

#### **File No:** J-11011/194/2016-IA-II(I)

# Government of India Ministry of Environment, Forest and Climate Change IA Division

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Date 25/03/2025



To,

M/s. HALDIA PETROCHEMICALS LIMITED

P. O. Box No. 12, Durgachak, Haldia, Dist. East Medinipur, West Bengal

hpl\_parivesh@hpl.co.in

Ref: EC Identification No. EC24A2101WB5692081N & File No: J-11011/194/2016-IA II (I) dated

08.08.2024

Subject: Environmental Clearance for petrochemical complex at the existing plant facility at Tehsil

Sutahata-I, Haldia, Dist. East Medinipur, West Bengal by M/s Haldia Petrochemicals Ltd – Split

of Environmental Clearance reg.

Sir/Madam,

This is in reference to your application for grant of splitting of Environmental Clearance (EC) under the provision of the EIA Notification 2006 and its amendment dated 21st April 2023- in respect of Environmental Clearance for Increase in Propylene, Phenol and Acetone (within 20% capacity) alongwith Olefine Conversion Unit (OCU) at the existing plant facility at Tehsil Sutahata-I, Haldia, Dist. East Medinipur, West Bengal By M/s. Haldia Petrochemicals Ltd. submitted to Ministry vide proposal number IA/WB/IND2/497174/2024 dated 19/12/2024.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC24A2101WB5101335S (ii) File No. J-11011/194/2016-IA-II(I)

(iii) Clearance Type Splitting of EC

(iv) Category A

(v) Project/Activity Included Schedule No. 5(c) Petro-chemical complexes (industries based on

processing of petroleum fractions

(vi) Sector IND2

Environmental Clearance for Increase in Propylene, Phenol and Acetone (within 20%)

(vii) Name of Project capacity) alongwith Olefine Conversion Unit

(OCU) at the existing plant facility at Tehsil Sutahata-I, Haldia, Dist. East Medinipur, West

(viii) Name of Company/Organization(ix) Location of Project (District, State)(x) Issuing Authority

Bengal By M/s. Haldia Petrochemicals Ltd. M/s. HALDIA PETROCHEMICALS LIMITED Purba Medinipur,WEST BENGAL MOEF&CC

- 3. This has reference to the online proposal no. IA/WB/IND2/497174/2024 dated 19th December, 2024 for the splitting of Environmental Clearance granted by the Ministry vide EC Identification No. EC24A2101WB5692081N & File No: J-11011/194/2016-IA II (I) dated 08.08.2024 for expansion in Propylene, Phenol & Acetone capacity (within 20%) along with Olefin Conversion Unit (OCU) at the existing plant facility at Tehsil Sutahata-I, Haldia, Dist: East Medinipur, West Bengal by M/s Haldia Petrochemicals Limited (HPL).
- 4. All projects are listed at S.N. 5(c) Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics) and 5 (e) Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

5. The details of products and capacity as under:

Sl. No	Name of Products	KTA
1	Ethylene	770
2	Propylene	385
3	Polypropylene	341
4	High Density Polyethylene (HDPE)	494
5	Linear Low-Density Polyethylene (LLDPE)	386
6	Butadiene	111
7	Benzene	175
8	C4 Raffinate	126
9	Vinyl Acetate Ethylene (VAE)	60
10	Mixed Butane	126
11	Cyclo Pentane	8.2
12	Pyrolysis Gasoline/Pentane	200
13	Motor Spirit (MS) Euro IV	300
14	Carbon Black Feedstock (CBFS)	100
15	Poly Butylene Terephthalate (PBT)	70
16	Tetrahydrofuran (THF)	16
17	C6 Raffinate	64

#### **Raw Material details:**

Sl. No.	Materials	Raw Material (KTA)	Source			
	Raw Materials					
1	Naphtha + Internal Recycles	2379	Sourcing through road/ coastal routes/imports			
2	Butanediol	35	Sourcing through road/ coastal routes/imports			
3	PTA	53	Sourcing through road/ coastal routes/imports			
4	VAM	45	Sourcing through road/ coastal routes/imports			
5	РҮОН	10	Sourcing through road/ coastal routes/imports			
	Major Intermediate Streams					

Sl. No.	Materials	Raw Material (KTA)	Source
1	Ethylene	770	HPL
2	Propylene	385	HPL
3	Benzene	175	HPL
4	Butadiene	111	HPL
5	C4 Raffinate	126	HPL
		Product Streams	
1	HDPE	494	-
2	LLDPE	386	-
3	VAE	60	-
4	PP	341	-
5	Benzene Note-1	175	-
6	Mixed Butanes	126	-
7	Butadiene Note-1	84	-
8	Py Gas Note-2	200	-
9	MS Note-2	300	44
9	C6 Raffinate Note-2	64	-
10	CBFS	100	-
11	Cyclopentane	8	-
12	PBT	70	-
13	THF	16	-

Note-1: Depending on Phenol capacity utilization, final saleable quantity may change but within limits.

- 6. Ministry has granted Environmental Clearance for petrochemical complex at Tehsil Sutahata-I, Haldia, District East Medinipur, State West Bengal vide File No. J-11011/194/2016-IA-II (I) dated 20th March 2018 to M/s Haldia Petrochemicals Limited (HPL). Further, the EC was bifurcated into two companies: M/s Haldia Petrochemicals Limited (HPL) and M/s Advanced Performance Materials Private Limited (AdPerMa) vide File No. J-11011/194/2016-IA-II (I) dated 27th August 2020. Ministry issued Environmental Clearance to M/s Haldia Petrochemicals Limited (HPL) for Expansion in Propylene, Phenol & Acetone capacity (within 20%) along with Olefin Conversion Unit (OCU) at the existing plant facility at Tehsil Sutahata-I, Haldia, Dist: East Medinipur, West Bengal vide EC Identification No. EC24A2101WB5692081N & File No: J- 11011/194/2016-IA II (I) dated 08.08.2024. Further, the proposal is for bifurcation of its EC dated 08.08.2024 into two companies: M/s Haldia Petrochemicals Limited (HPL) and M/s AdPlus Chemicals & Polymers Pvt Ltd (AdPlus).
- 7. Total land area required by M/s HPL at Tehsil Sutahata-I, Haldia, Dist: East Medinipur, West Bengal is 435 Ha. Greenbelt will be developed 116 Ha (i.e., 26.7% of the total area) within M/s HPL premises. M/s HPL will take the responsibility of maintaining the plantation in 48 Ha of the greenbelt area outside the HPL Complex. Total capital cost earmarked towards environmental pollution control measures will be Rs. 235.3 crores and the recurring cost (O&M) will be about Rs. 31.38 crores per annum. Industry proposes to allocate Rs. 3.0 Crores towards Extended EMP.
- 8. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. River Hoogly is at a distance of 2 Km from the project site.
- 9. Total fresh water requirement will be 37308.5 CMD which will be met from Haldia Development Authority (Geokhali). Additionally, 4278.8 CMD of water will be used from Rainwater Harvesting/ Recycling. 5733 KLD of total effluent will be treated at the proposed ETP & the Existing WWTP.
- 10. Power requirement will be 97.165 MW and will be met from the Existing Captive Power Plant. Additionally, 1 no. of BPSTG (25 MW) will be installed at HPL site.

#### **Stack Details:**

Note-2: Actual quantity may vary within approved limits depending on market dynamics

Sl. No.	Unit	Location	Stack Height (m)	Stack Diameter (m)
1	Naphtha Cracker Unit (9 Nos.)	NCU Heater	40	2.1
	Naphtha Cracker Associated Unit (1 No.)		33	0.95
3	Naphtha Cracker Associated Unit (1 No.)	PGDS Heater	30	1.06
4	Captive Power Plant (2 Nos.)	Auxiliary Boiler 1&2	54.3	2.3
5	Captive Power Plant (2 Nos.)	GT & HRSG 1&2	45	3.6
6	Captive Power Plant (1 No.)	CFB (3 x 120 TPH)- Common Stack	140	7.21
7	Captive Power Plant (1 No.)	Emergency DG (1500KVA)	17.2	0.3
8	Integrated Offsite Plant (SCR) (1 No.)	Incinerator	30	0.76
9	Common Flare Stack (1 No.)	HPL Existing Plant	120	1.88
10	Flare Stack (1 No.)	Off site	120	1.52

# 11. Details of Solid waste/ Hazardous waste generation and its management:

# **Solid Waste:**

Sl. No	Description	Source	Quantity	Mode of Disposal
1	Fly ash & Bed ash from	Fly ash & Bed ash from	15-40 TPH	Sent to Ash based
	CPP (Coal Fired Boiler)	CPP (Coal Fired Boiler)		Industries/filling in low lying
	$\simeq$			area
2	Kitchen waste	Kitchen waste	9 TPA	Sent to landfill for MSW
				through Municipality
3	Recyclable waste like	Recyclable waste like	4,485 TPA	An authorized PWP/PRO
	flexible packaging	flexible packaging materials		agency has been engaged to
	materials (plastic woven	(plastic woven sacks) under		collect/transport and recycle
	sacks) under EPR	EPR obligation as Brand		through authorized plastic
	obligation as Brand Owner	Owner and Importer		recycler to meet the yearly
	and Importer	"Olecano ch		target.
4	Metal/Wooden scrap,	Metal/Wooden scrap,	1027.8 TPA	Proper segregation and
	Miscellaneous Garbage,	Miscellaneous Garbage,		storage at designated area
		C GR		inside scrap yard
5	Biomedical Waste	Biomedical Waste	18 Kg/Year	Miscellaneous Garbage,
	Co			Broken packaging wastes will
				be periodically sold to local
		0 b		waste recyclers.
6	E-waste	E-waste	296 nos. PC/year+8	Sent to authorized
	4		Ton/year other EEE	recycler/buy-back through
				OEM
7	Spent Lead-Acid Battery	Spent Lead-Acid Battery	10-15 Nos/year	Sent to authorized
	Waste	Waste		recycler/buy-back through
				OEM

# **Hazardous waste:**

Sl.	Description	Category	Source	Quantity	Mode of Disposal
No					
1	ETP Sludge	35.3	WWTP	425 MT/Year	Incineration at CHWTSDF/Co-
					processing in Cement Kiln

2	Oily Wastes (Skimmed	5.1 & 5.2	NCU, NCAU,	350 m3/ Year	Incineration at
	oil, Slop oil, Waste		Polymer		CHWTSDF/Recycled through
	Lube oil, etc.)		Plants/Mechanical &		authorized Waste & Used Oil
			Electrical		Recyclers
			Maintenance		
3	Catalysts (Inert	1.6	NCU, LLDPE, HDPE	150 MT in 3-5	Sent to authorized recycler of spent
	Materials and traces of			year	catalyst
	heavy metals)				
4	Molecular sieves	1.6	NCU	125 MT in 3-5	Secured landfill at CHWTSDF
	(Sodium Aluminium			year	
	Silicate)				
5	Ion exchange resins	35.2	WTP, NCU, NCAU	10-12 m3 in	Incineration at CHWTSDF
	(Polymeric Materials)			every 2 years	
6	Oil impregnated Coke	36.2	NCU	25 MT/Year	Incineration at CHWTSDF
7	Incinerator ash	37.2	Incinerator	22 m3/year	Secured landfill at CHWTSDF
	(Inorganics)	<i></i>		Ca.	
8	PBT	4.2	Polybutylene	10-20kg/day	Will be sent to CHWTSDF /
			Terephthalate & THF		Recycling
9	Oligomers	4.4	Polybutylene	6kg/day	Will be sent to CHWTSDF /
			Terephthalate & THF		Recycling
10	Prepolymer with steel	1.6	Polybutylene	8-12 kg/day	Will be sent to CHWTSDF /
	sieves		Terephthalate & THF	0	Recycling
11	Polymer with steel	1.6	Polybutylene	2-5 kg/day	Will be sent to CHWTSDF /
	sieves		Terephthalate & THF		Recycling
12	Side stream THF	4.4	Polybutylene	2000-3000	Will be sent to CHWTSDF /
	column		Terephthalate & THF	kg/day	Recycling
13	Spent hydrogenation	1.6	Pyrolysis Gasoline	9. <mark>5</mark> TPA	Sent to authorized recycler of spent
	catalysts		Hydrogenation Unit	I EAL	catalyst

# **Storage Tanks details:**

Sl. No.	Chemical	Tank/ Sphere	No. of Tanks	Working Volume (Each) (m3)	Maximum Storage Quantity, (MT)
1	Naphtha	Tank	1 511	42735	28632
2	Motor Spirit	Tank	1-1-	4000	3080
3	Hydrogenated Py-Gas	Tank	R El	4000	3560
4	MS Blending Tank	Tank	1	1210	932
5	Butadiene	Sphere	1	2050	1271
6	Fuel Grade Naphtha	Tank	1	14000	9380
7	LPG	Sphere	1	20000	10000
8	Butanediol	Tank	2	3100	6324
9	THF	Tank	2	2000	3556
10	VAM	Tank	2	5500	10274
11	VAE	Tank	2	4000	7520
12	NaOH (50%)	Tank	2	530	795
13	H2SO4 (98%)	Tank	1	260	478

# Capital cost of EMP is given below:

Sl. No.	Description	EMP Cost in Crores
1	Air Pollution Control & Monitoring	108
2	Wastewater Management	65
3	Noise & Vibration Monitoring	5

4	Leak Detection & Repair Programme	0.2
5	Solid and Hazardous Waste Management	5
6	Storm Water Management	30
7	Rainwater Harvesting	2.1
8	Greenbelt Development & Maintenance	20
9	Statutory Clearance	0
	Total	235.3

# Recurring cost of EMP is given below:

Sl. No	Description	Recurring Cost in Crores /Annum
1	Air Pollution Control & Monitoring	16.18
2	Wastewater/Incinerator/Flare/BRU Monitoring & Operational Cost	10.49
3	Noise & Vibration Monitoring	0
4	Leak Detection/Environmental Statutory & Process Monitoring / /DW etc	0.67
5	Solid & Hazardous Waste Management	0.41
6	Storm Wate <mark>r Man</mark> agement	0
7	Rainwate <mark>r Harvesting</mark>	0
8	Green Belt Development and Maintenance	2.27
9	Statut <mark>ory Clearances (CT</mark> E/CTO/PESO/Others)	1.28
10	Environmental Training & Awareness Programme	0.08
	Gr <mark>and Total</mark>	31.38

## Details of **Extended EMP** with proposed activities and budgetary allocation:

Sl. No	Proposed activity	Proposed Budget (in Lacs INR)
1.	a) School building repair and renovation	143.25
	b) Setting up Science Laboratory & Book Distribution	
	c) Installation of Drinking Water facility	
2	a) Infrastructure & facility development in health care centres &	87.98
	hospitals	
	b) Mobile Clinical Van	
	c)Patient Rehabilitation - physiotherapy care equipment	<u></u>
3	Skill & livelihood development by imparting training to rural women	20
	to craft diversified jute products	.57
4	Community forest and mangrove plantation in Sajnekhali (Sunderban)	22.9
	Distribution of fruit bearing plants to local community	O.C.
5	Water Purifiers for District Police Force	26.2
	Computer for Coaching Centres & Schools	
	Grand Total	300.33

#### 12. During deliberations, following issues were discussed:

- PP has submitted the following information in support of the instant proposal:
- i. Business of Performance Chemicals/Specialty Chemicals has been envisaged to improve the current HPL business by further value addition.
- ii. HPL plans to carry out all chemical downstream Specialty Chemical business through AdPlus, as nature of business of downstream chemical value addition streams is significantly different than that of commodity chemical business of HPL. These businesses require flexibility to partner with technology suppliers where technology is still guarded and may require formation of Joint Ventures (JV) with Technology Suppliers.
- iii. The supply chain/trade channels are significantly different than current commodity business, which require setting-up dedicated supply chain and develop trade practices significantly different from current HPL business.

- iv. R & D efforts, Customer service and business development are key factors to drive and sustain demand. The JV is likely to be substantially different than present HPL structure.
- The EAC further noted that the division of land between M/s HPL and M/s AdPlus will also involve the proportional allocation of an additional greenbelt area totaling 50 Ha of land outside the HPL Complex. The PP is required to provide a formal commitment to maintain the designated greenbelt area for the lifetime of the project, whichever is longer. In line with this requirement, the PP has submitted a proposal for the proportional distribution of the 50 Ha greenbelt area. According to the proposal, M/s AdPlus will be responsible for developing approximately 4.9 acres (~1.98 Ha), while M/s HPL will take charge of around 118.7 acres (~48 Ha) of the greenbelt area. Annual audit shall be conducted by the industry for updating progress of the greenbelt developed outside the industry, which shall be submitted tothe Regional Office along with the 6-monthly compliance reports.
- The Project Proponent (PP) must fully comply with the decision issued by the Central Pollution Control Board (CPCB) in response to the Show Cause Notice (SCN). The PP is expected to implement the outcome of the decision in letter and in spirit, ensuring that all requirements are met and the underlying intent of the decision is respected.
- PP has submitted the CIN numbers of M/s. HPL (CIN U24100WB2015PLC205383) and M/s. AdPlus (CIN-U24304WB2022PTC257151).

EAC found the above information satisfactory.

- 13. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, has examined the proposal submitted by the Project Proponent in the desired form. 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 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.
- 14. 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 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 **recommended** for grant of Environmental Clearance.
- 15. 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.
- 16. The proposal was considered in EAC (ID: EC/AGENDA/EAC/850846/2/2025) meeting held on 17th 18th February, 2025 in the Ministry, wherein the project proponent and the accredited Consultant M/s. ABC Techno Labs India Pvt Ltd (NABET certificate no. NABET/EIA/2225/RA 0290 and validity 16th Nov, 2025), presented the case. The EAC, after detailed deliberations, **recommended the split of the EC dated 08.08.2024** with the same validity period subject to the following specific conditions, general conditions and additional conditions.
- 17. 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.
- 18. 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.
- 19. 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.

- 20. 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.
- 21. This issues with the approval of the Competent Authority.

### Copy To

- 1. The Principal Secretary, Department of Environment & Forest, 5th Floor, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata 700106.
- 2. The Regional Officer, Ministry of Environment, Forest and Climate Change, Regional Office, Kolkata IB 198, Sector-III, Salt Lake City, Kolkata 700106.
- 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi 32.
- 4. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhawan 10A, Block-LA, Sector-III Bidhannagar, Kolkata 700106.
- 5. Compliance and Monitoring Division, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
- 6. District Collector, East Medinipur, West Bengal.
- 7. Guard File/Monitoring File/Parivesh Portal /Record File.

Annexure 1

Specific EC Conditions for (Petroleum products and petrochemical based processing such as production of carbon black and electrode grade graphite (processes other than cracking)

# 1. Petroleum products and petrochemical based processing such as production of carbon black and electrode grade graphite (processes other than cracking

S. No	EC Conditions
1.1	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.
1.2	Total freshwater requirement shall not exceed 37308.5 KLD which will be met by the Haldia Development Authority. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The freshwater requirement shall be reduced after installation of rainwater harvesting system in the unit/project area.
1.3	Industry shall comply with undertaking submitted for reusing 10% of treated process effluent by mid-2025; to reuse and recycle 50% treated effluent by December 2026 and to adhere action plan submitted for achieving ZLD by 2030.
1.4	PP shall increase CoC to more than seven and switch from water-cooled system in the CPP to air-cooled system by 2026.
1.5	Comprehensive water audit shall be conducted annually and a report submitted to the concerned Regional Office of MoEF&CC. Outcome from the report to be implemented for conservation

S. No	EC Conditions
	scheme.
1.6	Process effluent/ any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through the guard pond.
1.7	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.
1.8	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF. The ash from the boiler shall be sold to brick manufacturers/cement industry.
1.9	Regular VOC monitoring shall be done at vulnerable points.
1.10	The oil sludge shall be subjected to melting pit for oil recovery and the residue shall be bioremediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.
1.11	Oil catchers/oil traps shall be provided at all possible locations in rain/storm water drainage system inside the factory premises.
1.12	The company shall undertake waste minimization measures as below:  • Metering and control of quantities of active ingredients to minimize waste.  • Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.  • Use of automated filling to minimize spillage.  • Use of Close Feed system into batch reactors.  • Venting equipment through vapor recovery system.  • Use of high-pressure hoses for equipment cleaning etc. to reduce wastewater generation.
1.13	The greenbelt of 5-10 m width in total area of 116.0 ha, i.e. 26.7 % of the total plant area shall be developed and maintained within the plant premises. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines and in consultation with the State Forest Department and native species shall be only planted. Industry shall comply with the MOU obtained vide letter No. 03/PCCF & HoFF/PA/2024 dated 12.06.2024 for 50 ha CSB plantation in Purba Medinipur district during the period 2024-25 to 2027-28. M/s AdPlus will be responsible for developing approximately 4.9 acres (~1.98 Ha), while M/s HPL will take the responsibility of maintaining the plantation in 118.7 acres (~48 Ha) of the greenbelt area and shall regularly update the maintenance status to the Regional Office, MoEF&CC along with six monthly compliance reports. Annual audit shall be conducted by the Industry for updating progress of the greenbelt developed outside the Industry which shall be submitted to Regional Office along with 6 monthly compliance reports. Greenbelt outside the project site shall be maintained for the lifetime of the Industry. PP shall submit undertaking for enhancement & densification of the existing Greenbelt with tree density of 2500 trees/Ha. Trees shall be planted in the Green Belt under the campaign and uploaded on the MeriLiFE portal (https://merilife.nic.in/).
1.14	PP proposed to allocate Rs. 3.0 Crore towards Extended EMP.
1.15	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged

S. No	EC Conditions
	laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
1.16	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. PP shall ensure that the concentration of pollutants in the ambient air quality remain within the norms specified in NAAQS 2009. In case any exceedance of air quality parameters is observed, the unit shall take action to curtail its activities immediately, till such time the ambient air quality is restored within the norms and inform the status to RO, MoEF&CC.
1.17	PP to set up Occupational Health Centre for surveillance of the workers 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.
1.18	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November 2012 as amended from time to time shall be followed.
1.19	Recommendations of mitigation measures for possible accidents shall be implemented based on Risk Assessment studies conducted for worst-case scenarios using the latest techniques.
1.20	The unit shall make the arrangement for protection of possible fire hazards during the manufacturing process in material handling. The firefighting system shall be as per the norms. PESO certificate shall be obtained. Location of storage tanks of hazardous/flammable/toxic substances shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such an event should not go beyond the boundary of the plant i.e. the risk should be tolerable (acceptable) at the boundary.
1.21	Company shall maintain an Emergency Response Decision support system in such a way so that identification of the detector's network for the leak source and the probable leaked quantity in real-time, followed by modelling of the dispersion of the plume and consequences as forecast is done in advance and thus, no leak accident may go unattended. Accordingly, a Risk Mitigation plan shall be in place and tested using the 3D CFD modelling.
1.22	Company shall determine the distance of fire hydrant while finalizing its location from storage tanks of flammable substance or any other hazardous storage substance shall be based on dispersion of Thermal Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.
1.23	The project proponent shall develop R&D facilities to develop their own technologies for propylene and polypropylene processing.
1.24	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.

# 2. General Conditions

S. No	EC Conditions
2.1	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.
2.2	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
2.3	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).
2.4	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.
2.5	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.
2.6	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayet, Zilla Parishad/Municipal Corporation. Urban local Body and local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
2.7	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.
2.8	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 Office of MoEF&CC by e-mail.
2.9	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

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	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.
2.10	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.
2.11	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.

# **Additional EC Conditions**

PP shall split additional greenbelt of total 50 Ha area in forest land proportionally between M/s HPL and M/s AdPlus developed outside the HPL Complex and maintain greenbelt area for lifetime of the project. M/s AdPlus will be responsible for developing approximately 4.9 acres (~1.98 Ha), while M/s HPL will take charge of around 118.7 acres (~48 Ha) of the greenbelt area which shall be maintained for the lifetime of the industries. Annual audit shall be conducted by the industry for updating progress of the greenbelt developed outside the industry which shall be submitted to the Regional Office along with the 6-monthly compliance reports.

