



BPCL/MOEF/EC/2025/01

Dt: 01/12/2025

To,  
**Deputy Director General of Forests (C),**  
Ministry of Environment, Forests & Climate Change,  
Regional Office (WZ), E-5,  
Kendriya Paryavaran Bhawan, E-5 Arera Colony,  
Link Road-3, Ravishankar Nagar,  
**BHOPAL – 462 016 (MP)**

**SUB : Six Monthly Compliance Report of Bharat Petroleum Corporation Limited, Bina Refinery.**

Ref :

S. No.	Name	MoEFCC File No.	Date
1	6 MMTPA Grassroot Refinery including Captive Power Plant (CPP) & Marketing Terminal (by BPCL) of M/s BORL at village - Agasode, Tehsil: Bina, Distt.: Sagar (M.P.)	J-11011/21/1994-IA II (I)	16 <sup>th</sup> Feb., 1995
2	Bina Refinery Project of M/s BORL at village- Agasode, Tehsil: Bina, Distt.: Sagar (M.P.)		20 <sup>th</sup> Mar., 2009
3	Expansion of Refinery (from 6 MMTPA to 7.5 MMTPA crude processing) by debottlenecking of M/s BORL at village-Agasode, Tehsil: Bina, Distt.: Sagar (M.P.)	J-11011/135/2013-IA II (I)	28 <sup>th</sup> Nov., 2014
4	Expansion of Refinery Capacity from 7.5 to 7.8 MMTPA of M/s BORL at village -Agasode, Tehsil: Bina, Distt.: Sagar (M.P.) – Amendment in EC		15 <sup>th</sup> May, 2015
5	Expansion of Refinery capacity from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex of M/s Bharat Oman Refineries Limited at Agasode village, Bina tehsil, Madhya Pradesh		28 <sup>th</sup> Nov., 2022
6	Expansion of Refinery capacity from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex of M/s Bharat Oman Refineries Limited at Agasode village, Bina tehsil, Madhya Pradesh – Transfer of EC (From M/s BORL to M/s BPCL)		25 <sup>th</sup> Oct., 2023
7	Expansion of Refinery Capacity from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex at Agasode Village, Bina tehsil, Madhya Pradesh by M/s Bharat Petroleum Corporation Limited - Amendment in EC	J-11011/319/2024-IA-II(I)	01 <sup>st</sup> Mar., 2025



Dear Sir,

With reference to above subject, we hereby submit our six-monthly compliance report for period of April 2025 - September 2025 on Environment Clearance's granted for BPCL, Bina Refinery.

Thanking You,

Yours Faithfully,  
For Bharat Petroleum Corporation Limited,

(Anil T Medhe)  
GM-HSSE

Encl: As above

**Copy to:**

1. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi- 110032
2. Regional Office, M.P. Pollution Control Board, Sagar

SIX MONTHLY COMPLIANCE REPORT

OF

ENVIRONMENT CLEARANCE ISSUED BY MOEF & CC, NEW DELHI

VIDE LETTER NO.: J-11011/135/2013-IA II (I), Dtd: 28<sup>th</sup> Nov, 2022 & 25<sup>th</sup> Oct, 2023

FOR

EXPANSION OF REFINERY CAPACITY FROM 7.8 MMTPA TO 12 MMTPA WITH PETROCHEMICAL COMPLEX OF M/S. BHARAT PETROLEUM CORPORATION LIMITED  
AT AGASODE VILLAGE, BINA TEHSIL, MADHYA PRADESH

S. No.	EC Conditions					Compliance status as furnished by the project proponent
A	Specific Conditions					
1	This has reference to your online proposal no. IA/MP/IND2/290279/2022 dated 09 <sup>th</sup> September, 2022 for environmental clearance to the above-mentioned project.					Noted
2	The Ministry of Environment, Forest and Climate Change has examined the proposal seeking environmental clearance for expansion of Refinery capacity from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex and associated facilities located at Village Agasode, Tehsil Bina, District Sagar, State Madhya Pradesh by M/s. Bharat Oman Refineries Limited.					Noted
3	All project/activity are listed at S.N. 4(a) - Petroleum Refining Industry and 5(c) - Petro-chemical complexes of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).					Noted
4	The details of products and capacity as under:					
	S. No.	Unit	Existing Capacity (MMTPA)	Proposed Capacity (MMTPA)	Total Capacity after expansion (MMTPA)	Noted
	1	Ethylene Cracker Unit	0	1.2	1.2	
	2	Hydrocracker Unit	2.623	0.927	3.55	
	3	LLDPE HDPE Swing Unit	0	0.650	0.650	
	4	Butene-1 Unit	0	0.050	0.050	
	5	CDU/VDU Unit	7.8	4.2	12	
	6'	Diesel Hydrotreater	2.372	0	2.372	
	7	CCR Reformer Unit	0.835	0	0.835	
	8	Isomerization Unit	0.633	0	0.633	
	9	SWS I & II Units	161 & 59 TPH	94 TPH	314 TPH	
	10	Delayed Coker Unit	1.822	0	1.822	
	11	ATF Merox Unit	0.569	0	0.569	
	12	Naphtha Hydrotreater	1.55	0	1.55	
	13	KeroHydro-desulphurization Unit	0.6	0	0.6	

S. No.	EC Conditions					Compliance status as furnished by the project proponent
	14	HDPE Unit	0	0.500	0.500	
	15	Hydrogen Unit	0.098	0	0.098	
	16	Sulphur Recovery Unit	3 x 243 MTPD	0	3 x 243 MTPD	
	17	Amine Regeneration Unit	468 TPH	106 TPH	574 TPH	
	18	LPG Treating Unit	0.277	0.09	0.317	
	19	Bitumen Blowing Unit	0a	0.3	0.3	
	20	Polypropylene Unit	0	0.550	0.550	
	Associated facilities such as utility plants, power plant, tankages and dispatch terminal shall be installed, commensurate with above process capacities.					Noted
	<b>Product Pattern:</b>					
	S. No.	Product/ By-product	Existing Quantity (KTPA)	Proposed Quantity (KTPA)	Total Quantity (KTPA)	Noted
	1	LPG	344	6	350	
	2	Bitumen	0	300	300	
	3	Sulphur	152	0	152	
	4	Benzene	0	300	300	
	5	BS VI Diesel	3641	1459	5100	
	6	Mineral Turpentine Oil (MTO)	0	100	100	
	7	Naphtha	189	-89	100	
	8	Petcoke	523	2	525	
	9	Polypropylene	0	570	570	
	10	Toluene	0	180	180	
	11	Propylene	0	100	100	
	12	Pyrolysis Fuel Oil (PFO)/Carbon Black Feed Stock (CBFS)	0	50	50	



S. No.	EC Conditions					Compliance status as furnished by the project proponent
	13	BS VI Gasoline	1242	258	1500	
	14	ATF+SKO	1118	-118	1000	
	15	PE(HDPE+LLDPE)	0	1200	1200	
	16	Mixed Xylene	0	100	100	
5	MoEF&CC has issued Environmental Clearance to the existing capacity 7.8 MMTPA vide File No. J-11011/135/2013-IA II (I) dated 15/05/2015. Certified Compliance report of existing ECs has been obtained from Integrated Regional Office, MoEFCC, vide File no 5(0)-1/2022(Env.) dated 10/08/2022. Action Taken Report has been submitted to IRO, MoEFCC, File No. BORL/MoEF/EC/2022/05 dated 07/09/2022 for partial compliances.					Noted
6	Standard Terms of Reference have been obtained vide F. No. J-11011/135/2013/IA II (I) dated 8 <sup>th</sup> February 2022. It was informed that litigation is pending against the project proponent in the court of Judicial Magistrate Bina, filed by M.P. Pollution Control Board in July 2018 on Zero Liquid Discharge in regard to inspection carried out in October 2017. A petition is lodged in the Hon'ble High Court at Jabalpur for quashing of complaint filed by MPPCB, which is pending for admission/interim orders.					Noted
7	Public Hearing for the proposed project had been conducted by the Madhya Pradesh Pollution Control Board (MPPCB) on 12/08/2022 at Gram Panchayat Bhawan Parisar, Village-Agasod, Tehsil-Bina, District-Sagar chaired by Additional Collector, Sagar District. The main issues raised during the public hearing and their action plan given below:					Noted
	<b>Regarding Health support, Education, school admission &amp; upgradation of school, provision of potable water supply,</b> Industry will continue to carry out various CSR & CER activities in future for development in surrounding villages under the proposed project. PP proposes to spend approximately Rs 12 Cr towards Health, Education and skill development of surrounding villagers as part of proposed project under CER.					

S. No.	EC Conditions	Compliance status as furnished by the project proponent
	<b>Regarding employment</b> , PP informed that during the construction phase, average temporary manpower requirement is about 5000. During operational phase, employment of approximately 400 persons directly and around 1500 persons indirectly is envisaged.	
	<b>Regarding BPCL shall make more efforts to preserve the environment.</b>	
	<b>Domestic waste accumulated near refinery shall be removed. BPCL shall start planting of trees</b> , PP informed that As part of the project, about Rs 10 Cr have been earmarked for environmental activities as mentioned - Rs 1 Cr. has been allocated towards Additional Plantation, Rainwater Harvesting & Pond Rejuvenation etc. , Rs 1 Cr. For Awareness workshops/programs for solar electrification., Rs. 3 Cr for Dust suppression facilities within complex as well as surrounding areas., Rs. 5 cr. towards mitigation measures for environmental pollution for surrounding areas/villages of BPCL Complex. The CER expenditure will be incurred during the plant construction/ commissioning phase (5 years maximum). Additionally, CSR budget will be allocated as per Govt. guidelines.	
	<b>Regarding School Admission shall be given to children of poor villagers. Villagers requested to open a school in nearby area. BPCL shall utilize CSR fund for benefit of people</b> , PP informed that Rs. 2 Crores has been allotted for Education and Skill Development for local youths / peoples & expansion of DAV School under CER activities.	
	<b>Regarding Prior information of public hearing was not given to people within 5 km radius area</b> , PP informed that Public notice was issued in 2 nos. of newspapers on 5th July 2022 (36 Days in advance). Project information reports were kept at 05 locations at offices of District Industries Department, Zilla Panchayat, Agasod Gram Panchayat, regional office of MP Pollution Control Board	

S. No.	EC Conditions			Compliance status as furnished by the project proponent
	(MPPCB) and Ministry of Environment, Forest & Climate Change (MoEFCC) as per the guidelines. Additionally, the project report was published on the website of MPPCB. Also, prior to public hearing, information was disseminated in surrounding villages in 5 KMs radius of the Refinery through public address system.			
	<p><b>Regarding no arrangement of water in Agasod village. Agasod village is adopted by BPCL. Still there is no development here, PP informed that Bina Refinery has spent close to Rs 110 Cr under various CSR initiatives over the years. In Agasod village approx. 2 Cr has been spent towards education, sports development, healthcare, hygiene, water and livelihood related activities. PP confirms that CSR activities will be continued as on-going process in the surrounding villages including Agasod village and Rs. 8 Crores has been earmarked for drinking water / supporting infrastructure / transport facilities in surrounding villages under CER activities which will include Agasod village, as well.</b></p>			
	<p><b>Regarding lands were forcefully taken, PP informed that This issue pertains to personal matter of an individual with no linkage of existing Refinery or proposed project and falls under the purview of Administration.</b></p>			
	<b>CER activities with budget allocation as per Public Consultation</b>			
	<b>S. No.</b>	<b>Activities as per public consultation</b>	<b>Allocated Budget (In Rs. Lakh)</b>	<ul style="list-style-type: none"> <li>200 Lakhs has already been invested in Development of Green belt.</li> </ul>
	1.	Education and Skill Development for Local Youths/ peoples & Expansion of DAV School	200.0	



S. No.	EC Conditions			Compliance status as furnished by the project proponent
	2.	Abatement in environmental pollution for surrounding areas/villages of BPCL Complex	500.0	
	3.	Additional Plantation, Rainwater Harvesting & Pond Rejuvenation etc.	100.0	
	4.	Healthcare Facilities (Such as Dispensaries & Super-Specialty Hospitals for Villagers)	1000.0	
	5.	Dust suppression facilities within complex as well as surrounding areas	300.0	
	6.	Support in Infrastructure / Transport facility / Surrounding development within 10 kms radius of Proposed Petrochemical Complex	100.0	
	7.	Awareness workshops/programs for solar electrification and solid waste management	100.0	
	8.	Drinking Water Facilities for surrounding villagers	700.0	
	<b>Total Expense (Rs. in Lakhs)</b>		<b>3000.0</b>	
	<b>Total Expense (Rs. in Crores)</b>		<b>30.0</b>	
8	Total plant area after expansion will be 1015 Ha. No additional land will be acquired for the expansion project as the same will be done within existing plant premises. Out of the total plant area 1015 Hectares i.e. 290 Ha greenbelt is already developed. Additional 90 Ha greenbelt will be developed in collaboration with State Forest Department. This would make the total greenbelt area as 37.43% of the project area. The estimated project cost is Rs. 35000 Crores. Capital			90 Ha green belt is already developed in the Forest Land in Kanjia Village (25Km from Refinery) in collaboration with Madhya Pradesh Forest Department. 1 lakh saplings planted in July-2024.

S. No.	EC Conditions	Compliance status as furnished by the project proponent
	cost of EMP would be Rs. 510.6 Crores and recurring cost for EMP would be Rs. 2.8 Crores per annum. Industry proposes to allocate Rs. 30 Crores towards extended EMP (Corporate Environment Responsibility). Total Employment after expansion will be 1900 persons as direct (400) & indirect (1500).	
9	There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors within 10 km distance. There are no Reserve forests/protected forests within 10 km distance. Betwa river is located at a distance of 4.5 Km in west direction.	Noted
10	Ambient air quality monitoring was carried out at 8 locations during January to April 2022 and the baseline data indicates the ranges of concentrations as: PM10 (65-76 $\mu\text{g}/\text{m}^3$ ), PM2.5 (20-40 $\mu\text{g}/\text{m}^3$ ), SO <sub>2</sub> (15-23 $\mu\text{g}/\text{m}^3$ ) and NO <sub>2</sub> (20-26 $\mu\text{g}/\text{m}^3$ ). AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 28.4 $\mu\text{g}/\text{m}^3$ and 44.9 $\mu\text{g}/\text{m}^3$ with respect to SO <sub>2</sub> and NO <sub>x</sub> . The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).	Noted
11	Total fresh water requirement after expansion will be 94440 m <sup>3</sup> /day, out of which 63240 m <sup>3</sup> /day will be used for expansion of refinery with petrochemical complex. Fresh water will be met from Betwa river. NOC has been obtained from Water Resources Division vide letter no. 14/ 2006/134 dated 06.03.2019. Existing effluent generation from refinery is 9000 m <sup>3</sup> /day which is treated through Effluent Treatment Plant. Additional proposed effluent generation will be 6240 m <sup>3</sup> /day which will be treated through new Effluent Treatment Plant. Domestic waste water will be treated in STP having 360 KLD capacity. The plant will be based on Zero Liquid Discharge system and treated effluent will not be discharged outside the factory premises.	Compliance will be ensured during execution of project.
12	Total power requirement of refinery cum petrochemical complex after expansion will be 350 MW (Existing 100 MW and Proposed 250 MW for expansion) which will be sourced from existing co-generation	

S. No.	EC Conditions	Compliance status as furnished by the project proponent
	power plant and State Grid. NOC for power requirement from State Grid has been obtained vide letter no. 04- 01/CRZ/CS-10-W/6876 dated 10/03/2022. Three numbers of CFBC boilers each of 275 TPH and one Utility Boiler of 160 TPH capacity are there in existing refinery. Two Utility Boilers of 180 TPH each will be installed in the proposed project. A stack of height of 100 m will be installed with the proposed boilers for controlling the particulate emissions within the statutory limit of 50 mg/Nm <sup>3</sup> . Industry will install 6.5 MW DG set, which will be used as standby during power failure and adequate stack height will be provided as per CPCB norms to the proposed DG sets.	Compliance will be ensured during execution of project.
13	<b>Details of Process emissions generation and its management</b>	
	The SO <sub>x</sub> emission of the existing refinery is 29.25 TPD. There will be additional 2.15 TPD SO <sub>x</sub> emission from the refinery expansion and Petrochemical complex. The overall SO <sub>x</sub> emission post expansion cum Petrochemical complex will be 31.4 TPD. However, below mitigation measures will be followed to control the process emissions:	Compliance will be ensured during execution of project.
	Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.	
	A stack height of 100 meters for utility boilers will be installed for controlling the particulate emissions.	
	Low NO <sub>x</sub> burners will be used in all process heaters, furnaces and boilers.	
	Low Sulphur Fuel Oil and Fuel Gas will be used as fuel in Process fired heaters and Boilers.	
	Adequate stacks height will be provided for better dispersion of flue gases. Online stack analyzers for monitoring of SO <sub>x</sub> , NO <sub>x</sub> , CO and PM emissions from furnaces/boilers.	
	Installation of internal floating roof with double seals in all Class-A tanks for reduction of fugitive emissions.	



S. No.	EC Conditions	Compliance status as furnished by the project proponent
	Provision of mechanical seals in all the hydrocarbon pumps for reduction of fugitive emissions.	
	LDAR surveys will be carried out periodically.	
14	<b>Details of Solid waste/ Hazardous waste generation and its management</b>	Compliance will be ensured during execution of project.
	Used Lubricating oil will be collected in metal drums kept in secured area and will be recycled/disposed through authorized recyclers.	
	Discarded containers/barrels/ liners contaminated with hazardous waste- Will be disposed as per Hazardous Waste Rules, 2016.	
	Spent catalyst will be disposed through authorized recyclers.	
	Hazardous waste and salt from ZLD plant from proposed project will be disposed off to nearest Treatment, Storage and Disposal Facility (TSDF).	
	Oily chemical sludge will be routed to Delayed Coker Unit (DCU)/bio-remediated/co-processed.	
	Salts from ZLD plant will be disposed to nearest TSDF facility.	
15	Total land of 1015 Hectares (Refinery – 774 Ha and Bina Dispatch Terminal 241 Ha) is under possession of the company. No additional land is required for proposed expansion of refinery with petrochemical complex.	Noted
16	The proposal was earlier considered by the EAC (Ind-2) in its meeting (ID:IA/IND2/13342/26/09/2022) held during 26-28 <sup>th</sup> September 2022 wherein EAC deferred the proposal for want of additional information. After submission of ADS reply by Project Proponent, proposal was again considered in EAC meeting (Meeting ID: IA/IND2/13360/20/10/2022) held on 20 <sup>th</sup> October, 2022 in the Ministry, wherein the project proponent and the accredited Consultant M/s. Engineers India Limited (NABET certificate no. NABET/EIA/1922/RA0189_Rev01 and validity 22/11/2023), presented the case under A category.	Noted
17	During deliberations, the committee was satisfied with the response of the PP against the additional details sought. Further, EAC discussed following issues:	Noted



S. No.	EC Conditions	Compliance status as furnished by the project proponent
	PP informed that after considering the water conservation method, they have reduced the water requirement by 7% (94440 m <sup>3</sup> /day) through various optimization measures.	Noted
	PP informed that by taking control measures such as maximizing low Sulphur Fuel firing, Installing modern Low NO <sub>x</sub> Burners for Crackers Heaters & Utility Boilers/CDU VDU, stack heights shall be increased for Utility Boilers, Cracker Heaters and CDU/VDU unit heaters, incremental GLC of SO <sub>2</sub> has been reduced from 28.4 µg/m <sup>3</sup> to 5.94 µg/m <sup>3</sup> and NO <sub>x</sub> has been reduced from 38.3 µg/m <sup>3</sup> to 19.4 µg/m <sup>3</sup> .	Shall be complied.
	The committee was satisfied with the response provided by PP on above information.	
18	The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.	Noted
19	The Committee noted that the EIA/EMP report is in compliance of the TOR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as	Noted

S. No.	EC Conditions	Compliance status as furnished by the project proponent
	amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have <b>recommended</b> for grant of environmental clearance.	
20	The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.	Noted
21	Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for expansion of Refinery capacity from 7.8 MMTPA to 12 MMTPA with Petrochemical Complex and associated facilities located at Village Agasode, Tehsil Bina, District Sagar, State Madhya Pradesh by M/s. Bharat Oman Refineries Limited, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-	Noted
<b>A</b>	<b><u>Specific Condition:</u></b>	
i.	This Environmental clearance is granted subject to final outcome of Hon'ble High Court	Noted
ii.	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. All public	Compliance will be ensured during execution of project.  200 Lakhs has already been invested in Development of Green belt. 90 Ha green belt is already developed in the Forest Land in Kanjia Village (25Km from Refinery) in collaboration with Madhya Pradesh Forest Department. 1 lakh saplings planted in July-2024.



S. No.	EC Conditions	Compliance status as furnished by the project proponent
	hearing issues shall be addressed as per timeline and budget (Rs. 30 Crores) submitted.	
iii.	The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.	Shall be complied.
iv.	Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.	Compliance will be ensured during execution of project.
v.	Total freshwater requirement for the proposed project shall not exceed 94440 m <sup>3</sup> /day to be met from Betwa river. Necessary permission in this regard shall be obtained from the concerned regulatory authority. Entire effluent from the plant premises shall be treated and recycled/reused for makeup water in process etc. and no waste or treated water shall be discharged outside the premises. Domestic sewage shall be treated in the STP.	Compliance will be ensured during execution of project.
vi.	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MoEF&CC. Outcome from the report to be implemented for conservation scheme.	Compliance will be ensured during execution of project.
vii.	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Compliance will be ensured during execution of project.
viii.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Compliance will be ensured during execution of project.
ix.	Industry shall reduce SO <sub>2</sub> and NO <sub>x</sub> emissions by maximizing low Sulphur Fuel firing, installing modern Low NO <sub>x</sub> Burners for Crackers Heaters & Utility Boilers/CDU VDU, stack heights shall be increased for Utility Boilers, Cracker Heaters and CDU/VDU unit heaters	Compliance will be ensured during execution of project.

S. No.	EC Conditions	Compliance status as furnished by the project proponent
x.	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Compliance will be ensured during execution of project.
xi.	Study on Lifecycle assessment for Bitumen, Benzene, Toluene and Xylene(BTX) shall be instituted to understand the environmental impacts associated with all stages of the cycle of these products being hazardous and highly toxic for human exposure. Report be submitted to the Regional Office of MoEF&CC.	Study on LCA shall be done.
xii.	Regular VOC monitoring shall be done at vulnerable points.	Being complied.
xiii.	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.	Being Complied.
xiv.	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.	Oily sludge generated is recycled/ reprocessed in Delayed Coker Unit (DCU) within the refinery premises.
xv.	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.	Complied
xvi.	The company shall undertake waste minimization measures as below:	Compliance will be ensured during execution of project.
	a) Metering and control of quantities of active ingredients to minimize waste	
	b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes	
	c) Use of automated filling to minimize spillage	
	d) Use of Close Feed system into batch reactor	
	e) Venting equipment through vapour recovery system	



S. No.	EC Conditions	Compliance status as furnished by the project proponent
	f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.	
vii.	The green belt of 5-10 m width shall be developed in the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. The project proponent shall ensure 33% greenbelt area vis-à-vis the project area through afforestation in the degraded area. The Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	Complied with
viii.	Additional Green Belt Area in 90 ha area instead of 65 ha as originally proposed shall be developed outside the Project boundary in consultation with Forest Department. This would make the total greenbelt area as 37.43 % of the project area.	Complied with
xix.	PP will also take guidance of Forest Department to further enhance the density of trees in existing greenbelt area.	Compliance will be ensured during execution of project.
xx.	As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.	Compliance will be ensured during execution of project.
xxi.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	Compliance will be ensured during execution of project.


S. No.	EC Conditions	Compliance status as furnished by the project proponent
cxii.	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Compliance will be ensured during execution of project.
cxiii.	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.	Compliance will be ensured during execution of project.
cxiv.	The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development center/provide skill development training to village people.	Compliance will be ensured during execution of project.
cxv.	PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Compliance will be ensured during execution of project.
cxvi.	Process safety and risk assessment studies shall be further carried out using advanced models, and the mitigating measures shall be undertaken/implemented accordingly.	Compliance will be ensured during execution of project.
cxvii.	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.	Compliance will be ensured during execution of project.
cxviii.	Recommendations of mitigation measures from possible accident	Compliance will be ensured during execution of project.




S. No.	EC Conditions	Compliance status as furnished by the project proponent
	shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.	
xix.	The project proponent shall develop R& D facilities to develop their own technologies for propylene and polypropylene processing.	Compliance will be ensured during execution of project.
xx.	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied.
xxi.	PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.	Awareness programs are being conducted on regular basis through digital display boards and broadcasts.
<b>B</b>	<b><u>General Condition:</u></b>	
i.	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted
ii.	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Noted
iii.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures	Noted

S. No.	EC Conditions	Compliance status as furnished by the project proponent
	including acoustichoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	
iv.	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Noted
v.	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Noted
vi.	A copy of the clearance letter shall be sent by the project 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 processing the proposal.	Copy of clearance letter sent to panchayat, zila parishad/municipal corporation, urban local body and local magistrate. Copies are attached below:



S. No.	EC Conditions	Compliance status as furnished by the project proponent
		
vii.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	<p>Compliance report of conditions stipulated in Environment Clearance is available on the company website i.e.:</p> <p><a href="https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx">https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx</a></p> <p>Six monthly monitoring reports are regularly submitted to the RO-MoEF&amp;CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance.</p>
viii.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted 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 clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	<p>Being Complied.</p> <p>The Environment Statement in Form-V for the Financial Year: 2024-25 is submitted to MPPCB vide letter No.: BPCL/MPPCB/Consents/2024/13 dated 30.08.2024</p> <p><a href="https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx">https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx</a></p>
ix.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and	<p>Complied with.</p> <p>Informed to public by publishing in two local newspapers of Times of India and Dainik Bhaskar on 4<sup>th</sup> Dec, 2022.</p>

S. No.	EC Conditions	Compliance status as furnished by the project proponent
	may also be seen at Website of the Ministry and at <a href="https://parivesh.nic.in/">https://parivesh.nic.in/</a> . 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 concerned Regional Office of the Ministry.	Newspaper Clippings are attached 
x.	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.	Noted
xi.	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted
22	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.	Noted
23	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted

S. No.	EC Conditions	Compliance status as furnished by the project proponent
24	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted
25	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.	Noted

SIX MONTHLY COMPLIANCE REPORT

OF

ENVIRONMENT CLEARANCE ISSUED BY MOEF & CC, NEW DELHI

VIDE LETTER NO.: J-11011/135/2013-IA II (I), Dtd: 12<sup>th</sup> May, 2015

FOR

EXPANSION OF REFINERY CAPACITY FROM 7.5 MMTPA TO 7.8 MMTPA OF M/S. BHARAT OMAN REFINERIES LIMITED (BPCL-BINA REFINERY) AT BINA, MP  
CONSIDERING AN INCREASE IN ANNUAL OPERATING DAYS FROM 333 DAYS TO 345 DAYS AND MAINTAINING THE SAME DAILY PROCESSING RATE- AMENDMENT



S. No	EC Conditions	Compliance Status
2.	The Proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 32 <sup>nd</sup> meeting held during 20 <sup>th</sup> -21 <sup>st</sup> January, 2015. EIA report preparation/public hearing is exempted as per para 7(ii) of EIA Notification, 2006. The committee recommended the proposal for amendment in environmental clearance.	Noted.
3.	The ministry accepts the recommendation of the expert appraisal committee (industry) for amendment in the existing clearance subject to compliance of specific conditions and general conditions.	Noted.
4.	All other conditions will remain unchanged	We have noted the condition.
5.	You are requested to keep this letter with the Environmental Clearance accorded vide letter No. J-11011/135/2013-IA II (I) dated 28 <sup>th</sup> November, 2014.	We have noted the condition.
6.	In future, in case of change in the scope of the project, the company shall obtain fresh environmental clearance	We have noted the condition.
7.	This issues with the prior approval of the competent authority	Noted.

SIX MONTHLY COMPLIANCE REPORT

OF

ENVIRONMENT CLEARANCE ISSUED BY MOEF & CC, NEW DELHI

VIDE LETTER NO.: J-11011/135/2013-IA II (I), Dtd: 28<sup>th</sup> November, 2014

FOR

EXPANSION OF REFINERY (FROM 6 MMTPA TO 7.5 MMTPA CRUDE PROCESSING) BY DEBOTTLENECKING OF M/S. BHARAT OMAN REFINERIES LIMITED (BPCL-BINA REFINERY) AT VILLAGE AGASOD, TEHSIL BINA, DISTRICT SAGAR, MADHYA PRADESH.

S. No.	EC Conditions	Compliance Status
A	Specific Conditions	
i.	Compliance to all the environmental conditions stipulated in the environmental clearance letter no. J-11011/121/1994-IA II (I) dated 16 <sup>th</sup> February 1995 and 20 <sup>th</sup> March, 2009 shall be satisfactorily reports submitted to the Ministry of Regional office at Bhopal.	<p>Complying with.</p> <p>Six monthly monitoring reports are regularly submitted to the RO-MoEF&amp;CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance.</p> <p>Receipt of the same of submissions done in May-25 are attached as <b>Annexure-1</b></p>
ii	M/s BPCL-BINA REFINERY shall comply with new standards/norms for Oil Refinery Industry notified under the Environment (Protection) Rules, 1986 vide G.S.R 186 (E) dated 18 <sup>th</sup> March, 2008	<p>Environment Management Plan is designed in compliance to Norms as per G.S.R 186 (E) dated 18<sup>th</sup> March, 2008.</p> <p>The Category wise compliance of Environmental Parameters/ standards are given below:</p> <ol style="list-style-type: none"> <li>It is to mention that the Bina Refinery is maintaining Zero Liquid Discharge, thus complying Effluent standards prescribed in Schedule-I of 2 of said rules in respect of effluent discharge to surface water bodies.</li> <li>Mixed fuels (gas &amp; liquid) are presently being used for operations at Bina Refinery, the applicable emission standards are being complied as prescribed in Part B of schedule-I of the said rules. The plant is designed and operated with Hydrogen cracking technology. Emissions are in compliance w.r.t Sulphur recovery unit. Monthly manual monitoring is conducted for SO<sub>2</sub> and online Continuous Emission Monitoring System is connected to stack. The monitored data of SO<sub>2</sub> emissions are regularly being submitted to MPPCB and a summary statement of SO<sub>2</sub> emissions is submitted MoEF&amp;CC in six monthly compliance report. The assessment of efficiency of sulphur recovery is on the basis of quantity of the feed and sulphur recovered which is the data collected from the SRU process unit.</li> <li>All installations to control fugitive emissions in respect of storage of general petroleum products are in place, with applicable engineering &amp; regulatory standards like ASTM, OISD etc.</li> <li>Presently, no Tar distillation is in process, thus no production of benzene &amp; benzene-based products.</li> <li>All leak detection measures as per the engineering design for refineries are implemented.</li> <li>Waste water collection and treatment system is installed with closed circuit operation system with collection of VOCs and its treatment.</li> <li>There is no aromatic plant installed.</li> </ol> <p>Monitoring reports of Effluent and Emissions are enclosed as <b>Annexure-2</b></p>
iii	Continuous on-line stack monitoring for SO <sub>2</sub> , NO <sub>x</sub> , HC and CO of all the stacks shall be carried out. Low NO <sub>x</sub> burners shall be	<p>Continuous on-line stack monitoring for SO<sub>2</sub>, NO<sub>x</sub>, PM and CO installed and connected to CPCB &amp; MPPCB.</p> <p>Low NO<sub>x</sub> burners installed in all new heater / furnaces to minimize the NO<sub>x</sub> emissions.</p>



S. No.	EC Conditions	Compliance Status						
	installed in heaters/furnaces/boiler to minimize NOx emissions.							
iv	The process emissions [SO <sub>2</sub> , NO <sub>x</sub> , HC (methane & Non-methane)], VOC and Benzene from various units shall conform to the standards prescribed under the Environment (protection) Act. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted unit the desired efficiency of the pollution of the pollution control device has been achieved.	As given in condition no. ii all emissions are in compliance with G.S.R 186(E) standards.						
v	Leaks detection and repair programme shall be prepared and implemented to control HC/VOC emissions. Focus shall be given to prevent fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to. Fugitive emission of HC from product storage tank yards etc. must be regularly monitored sensors for detecting HC leakage shall be provide at strategic location.	<p>As given in condition no. ii all emissions are in compliance with G.S.R 186(E) standards.</p> <p>Leak Detection and Repair (LDAR) program is implemented since 2011 for monitoring of fugitive emissions in refinery &amp; dispatch terminal and the reports are submitted along with Six monthly monitoring reports to the RO-MoEF&amp;CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance.</p> <p>The summary of the savings done after the repair of identified leaks from Oct'24 to Mar'2 is given below:</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Total points checked</th><th>Equipment's checked</th></tr> </thead> <tbody> <tr> <td>1</td><td>9892</td><td>Pump, compressors, valves, flanges, exchangers, PSV, PRV etc.</td></tr> </tbody> </table> <p>Savings resulted after leak detection and repair is 0.3941Kg/day. Leak detected as per the <b>GSR 186(E) dtd. 18.03.24</b></p> <p>HC detectors installed at strategic locations as per requirement.</p>	S. No.	Total points checked	Equipment's checked	1	9892	Pump, compressors, valves, flanges, exchangers, PSV, PRV etc.
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S. No.	EC Conditions	Compliance Status												
vi	SO <sub>2</sub> emission after expansion from the plant shall not exceed 29.25 TPD. Sulphur recovery efficiency of sulphur recovery unit with tail gas treating shall not be less than 99.9%.	<p>Sulphur recovery efficiency of Sulphur Recovery Unit and Tail gas treatment (TGT) sections is &gt;99.9%. The sulphur present in crude oil gets evolved mainly in the form of H<sub>2</sub>S gas during various stages of processing. Sulphur Recover Unit (SRU) recovers the Sulphur from Hydrogen Sulphide (H<sub>2</sub>S) rich gas stream which is formed in various secondary processing units. H<sub>2</sub>S rich gas is the feed to SRU &amp; is treated in the Main Combustion Chamber &amp; followed by two stage Claus reaction to convert H<sub>2</sub>S into elemental Sulphur. Residual Sulphur compounds are further treated in Tail Gas Treating Unit (TGTU) in presence of catalyst. Overall, very high Sulphur recovery is achieved in SRU with efficiency of &gt;99.9%.</p> <table border="1"> <thead> <tr> <th>FY</th><th>Yearly Emission in MT</th><th>Daily avg. Emission in MT</th></tr> </thead> <tbody> <tr> <td>2022-23</td><td>2186.7</td><td>5.99</td></tr> <tr> <td>2023-24</td><td>1743.8</td><td>4.77</td></tr> <tr> <td>2024-25</td><td>2167.03</td><td>5.93</td></tr> </tbody> </table>	FY	Yearly Emission in MT	Daily avg. Emission in MT	2022-23	2186.7	5.99	2023-24	1743.8	4.77	2024-25	2167.03	5.93
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2022-23	2186.7	5.99												
2023-24	1743.8	4.77												
2024-25	2167.03	5.93												
vii	As proposed, record of sulphur balance shall be maintained at the Refinery as part of the environmental data on regular basis. The basic component of sulphur balance include sulphur input through feed (sulphur content in crude oil), sulphur output from Refinery through products, by-product (elemental sulphur), atmospheric emissions etc.	Sulphur balance sheet is being maintained in Environment Management Cell based on the process feed, product & by-product. Records of the same for FY 24-25 has been given condition no. vi above.												
viii	Ambient air quality monitoring stations, [PM <sub>10</sub> , PM <sub>2.5</sub> , NO <sub>x</sub> , H <sub>2</sub> S, mercaptan, non-methane-HC and Benzene] shall be set up in the complex in consultation with Maharashtra Pollution Control Board, 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.	Four ambient air quality locations are identified in consultation with MPPCB namely 4 inside the plant premises and a mobile monitoring van is being deputed outside the project area with regular & random monitoring.												

S. No.	EC Conditions	Compliance Status
ix	Ambient air quality data shall be collected as per NAAQMS standard notified by the ministry on 16 <sup>th</sup> November, 2009 and trend analysis w.r.t past monitoring results shall also be carried out. Adequate measures based on the trend analysis shall be taken to improve the ambient air quality in the project area.	Regular monitoring is being conducted; Ambient Air quality is within prescribed limits within and outside the plant premises.  Six Months Ambient Air Quality reports are enclosed as <b>Annexure-3</b>
x	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets mitigate the noise pollution. Besides, acoustic enclosure /silencer shall be installed wherever noise levels exceed the limit.	Complied with. Adequate stack height provided to the proposed DG sets as part of refinery expansion. Acoustic enclosures / silencers incorporated as part of the design of the DG sets.
xi	Total raw water requirement from Betwa river shall not exceed 6.26 MGD. Industrial effluent shall be treated in the effluent treatment plant. Treated effluent shall be recycled/reused as make up for the raw water to cooling tower. Domestic sewage shall be treated in sewage treatment plant (STP). As proposed, no effluent shall be discharged outside the plant premises and zero discharge concepts shall be followed.	Complied with.  The effluent generated from the proposed expansion is treated within the existing Effluent Treatment Plant. Domestic sewage generated is treated along with the process effluent in Sequential Batch reactor. The entire treated water is reused for production of DM water in RO_DM plant and for horticulture purpose. Hence, Zero Discharge Condition followed.



S. No.	EC Conditions	Compliance Status																					
xii	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.	<p>Complied with.</p> <p>Three numbers of oil catchers are already in place on storm water drainage system inside the factory premises.</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Oil Catcher</th><th>Location</th></tr> </thead> <tbody> <tr> <td>1</td><td>Oil Catcher-1</td><td>ETP, to handle the storm water flowing from the process plants</td></tr> <tr> <td>2</td><td>Oil Catcher-2</td><td>ETP, to cater the storm water from Crude Receipt Terminal</td></tr> <tr> <td>3</td><td>Oil Catcher-3</td><td>Near Flare stack, to cater the storm water near flare stack</td></tr> </tbody> </table>	S. No.	Oil Catcher	Location	1	Oil Catcher-1	ETP, to handle the storm water flowing from the process plants	2	Oil Catcher-2	ETP, to cater the storm water from Crude Receipt Terminal	3	Oil Catcher-3	Near Flare stack, to cater the storm water near flare stack									
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xiii	As proposed, BPCL-BINA REFINERY shall be developed rainwater harvesting pond in an area of 6 acres.	<p>Complied with.</p> <p>Rainwater harvesting measures have been implemented in refinery township.</p> <p>Rainwater harvesting pond in 12 acres with 10 recharge wells having a capacity of 173156 m3 and recharge capacity of 25973 m3 is constructed in refinery premises.</p>																					
xiv	As proposed, oily sludge shall be disposed-off through bio-remediation. Annual oily sludge generation and disposal data shall be submitted to Ministry's Regional Office and CPCB	<p>Complied with.</p> <p>Currently, the Oily sludge generated in the Effluent Treatment Plant, is reprocessed in Delayed Coker Unit (DCU). Details of generation and reprocessing from April 25 to Sept 25 is given below:</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Month</th><th>Quantity, MT</th></tr> </thead> <tbody> <tr> <td>1</td><td>April-25</td><td>19.6</td></tr> <tr> <td>2</td><td>May-25</td><td>19.9</td></tr> <tr> <td>3</td><td>June-25</td><td>21.8</td></tr> <tr> <td>4</td><td>July-25</td><td>21.3</td></tr> <tr> <td>5</td><td>Aug-25</td><td>8.25</td></tr> <tr> <td>6</td><td>Sept-25</td><td>14.7</td></tr> </tbody> </table> <p>There is also a provision in existing ETP to reprocess the Oily sludge in Bioremediation Unit.</p> <p>Annual oily sludge generation and disposal data is submitted in the form of <b>Form-4</b> to board.</p>	S. No.	Month	Quantity, MT	1	April-25	19.6	2	May-25	19.9	3	June-25	21.8	4	July-25	21.3	5	Aug-25	8.25	6	Sept-25	14.7
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xv	The company should strictly comply with the rules and guidelines under Manufacture, storage and import of Hazardous chemicals rules, 1989 as amended in October 1994 and January,2000 hazardous waste should be disposed of as per Hazardous waste (management, Handling and trans-	<p>No hazardous chemical, which satisfies the criteria laid down in Part I of schedule 1 or listed in column 2 of Part II is being imported.</p> <p>The hazardous waste generated is disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Hazardous Waste authorisation is also obtained from MPPCB, valid till 30.06.2029.</p>																					

S. No.	EC Conditions	Compliance Status
	boundary movement) rules, 2008 and amended time to time.	
xvi	The membership of common TSDF shall be obtained for the disposal of hazardous waste. Copy authorization or membership of TSDF shall be submitted to ministry's Regional office at Bhopal. Chemical/inorganic sludge shall be sent to treatment storage disposal facility (TSDF) for hazardous waste. Spent catalyst shall be sent authorized recyclers/re-processors.	Complied with. BPCL-Bina Refinery has already taken TSDF membership with M/s. Pithampur Industrial Waste Management Private Limited, Dhar, MP. The details of spent catalyst handled in FY 24-25 is also submitted in Form-IV, as attached in condition xiv and attached as <b>Annexure-4</b>
xvii	Proper oil spillage prevention management plan shall be prepared to avoid spillage/leakage of oil/petroleum product and ensure regular monitoring.	Complied with. Emergency Response and Disaster Management Plan has been prepared. Necessary features incorporated in expansion refinery to prevent and collect oil spills etc.
xviii	The company shall strictly follow all the recommendation mentioned in the charter on corporate responsibility for Environment protection.	Complied with.
xix	To prevent fire and explosion at oil and gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance between potential ignition sources and flammable materials shall be as per the CPCB guidelines.	Complied with. For refinery expansion, separation distance between various facilities in the refinery has been kept in accordance with applicable OISD standards (OISD-STD-118).

S. No.	EC Conditions	Compliance Status
xx	Green belt shall be developed at least in 255 ha area in and around the plant premises to mitigate the effects of fugitive emissions all around the plant as per the CPCB guidelines in consultation with DFO. Thick greenbelt with suitable plant species shall be developed around unit. Selection of plant species shall be as per the CPCB guidelines.	Complied. Green belt development is a continuous activity in and around boundaries of refinery. Green belt of 200m width along the boundary of refinery is developed with local species like Neem, Sheesham, Kadamba, Arabic gum, scholar tree, Indian rosewood, red forest gum etc. A total of 5 Lakh + saplings are planted so far inside refinery and outside premises in phase wise manner. 290 Ha of green belt is already developed and additionally 90 ha of green belt is developed in Forest land in collaboration of MP Forest Department. Total 380 Ha of green belt area as against 1015 Ha (37.43% of total area of 1015 Ha).
xxi	All the commitment made regarding issues raised during the public hearing/consultation meeting held on 19 <sup>th</sup> February, 2014 shall be satisfactorily implemented.	Complied. Public hearing was conducted on 19.02.2014. All the issues have been addressed adequately and to the satisfaction of the stakeholders.
xxii	At least 5% of the total cost of the project shall be earmarked towards the enterprise social responsibility based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional office at Bhopal. Implementation of such program shall be ensured accordingly in a time bound manner.	Complied. We wish to submit that 5 % of the total project cost amounts to Rs 150 Crore with the approved cost of the Project being Rs 3000 Crore. Such an allocation is not feasible considering the economics of the project. We would like to inform that after commissioning of greenfield refinery in 2011, company continued to have accumulated losses and hence we had undertaken the capacity expansion project to overcome our weak financial position. Hence allocation of 5 % of the total project cost towards Enterprise Social Responsibility (ESR) amounting to Rs 150 Crore will further burden the project and impact the project economics.  Subsequently, vide MoEFCC Memorandum – F. No. 22-65/2017-IA.III dated May 1, 2018, capital investment prescribed for a brown field project of greater than Rs 1,000 Crores to Rs. 10,000 crores are 0.25 % on Corporate Environmental Responsibility (CER). It may be noted that we have applied for waiver of this condition with MoEF&CC and EAC committee recommended the same. Further, MoEFCC circular dated 30/09/2020 allocation of funds under CER is not required. As on date we have spent more <u>than 6.35 crores against 6.25 Crores under ESR</u> towards protection of Environment. Apart from above, company is doing CSR jobs in surrounding areas in four thematic areas which includes Environment also.
xxiii	All the recommendations mentioned in the rapid risk assessment report, disaster	Being Complied.



S. No.	EC Conditions	Compliance Status
	management plan and safety guidelines shall be implemented.	
xxiv	Company shall adopt corporate Environment policy as per the ministry's O.M. no. J-11013/41/2006 –IA.II (I) dated 26 <sup>th</sup> April, 2011 and implemented.	Company has well laid QEHS Policy. A hierarchical system of the company to deal with environmental issues and for ensuring the compliance of Environmental clearance conditions is developed with environmental engineers in place. Periodical review of Environmental performance takes place at APEX meetings.
xxv	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, safe drinking water, medical health care, crèche etc. The Housing may be in the form of temporary structures to be removed after the completion of the project.	Implemented and complied.
<b>B</b>	<b>General Conditions</b>	
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.	Complying with all the stipulations made by the MP Pollution Control Board and compliance reports are submitted to MPPCB regularly.
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.	We have noted the condition.
iii	The project authorities must strictly comply with the rules and regulation under Manufacture, storage and import	Rules and regulations under MSIHC rules 1989, as amended in 2000 are compiled and approvals from The Petroleum and Explosives Safety Organization ( <b>PESO</b> ) and Fire safety inspectorate have been obtained for the project.

S. No.	EC Conditions	Compliance Status												
	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.													
iv	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise.	Adequate measures are incorporated during the detailed engineering of the project such that noise levels in and around the plant shall be within the noise levels. Summary of the noise survey reports is as below: Detailed reports are attached as <b>Annexure-5</b>												
v	A separate Environmental Management cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	Complied with.  Environment Management Cell has been set up with qualified staff to ensure the effective implementation of environmental safeguards.												
vi	Adequate funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures and shall be used 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.	Complied. <ul style="list-style-type: none"> <li>Separate budget has been allocated to the Environment Department. Allocated budget for the FY: 2024-25 is INR 243 Lakhs.</li> <li>Detail of the environment budget and expenditure for FY 23-24 and FY 24-25 the is enclosed below:</li> </ul> <table border="1"> <thead> <tr> <th>Year</th><th>Budget</th><th>Expenditure</th></tr> </thead> <tbody> <tr> <td>2023-24</td><td>558 L</td><td>420 Lakhs</td></tr> <tr> <td>2024-25</td><td>243 L</td><td>243 Lakhs</td></tr> <tr> <td>2025-26</td><td>441 L</td><td>153 Lakhs (till Sept'25)</td></tr> </tbody> </table>	Year	Budget	Expenditure	2023-24	558 L	420 Lakhs	2024-25	243 L	243 Lakhs	2025-26	441 L	153 Lakhs (till Sept'25)
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vii	The Regional office of this Ministry/Central 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 monitoring reports are regularly submitted to the RO-MoEF&CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance as given Specific condition no.i.												
viii	A copy of clearance letter shall be sent by the proponent to concerned panchayat, Zila Parishad/ Municipal Corporation,	Copy of clearance letter sent to panchayat, zila parishad/municipal corporation, urban local body.												

S. No.	EC Conditions	Compliance Status
	Urban Local Body and the Local NGO, if any, from whom suggestion/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	
ix	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 SPCB. The criteria pollutant levels namely: [PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>x</sub> , 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.	Compliance report of conditions stipulated in Environment Clearance is available on the company website i.e.: <a href="https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx">https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx</a> Six monthly monitoring reports are regularly submitted to the RO-MoEF&CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance. The Continuous Ambient Air Quality Monitoring data and Continuous Emission Monitoring of Stacks is displayed in the digital display board at the main gate of refinery.
x	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 of office of this Ministry/CPCB /SPCB shall monitor the stipulated conditions.	Six monthly monitoring reports are regularly submitted to the RO-MoEF&CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance as given Specific condition no. i.



S. No.	EC Conditions	Compliance Status
xi	The environmental statement for each financial year ending 31 <sup>st</sup> 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.	Complied. The Environment Statement in Form-V for the Financial Year: 2024-25 is submitted to MPPCB vide letter No.: BPCL/MPPCB/Consents/2024/13 dated 30.08.2024 <a href="https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx">https://www.bharatpetroleum.in/sustainability/environmental-clearance.aspx</a>
xii.	The Project Proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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.	Complied with. Informed to public by publishing in two local newspapers of Hindustan Times and Dainik Bhaskar on 21 <sup>st</sup> & 23 <sup>rd</sup> June 2015.
xiii	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.	Date of Commencement of land development: September 2015

S. No.	EC Conditions	Compliance Status
8.0	The Ministry may revoke or suspend the clearance, if implementations of any of the above conditions are not satisfactory.	We have noted the condition.
9.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.	We have noted the condition.
10.0	The above conditions will be enforced, inter-alia under the provisions of the water (prevention & control of pollution) Act, 1974 Air (prevention & control water of pollution) Act, 1981, the Environment (protection) Act, 1986, Hazardous waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the public liability insurance Act, along with their amendments and rules.	Noted.

SIX MONTHLY COMPLIANCE REPORT  
OF  
ENVIRONMENT CLEARANCE ISSUED BY MOEF & CC, NEW DELHI  
VIDE LETTER NO.: J-11011/21/1994-1A II (I), Dtd: 20<sup>th</sup> March, 2009



S. No	EC Conditions	Compliance status
<b>Specific Conditions</b>		
i	M/s BPCL-BINA REFINERY shall comply with new standards/ norms for Oil Refinery Industry notified under the Environment (Protection) Rules 1986 vide G.S.R. 186 (E) dated 18 <sup>th</sup> March 2008.	New norms prescribed for the refineries were incorporated into the design of the project and are being complied with. Gaseous emissions from all the process units are continuously monitored through Online Continuous Emission Monitoring System available in all the stacks for ensuring compliance with the stipulations.
ii	M/s BPCL-BINA REFINERY shall comply with all the conditions stipulated vide Ministry's letter of even no. dated 16.02.1995.	Point has been noted. Compliance Status is enclosed in the preceding section.
iii	The process emissions (SO <sub>2</sub> , NO <sub>x</sub> , HC, VOCs and Benzene) from various units shall conform to the standards prescribed by the Madhya Pradesh State Pollution Control Board from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Gaseous emissions from all the process units are continuously monitored through an online stack monitoring system for ensuring compliance with the stipulations. In addition, the monthly Stack monitoring/analysis is being done through a MoEF&CC approved laboratory.
iv	Ambient air quality monitoring stations (SPM, SO <sub>2</sub> , NO <sub>x</sub> , H <sub>2</sub> S, Mercaptans, NMHC and Benzene) shall be set up in the Refinery complex in consultation with SPCB, based on occurrence of maximum ground level concentration and down wind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs. Continuous on-line stack monitoring equipment shall be installed for measurement of SO <sub>2</sub> , NO <sub>x</sub> , CO and O <sub>2</sub> . Data should be displayed on the gate of the refinery and important public places through sign boards. The data should be displayed on the web industry and e-mailed to the Regional office of the Ministry/CPCB/State Pollution Control Board.	Complied with. BPCL-Bina Refinery has installed and commissioned 4 nos. of continuous AAQMS in consultation with MPPCB. And connected to MPPCB. One station shifted to MPPCB- Sagar as per the directions of MPPCB. The data is displayed at the main gate through a digital display board.
v	Monitoring of fugitive emissions shall be carried out as per the guidelines of CPCB by fugitive emission detectors and reports shall be submitted to the Ministry's regional office at Bhopal. For control of fugitive emission all unsaturated hydrocarbon will be routed to the flare system and the flare system shall be designed for smoke less burning.	Complied with. Leak Detection and Repair (LDAR) program is implemented since 2011 for monitoring of fugitive emissions in refinery & dispatch terminal and the reports are submitted along with Six monthly monitoring reports to the RO - MoEF&CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance. All unsaturated hydrocarbons are routed to the flare system and the flare system is designed for smoke less burning

vi	Fugitive emissions in the form of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting H <sub>2</sub> S, HC leakage shall also be provided at strategic locations. The company shall use low sulphur fuel to minimize SO <sub>2</sub> emission. Leak Detection and Repair program shall be implemented to control HC/VOC emissions. Work zone monitoring shall be carried out near the storage tanks besides monitoring HCs/VOCs in the work zone.	<ul style="list-style-type: none"> <li>All floating roof tanks along with crude oil tanks are provided with primary and secondary seals and all fixed roof tanks are provided with N<sub>2</sub> blanketing to reduce fugitive emissions. Sensors for detecting H<sub>2</sub>S, HC leakage have been installed in the refinery.</li> <li>Fuel with low sulphur is used for refinery operation. Leak Detection and Repair program is implemented to control HC/VOC emissions.</li> </ul>
vii	The flare area shall have H <sub>2</sub> S and HC detectors with fire alarm system at fire station/ control room. Flare gas recovery system shall be installed. All process units shall have knockout drums in every battery area. The safety release system of light hydrocarbons which are open to atmosphere shall be connected to flare system.	<p>Complied</p> <ul style="list-style-type: none"> <li>H<sub>2</sub>S and HC detectors are installed at flare area and are connected to control room with alarm system.</li> <li>Flare gas recovery system is installed.</li> <li>Knockout drums are available in all process units</li> <li>The safety release system of hydrocarbons is connected to flare system.</li> </ul>
viii	The wastewater shall be treated in the waste water treatment plant and the treated effluent shall meet the prescribed standards. Efforts shall be made to recycle the treated effluent to achieve zero discharge.	<ul style="list-style-type: none"> <li>The wastewater after suitable treatment in ETP is being recycled to RO-DM plant.</li> <li>Balance if any, are being utilized for gardening / horticulture use within refinery. The Continuous Effluent Quality Monitoring System is installed at the outlet of ETP and these analyzers are connected to CPCB and MPPCB for real time monitoring.</li> </ul>
ix	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. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	The hazardous waste generated is disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Hazardous Waste authorization is also obtained from MPPCB, valid till 30.06.2029.
X	The company shall strictly follow all the recommendation mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP).	Complied with.
xi	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 flaring.	Necessary features have been incorporated in refinery design to prevent fire hazards, oil spills etc. Firefighting facilities have been designed confirming to the relevant OISD standards (OISD-STD-116, OISD-GDN-115 & 200). Additionally, a Vacuum truck has been procured for handling of oil spills. All flare lines are routed to an overhead flaring stack with knockout drum.
xii	To prevent fire and explosion at Oil and Gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance	Complied with.



	between potential ignition sources and flammable material shall be in place.	For refinery expansion, separation distance between various facilities in the refinery has been kept in accordance with applicable OISD standards (OISD-STD-118).
xiii	Occupational health surveillance of worker shall be done on a regular basis and records maintained as per the Factories Act.	Periodical medical surveillance of workers is done regularly, and records are being maintained.
xiv	Greenbelt shall 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.	Complied. Green belt development is a continuous activity in and around boundaries of refinery. Green belt of 200m width along the boundary of refinery is developed with local species like Neem, Sheesham, Kadamba, Arabic gum, scholar tree, Indian rosewood, red forest gum etc. A total of 5 Lakh + saplings are planted so far inside the refinery and outside premises in phase wise manner. 290 Ha of green belt is already developed and additionally 90 ha of green belt is developed in Forest land in collaboration of MP Forest Department. Total 380 Ha of green belt area as against 1015 Ha (37.43% of total area of 1015 Ha).
xv	M/s BPCL-BINA REFINERY shall undertake measures for rain water harvesting to recharge the ground water and minimize fresh water consumption.	Rainwater harvesting measures have been implemented in refinery township. Rainwater harvesting pond in 12 acres with 10 recharge wells having a capacity of 1,73,156 m3 and recharge capacity of 25,973 m3 is constructed in refinery premises.
6	In case of change in the scope of the project, M/s, BPCL-BINA REFINERY shall obtain fresh environment clearance under the provisions of EIA Notification, 2006	Point has been noted.



SIX MONTHLY COMPLIANCE REPORT

OF

ENVIRONMENT CLEARANCE ISSUED BY MOEF & CC, NEW DELHI

VIDE LETTER NO.: No: J-11011/21/94-IA-II (I), Dtd: 16-02-1995

FOR

6 MMTPA GRASSROOT REFINERY, INCLUDING CAPTIVE POWER PLANT (CPP) AND MARKETING TERMINAL (BY BPCL) AT BINA, M.P. OF BHARAT OMAN REFINERIES  
LIMITED

S. No	EC Conditions [EC. No: J-11011/21/94-IA-II (I), Dtd: 16-02-1995]	Compliance status
i	The project authority must strictly adhere to the stipulations made by the M.P. Pollution Control Board and the State Government.	All the conditions stipulated by Pollution Control Board of Madhya Pradesh through Air, Water & Hazardous authorizations are strictly adhered to and compliance of same is submitted to MPPCB regularly.
ii	Any expansion of the plant, either with the existing product mix or new product(s) or storage facilities etc. can be taken up only with the prior approval of this ministry.	Any expansion or modernization in the plant will be taken up only with the prior approval of the Ministry of Environment & Forests.
iii	Total emissions of SO <sub>2</sub> from the entire refinery complex should not exceed the range 30 - 40 TPD.	Sulphur recovery efficiency of Sulphur Recovery Unit and Tail gas treatment (TGT) sections is >99.9%. The sulphur present in crude oil gets evolved mainly in the form of H <sub>2</sub> S gas during various stages of processing. The Sulphur Recover Unit (SRU) recovers the Sulphur from Hydrogen Sulphide (H <sub>2</sub> S) rich gas stream which is formed in various secondary processing units. H <sub>2</sub> S rich gas is the feed to SRU & is treated in the Main Combustion Chamber & followed by two stage Claus reaction to convert H <sub>2</sub> S into elemental Sulphur. Residual Sulphur compounds are further treated in Tail Gas Treating Unit (TGTU) in presence of catalyst. Overall, very high Sulphur recovery is achieved in SRU with efficiency of >99.9%.
iv	The gaseous emissions from various process units should conform to the standards prescribed by the concerned authorities, from time to time. At no time the emissions level should go beyond the stipulated standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be shut down immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.	Gaseous emissions from all the process units are continuously monitored through the Online Continuous Emission Monitoring System available in all the stacks for ensuring compliance with the stipulations. In addition, the monthly Stack monitoring/analysis is being done through a MoEF&CC approved laboratory.
v	Sulphur recovery units with more than 99% efficiency for sulphur recovery should be provided	Sulphur recovery unit with Tail Gas Treatment Unit (TGTU) with >99.5% efficiency for Sulphur recovery is operated
vi	Low NO <sub>x</sub> burners to avoid excessive formulation of NO <sub>x</sub> should be provided.	Low NO <sub>x</sub> burners are provided in all fired heaters of the refinery for reduction of NO <sub>x</sub> emissions.
vii	At least four ambient air quality monitoring stations should be set up in the refinery area in the down wind direction as well as where maximum ground level concentrations of SO <sub>2</sub> , NO <sub>x</sub> , HC and SPM are anticipated. The monitoring network should be decided based on the modeling exercise to represent the short term GLCs. A mobile van with adequate facilities to monitor ambient air quality outside the refinery premises should also planned.	Complied with. BPCL-Bina Refinery has installed and commissioned 4 nos. of continuous AAQMS in consultation with MPPCB. And connected to MPPCB. One station shifted to MPPCB- Sagar as per the directions of MPPCB. A mobile van with adequate facilities to monitor ambient air quality outside the refinery premises is available.

viii	Fugitive emissions of HC from storage tanks, crude oil tanks etc., should be minimized by adopting necessary measures. Action plan should be prepared for this purpose and submitted to this ministry.	All floating roof tanks along with crude oil tanks are provided with primary and secondary seals and all fixed roof tanks are provided with N <sub>2</sub> blanketing to reduce fugitive emissions. Regular fugitive emissions monitoring is being done to check the VOC emissions.																											
ix	Adequate facilities for monitoring the fugitive emissions should be planned	Leak Detection and Repair (LDAR) program is implemented since 2011 for monitoring of fugitive emissions in refinery & dispatch terminal and the reports are submitted along with Six monthly monitoring reports to the RO - MoEF&CC, Bhopal and other authorities along with Six Monthly Compliance Report of Environment Clearance.																											
x	The stack should be of appropriate design and height and should be attached to pollution control system where ever necessary. Height of stacks attached to AVU, HCU, CPP etc. should not be less than 100m.	<p>Stacks of appropriate design and adequate height are provided in all units. Height of stacks attached to CDU, HCU UB &amp; CPP units is 100 m.</p> <table border="1"> <thead> <tr> <th>Name of section</th><th>Stack Height (meters)</th><th>Control equipment to be installed</th></tr> </thead> <tbody> <tr> <td>Boilers (CPP)</td><td>100</td><td>Cyclone, E.S.P, Green Belt</td></tr> <tr> <td>Boiler (Utility)</td><td>100</td><td>Heater/Furnace-Low Sulphur Fuel, Low NOX Burner</td></tr> <tr> <td>CDU/VDU Heater (Stack-1)</td><td>100</td><td>Green Belt, Heater/Furnace-Low Sulphur Fuel, Low NOX Burner</td></tr> <tr> <td>HCU/Dhdt heater (Stack-6)</td><td>100</td><td>Green Belt, Heater/Furnace-Low Sulphur Fuel</td></tr> <tr> <td>Furnace (Heaters in KHDS)</td><td>60</td><td>Green Belt Heater/Furnace-Low Sulphur Fuel, Low NOX Burner</td></tr> <tr> <td>Furnace (NHT Auxiliary Reboiler)</td><td>60</td><td>Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner</td></tr> <tr> <td>Furnace (Stack -2 DCU heaters)</td><td>60</td><td>Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner</td></tr> <tr> <td>Furnace (Stack-4 Hot-oil heater)</td><td>60</td><td>Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner</td></tr> </tbody> </table>	Name of section	Stack Height (meters)	Control equipment to be installed	Boilers (CPP)	100	Cyclone, E.S.P, Green Belt	Boiler (Utility)	100	Heater/Furnace-Low Sulphur Fuel, Low NOX Burner	CDU/VDU Heater (Stack-1)	100	Green Belt, Heater/Furnace-Low Sulphur Fuel, Low NOX Burner	HCU/Dhdt heater (Stack-6)	100	Green Belt, Heater/Furnace-Low Sulphur Fuel	Furnace (Heaters in KHDS)	60	Green Belt Heater/Furnace-Low Sulphur Fuel, Low NOX Burner	Furnace (NHT Auxiliary Reboiler)	60	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner	Furnace (Stack -2 DCU heaters)	60	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner	Furnace (Stack-4 Hot-oil heater)	60	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner
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		Furnace (CCR Auxiliary Inter Heater)	65	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner
		Furnace (Stack -7 HGU heater)	70	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner
		Incinerator (Stack - 3 SRU Incinerator)	80	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner
		NHT/CCR heater (Stack-5 MS block Heaters)	75	Green Belt , Heater/Furnace-Low Sulphur Fuel, Low NOX Burner
xi	Designing of LPG spheres including the exclusion zone should be finalized in consultation and approval of the department of Explosives.	Not applicable as only LPG mounded bullets are provided for storage instead of spheres.		
xii	Ground water should not be tapped for the industrial as well as domestic uses including the township. Alternate source has to be finalized keeping in view its impact on other competent users.	Betwa river water is used to meet the water requirement of refinery and township. Therefore, no ground water is tapped.		
xiii	Recycling/Reuse of the treated effluent to the maximum extent possible should be planned.	Treated effluents from ETP are recycled to RO-DM plant. Balance treated effluent is being utilized for greenbelt development inside refinery.		
xiv	Adequate numbers of influent and effluents quality monitoring stations have to be planned with adequate facilities especially for the parameters like phenols, sulphides, oil and grease, suspended solids, BOD, COD, pH and flow.	<p>Influent &amp; effluent quality monitoring is carried out on a regular basis by in-house laboratory &amp; also by an external MoEF approved laboratory.</p> <p>Also installed Continuous Effluent Quality Monitoring Station at ETP outlet for the parameters such as pH, BOD, COD, TSS and Flow as per the CPCB guidelines and real-time data is transferred to MPPCB and CPCB portals continuously.</p>		
xv	System to recover oil from the oily sludge and incinerator for burning the residues should be provided.	For maximum recovery of hydrocarbons, ETP Oily sludge is recycled to the Delayed Coker Unit. Alternatively, Bio-remediation facility has been provided for conversion of residual oil from the oily sludge. BPCL-Bina Refinery has also tied-up with TSDF, Dhar, M.P. for incineration of ETP sludge.		
xvi	Hazardous substances and solid wastes should be handled, stored and disposed off as per the hazardous wastes (Management and Handling) Rules, 1989 of the EPA 1986.	Hazardous waste generated is stored, handled and disposed of as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Hazardous Waste authorization is also obtained from MPPCB, valid till 30.06.2029.		

xvii	Cutting of trees from the project sites should be kept to minimum while developing the site and planning the infrastructural facilities.	Cutting of trees has been kept minimum during the site and planning of infrastructural facilities
xviii	The industrial township should not be located in the down wind direction with respect to the refinery.	The residential colony is developed on southern side of the refinery with respect to predominant wind pattern
xix	Adequate sanitation facilities and cooking fuel should be provided to the laborers to avoid tree cutting and nuisance in the area.	Adequate sanitation facilities were provided to laborers
xx	The labours of the contractor should leave the place after completion of the work at site to avoid creation of slum in the adjoining areas of the project.	The temporary housing of the construction labour was removed from the project area to avoid creation of slum in the adjoining area
xxi	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing acoustic hoods, silencers etc on all the sources of noise generation.	Adequate measures are incorporated during the detailed engineering of the project such that noise levels in and around the plant shall be within the noise levels.
xxii	A green belt of at least 200 m and adequate density in the downwind direction using native plant species should be developed in consultation with the local DFO.	Green belt development is a continuous activity in and around boundaries of refinery. Green belt of 200m width along the boundary of refinery is developed with local species like Neem, Sheesham, Kadamba, Arabic gum, scholar tree, Indian rosewood, red forest gum etc.
xxiii	Necessary approvals from the Chief Explosives Directorate, Inspector of Factories, Fire Safety Inspector etc., should be obtained and copies of approval letters be made available to this ministry.	Necessary approvals from concerned authorities are obtained and copies submitted to your office vide our letter No. BPCL-BINA REFINERY/MoEF/EC/2018/03 dated 01/01/2019.
xxiv	The project authority should set up laboratory facilities for collection and analysis of samples under the supervision of competent technical personnel, who will directly report to the chief Executive.	The laboratory facility had been established with competent technical personnel reporting to senior management and is NABL accredited.
xxv	An Environmental Management Cell should be established with suitably qualified people to carry out various functions and should be set up under the control of a senior executive who will report directly to the head of the organization.	Environment Management Cell has been set up with qualified staff to ensure the effective implementation of environmental safeguards.
xxvi	Medical surveillance of workers should be done regularly to avoid possibility of contracting occupational diseases against the worker engaged in the various plants and record maintained.	Periodical medical surveillance of workers is done regularly, and records are being maintained.
xxvii	The project authorities should carry out a water balance study at the proposed weir site and submit the report within 12 months.	Water balance study has been carried out at the weir site and report submitted.
xxviii	The funds earmarked for the environmental protection measures should not be diverted for other purposes and year wise expenditure should be reported to this ministry.	Complied.

3	The project authorities should also comply with the additional stipulations and conditions prescribed in the EIA and risk analysis reports.	Being Complied.
4	The ministry or any other competent authority may stipulate any further conditions, after assessing the pollution caused after the implementation of the project.	Noted and agreed to comply with the directions of the MoEF& CC, if any.
5	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Point has been noted.
6	The above conditions will be enforced inter-alia under the provisions of the water (prevention and control of pollution) Act 1974, the Air (Prevention and control of pollution) Act 1981, The Environment Protection Act – 1986.	Point has been noted.