

Ref	PA-V EC COMPLIANCE REPORT OCT2022-MARCH2023 EC No. J-11011/73/2016-IA-II(I) Dated : 14th Mar , 2022. EC AMENDMENT F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022
To	IG Petrochemicals Ltd, T-2, MIDC Talaja
For	Proposed expansion of Petrochemical based product manufacturing facility.
Status	The project is under advanced construction stage & is scheduled for commissioning in November 2023. Consent to establish -No:- Format1.0/CAC/UAN No.0000129419/CE/220700011,7 Dated 02/07/2022 ANNEXURE-7 Application for Consent to operation no MPCB-CONSENT- 0000170581 dated 11-05-2023 has been uploaded

Proposal is for expansion of Petrochemical based product manufacturing facility at Plot No. T-2, V-45, V-11 to V-14, T-2/1, T-1, MIDC Talaja, Tehsil Panvel, District Raigad, Maharashtra by M/s I G Petrochemicals Ltd. (IGPL). Total land area is 1,13,282 m². Industry has already developed Green belt in an area of 10% i.e. 11,327.6 m² out of 1,13,282 m² of area of the project.

This Environmental Clearance (and its subsequent amendment) is obtained for expansion of petrochemical based product manufacturing facility with total proposed capacity of 54950 TPA.

Consolidated Consent to Operate for existing Plant PA –I, PA – II ,PA – III, PA-IV, Benzoic Acid & Maleic Anhydride plants is obtained.

Production details of existing unit as per listed below:

Product	As per Environmental Clearances	*As per Consent to Operate (2021)
Phthalic Anhydride	PAI+PAII90000 MTPA PAI+PA IIEXP 26110 MTPA PAIII 53000 MTPA PA IV 53000 MTPA	222110 MT/A
Benzoic Acid	2000 MT/A	1500 MT/A
Power (Exported to Grid)	2.5 MW	2.5 MW
**Maleic Anhydride	9110 MTPA	7660 MTPA

Di ethyl phthalate (DEP) / Di methyl phthalate (DMP)	12,600 MTPA	12600 MTPA
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***No:- Format1.0/CAC/UAN No.MPCBCONSENT-0000115836/CR/2207000116 Dated 02/07/2022 & valid up to 31/08/2026**

**** Maleic Anhydride manufacturing facility of Mysore Petro Chemicals Ltd located at plot T-1 was bought over by I G Petro Chemicals Ltd w. e.f. 1st April 2017.**

Proposed Additional capacities of Products as per EC No. J-11011/73/2016-IA-II(I) Dated: 14th Mar , 2022 & EC AMENDMENT F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022

Product	As per Environmental Clearance (MT/A)
Phthalic anhydride (PAN)(PA4 plant)	53,000
Benzoic acid (capacity increase of existing plant)	500
Maleic Anhydride (MA4 plant)	1450

Compliance to the conditions stipulated under Environmental Clearance granted by the Ministry of Environment & Forest, Government of India vide letter EC No. J-11011/73/2016-IA-II(I) Dated: 14th Mar , 2022 & EC AMENDMENT F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022 are given below.

The project activity is listed at 5 (f) in the Schedule of the EIA Notification, 2006 and is of 'B' Category being in the industrial area and shall not require Public Hearing. Based on the information provided by you, the Ministry of Environment and Forest hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and Generation condition

The project/activities are covered under category B of item 5 (e) Petroleum products and petrochemical based processing such as production of carbon black and electrode grade graphite (processes other than cracking & reformation and not covered under the complexes). Due to applicability of General Condition i. e. location of Matheran ESZ at a distance of 3.15 km, the project is appraised at Central Level by Expert Appraisal Committee (EAC).

A.	Specific Conditions:
	COMPLIANCE

i.	<p>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. Industry shall install solar power of at least 10% of its total power requirement within plant/nearby villages as a part of EMP.</p> <p>As per the EC amendment F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022, the condition is amended as</p> <p>Industry shall install solar power of at least 16% of the power requirement of proposed expansion project within plant</p>	<ul style="list-style-type: none"> • The power required for the expansion is 2750KW. • Installation of 400KW solar power generation unit is completed & is operational from December2022. Part of the generated power is being utilized inhouse & excess power is being exported to power grid of MSEDCL. Approx power exported is 200-KWH /Day. Photos of unit attachedANNEXURE-1
ii.	<p>Net fresh water requirement shall not exceed 5734 m3/day will be met from MIDC Taloja. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.</p> <p>As per the EC amendment F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022, the condition is amended as</p> <p>Industry shall restrict CETP discharge to existing 220 CMD and no additional effluent shall be discharged from the proposed expansion project. Additional treated effluent from the proposed expansion shall be treated and recycled completely.</p>	<p>Water consumption post expansion will be kept within 5734 m3/day.</p> <p>Existing CTO permitted effluent discharge to CETP is 220 cmd. The same will be maintained post expansion.</p> <p>The effluent generated from expansion will be treated in ETP and recycled.</p>
iii.	<p>For use of furnace oil as fuel for Hot oil heater, CPCB guideline shall be followed coupled with adequate measures such as installation of Cyclone Dust Separator and alkali Scrubber with adequate stack height shall be taken to mitigate emissions.</p>	<p>Complied. Existing heaters have been provided with alkali scrubber and cyclone separator. The same is provided in new plant</p>

iv.	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.	Water audit has been completed. Audit recommendations are being implemented Audit copy attached as ANNEXURE-8.
v.	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Complied
vi.	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.	Complied
vii.	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. The ash from boiler shall be sold to brick manufacturers/cement industry. As per the EC amendment F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022, the condition is amended as Process organic residue (distillation residues from Phthalic Anhydride and Maleic Anhydride process) shall be used as fuel in Thermic Fluid Heaters. Spent carbon and process organic residue from tank cleaning, if any, shall be sent to, CHWTSDF	Complied in existing plants and will be complied in expansion project.
viii.	Regular VOC monitoring shall be done at vulnerable points.	Complied
ix	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.	Not applicable
x	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.	Complied

xi	<p>The company shall undertake waste minimization measures as below:</p> <p>(a) Metering and control of quantities of active ingredients to minimize waste.</p> <p>(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</p> <p>(c) Use of automated filling to minimize spillage.</p> <p>(d) Use of Close Feed system into batch reactors.</p> <p>(e) Venting equipment through vapor recovery system.</p> <p>(f) Use of high-pressure hoses for equipment cleaning etc. to reduce wastewater generation.</p>	<p>The existing plant has adequate systems installed. The same are incorporated in expansion plant.</p>
xii	<p>The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.</p> <p>As per the EC amendment F. No. J-11011/73/2016-IA-II(I) Dated -6th October, 2022, the condition is amended as</p> <p>Industry will develop 26% (29064.63 m²) of the total plot area as greenbelt within the plant premises and 10% additional green belt shall be developed outside plant premises adjacent to the plant within MIDC Industrial area.</p>	<p>The green belt outside the plant premises is developed. The photos are attached as ANNEXURE-9</p>

xiii	PP proposed to allocate Rs. 3.0 Crores which shall be equally spent on improving infrastructure of public schools and installation of solar power in nearby villages in consultation with District Magistrate. All the proposed activities under CER shall be completed before commencement of operations of the plant.	The order or the proposed CER activity as per the condition has been issued to m/s Oriearth Foundation for providing Solar Installations and school infrastructure at Group Gram Panchayat of Maldunge Village, Panvel, Dist. Raigad The identified tribal villages are- Dhamani, Waghachivadi, Dodhani, Kombaltekadi, Deharang, Towerwadi under group gram panchiyat Maldunge. The project is at advances stage of completion and is scheduled to be completed by end April. The progress report of the same is attached as ANNEXURE-2
xiv	The project proponent shall set up a skill development center /provide skill development training to village people.	we have conducted the 'Skill Development for Villagers' at Village Ghot Camp, Taloja on 30th april2023. Photos of the same are attached as ANNEXURE-11
xv	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.	Qualified staff with post-graduation in Environmental Science / Environmental Engineering is appointed for environmental management activities.
Xvi	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.	Yes, will be Complied with- entire plant will be covered by a hydrant system, which will be provided with separate fire water pump and emergency pumps (diesel operated) as per existing unit. Fire extinguishers will be kept in various parts of the plant depending upon type of fire hazard likely.

Xvii	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. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.	Yes, we have installed continuous online (24*7) monitoring system measurement for stacks emission& effluent. We have existing online continuous emission monitoring system connected to CPCB / MPCB Server and data is uploaded on company's website regularly. The same system is being extended in the upcoming expanded plants.
xviii	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.	Yes, it is carried out regularly in existing plants. Trained Male nurse is provided in all three shifts. We have appointed fulltime Doctor and have tie up with local hospitals to attend to medical emergencies. Company has well equipped Occupational Health center (OHC) with two beds located in its admin building. Company has a program of pre and post (periodic) medical checkups whereby all workers in hazardous operations are tested twice a year. The records are maintained in form-7 as per factories act.
xix	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.	Complied. It is part of existing CTO issued by SPCB. The same will be complied for the proposed expansion.
xx	Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.	Hazop has been conducted during detailed engineering and its recommendations have been incorporated in the plant design.

B.	General Conditions:	
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.	Agreed
ii.	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Provided in existing plant. Same will be implemented for the proposed expansion.
iii.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Agreed. Noise levels are measured periodically through MOEF&CC approved lab. Acoustic enclosure will be provided to requisite machinery.
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.	Company is undertaking various community welfare measure for improvement of the environment. CER activity has been initiated as given in ANNEXURE-2

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.	Yes, Budget for Environment Protection as stipulated in the EIA has been used for environmental protection in proposed expansion project.
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.	Yes, we have submitted EC copy to Panvel Municipal Corporation which is local body. Copy of the same is attached ANNEXURE--3
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.	Will be complied as per existing compliances for earlier ECs
viii.	The environmental statement for each financial year ending 31st 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.	Yes, it is submitted regularly for existing plants and same practice will be adopted in expansion plant.

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 may also be seen at Website of the Ministry and at https://parivesh.nic.in/ . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Advertise has been published in local newspaper Navshakti & Free Press Journal dated 16 th March -2022 ANNEXURE-4
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.	Will be complied.
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.	Agreed
ADDITIONAL CONDITIONS GIVEN IN EC AMENDMENT		
i	Industry shall obtain prior approval from SPCB for discharge of effluent to CETP. Industry shall discharge 220 KLPD of treated effluent to CETP after achieving the discharge norms specified by the SPCB. Online monitoring system shall be installed and connected to the CPCB and SPCB server	The existing CTO (ANNEXURE-5) has permitted treated effluent discharge of 220 cmd to Taloja CETP. The same will be continued post expansion. OCEMS and RTDMS is installed & is connected to CPCB and MPCB servers.
ii	Air emissions from Thermic Fluid Heaters shall be monitored and emission levels shall not exceed the prescribed limit	Thermic fluid heaters are provided with cyclone separators followed by wet scrubber (alkali scrubber). The stack is connected to OCEMS. The emission levels are maintained well within the prescribed limits.
iii	For outside greenbelt development, PP shall take land for long term lease of 25 years	Communication in this respect is done with MIDC. ANNEXURE-6

	And greenbelt shall be maintained properly.	
iv	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.	The awareness program was conducted on 26 th February in three nearby villages Pale, Kolwadi & Vallap. The details are attached as ANNEXURE-10