, in such manner so as not to cause environmental pollution.

**VII. HAZARDOUS WASTES (MANAGEMENT & HANDLING) RULES 1989 & 2003:**

1. The industry shall apply and obtain authorization under Hazardous Waste (Management & Handling) Amended Rules 2003, and comply with the conditions of the authorization to handle, store and to dispose hazardous waste generated.

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2. The details of estimated solid/hazardous waste at proposed MRPL Phase-III project and the mode of disposal shall be as below.

Source	Quantity in TPA	Mode of disposal
DHDT spent catalyst	27	Shall be sent to authorized reprocessor/recycler.
PFCC spent catalyst	1600	- do -
SRU spent catalyst	9.4	- do -
CHT spent catalyst	60	- do -
OHCU-1 spent catalyst	17.2	- do -
OHCU-2 spent catalyst	19.2	- do -
HGU spent catalyst	36	- do -
COMOX (catalyst)	10	- do -
Spent activated carbon	10	- do -
Spent lubricants	200 liters/annum	Current practice of processing with crude oil shall be followed.
Spent/used batteries	50 No.	Shall be sent to authorized vendor.
Oily/chemical sludge	25	Shall be fed to delayed cooker unit.

#### VIII. ENVIRONMENTAL MANAGEMENT SYSTEM AND PLAN:

1. The industry shall establish, implement and maintain an Environmental Management System in conformity with ISO 14001:2004 standards.

#### IX. GENERAL:

- The industry shall arrange for alternate power supply to run and operate the essential units of effluent treatment plant/control equipments, in event of break down of regular supply from Electricity Board. The industry shall provide separate energy meters to the Water and Air pollution control systems wherever appropriate.
- The industry shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.
- The industry shall not commission the proposed plant for trial or regular production unless necessary air pollution control equipments are installed to the satisfaction of the Board. The industry shall ensure that the treatment plant and control equipments are completed and commissioned simultaneously along with construction of the factory and erection of machineries.
- The industry shall not change or alter (a) raw materials or manufacturing process, (b) change the products or product mix (c) the quality, quantity or rate of discharge/emissions and (d) install/replace/alter the water or air pollution control equipments without the prior approval of the Board.

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5. The industry shall immediately report to the Board of any accident or unforeseen act or event resulting in release of discharge of effluents or emissions or solid wastes etc. in excess of the standards stipulated. And the industry shall immediately take appropriate corrective and preventive actions under intimation.
6. The industry is liable to reinstate or restore, damaged or destroyed elements of environment at his cost, failing which, the applicant/occupier as the case may be shall be liable to pay the entire cost of remediation or restoration in advance an amount equal to the cost estimated by Competent Agency or Committee.
7. The applicant shall comply with all the Rules and guidelines issued from time to time.
8. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
9. This CFE does not give any right to the Party/Project Authority/Industry to forego any legal requirement, that is necessary for setting/operation of the plant.
10. The industry shall furnish pointwise compliance to the conditions given under this consent for establishment within 30 days.

Please note that this is only consent for establishment issued to you to proceed with the formalities for infrastructure facility and does not give any right to proceed with establishment of all the individual units. For this purpose, separate consents of the Board for discharge of liquid effluent and the emissions to the air from individual units shall have to be obtained by remitting prescribed consent fee. The application for consent to individual units has to be made 45 days in advance.

The receipt of this letter may please be acknowledged.

FOR AND ON BEHALF OF  
KARNATAKA STATE POLLUTION CONTROL BOARD

*[Signature]*  
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Encl.: Annexure-I to III.

**Note:**

1. It is advised to provide all necessary healthcare facilities to employees & local people and shall carry out routine health survey among employees & local people and tests like Spirometry, Pulseoxymetry, Lung function test, etc.
2. It is advised to regularly check the health of workers exposed to very high noise levels and suitable measures to avoid any ill effects shall be taken.
3. It is advised to take all safety measures to avoid any injury to its employees and local people as per the approved Onsite and Offsite Emergency Plan.

*[Signature]*  
SENIOR ENVIRONMENTAL OFFICER-4.