

**HALF YEARLY COMPLIANCE
REPORT OF THE CONDITIONS OF THE
ENVIRONMENTAL CLEARANCE FOR
EXPANSION OF NAPHTHA CRACKING
FACILITY AND PETROCHEMICAL
PRODUCTS**

F. No. J-11011/194/2016-IA-11(1)



PERIOD: April 2021 to September 2021

**HALDIA PETROCHEMICALS LTD
P.B.NO. - 12
P.O - DURGACHAK, HALDIA
DIST - PURBA MEDINIPUR
PIN - 721602
WEST BENGAL**

Name of the Project: Expansion of Naphtha cracking facility and Petrochemical products Clearance Letter No.: F. No. J-11011/194/2016-IA-11(1) dated 20.03.2018 Period of Compliance Report: April'21 to September'21 Specific Conditions:		
Sr. No.	Conditions	Compliance Status
i	Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Consent to Establish (NOC) was obtained from WBPCB vide NOC NO153414 dated 29.11.18 & 10.07.18 and 29.06.18 (Ref. Annexure-1). Consent to Operate was obtained from WBPCB vide Memo NO: 215-403/WPB (HRO)-K/2001 (Pt-VI) dated 14.08.19 and 06.03.19 (Ref. Annexure-2). Full Compliance
ii	Necessary clearance under the CRZ Notification, 2011, as applicable, shall be obtained from the State Coastal Zone Management Authority, prior to commencement of works for the proposed expansion.	CRZ Clearance was obtained for laying of pipeline from HPL to Haldia Oil Jetties of Haldia Dock Complex from MoEFCC vide F.No. 11-52/2020-IA III dated 19.05.2021. (Ref: Annexure-3) Subsequent Consent to Establish (NOC) was obtained from WBPCB vide Memo No. 200-403/WPB(HRO)-K/2001 (Pt-VIII) dated 22.09.2021. (Ref: Annexure-4) Full Compliance
iii	The effluent of 8625 cum/day shall only be discharged into river/creek through green belt canal. The effluent discharge from the premises shall conform to the standards prescribed under the Environment (Protection) Rules, 1986. Prior permission in this regard shall be obtained from concerned regulatory authority/SPCB.	Total 7127 KL/day of the treated effluent discharged into green belt canal during April'21 to September'21 HPL is monitoring the quality of the effluent discharged outside premises and it is well within the prescribed standard. Full Compliance
iv	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	The Authorisation of Handling and Management of Hazardous Waste vide Memo No 59/25(HW)-294/99-2000 (Pt-I) dated 23.02.2016 got expired on 31.12.2020 after five years. Renewal of Hazardous Authorization was applied online to WBPCB on 27.11.2021. The same is awaited from WBPCB end. (Annexure - 5)
v	Environmental Standards for Petroleum Oil Refinery dated 18 th March 2008 and Environmental Standards for Petrochemical (Basic and Intermediates) dated on 9 th November, 2012, and its amendments from time to time shall be followed.	Since HPL complex does not have petroleum oil refinery, Environmental Standards for Petroleum Oil Refinery dated 18 th March 2008 may not be applicable for us. However, Environmental Standards for Petrochemical (Basic & Intermediates) dated on 09 th November, 2012 will be adhered with full compliance. Full Compliance

vi	<p>To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Multi-cyclone followed by bag filter shall be provided to the DCU coke based CFBC boiler to control particulate emissions within permissible limit. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines</p>	<p>The CFBC boiler project was under construction phase. Suitable pollution control devices would be installed to meet the prescribed norms and/or NAAQS. Multi-cyclone followed by bag filter & ESP were provided to the CFBC boiler to be operated with appropriate proportion of imported and domestic coal only to control particulate emissions within permissible limit. The lime stone dosing system was also introduced to control the SO_x emission. It will not be a DCU (Delayed Coker Unit) coke based boiler.</p> <p>A stack of height 140 m was constructed to disperse the gaseous emissions as per CPCB/SPCB guidelines.</p>
vii	<p>The total fresh water requirement shall not exceed 10 MGD after expansion from Geonkhali Water Supply System operated by Haldia Development Authority (HDA). Necessary permission in this regard shall be obtained from the concerned regulatory authority.</p>	<p>An agreement was made with Haldia Development Authority (HDA) for supply of 43594 KL/day (9.5 MGD) water. Total 7.1 MGD water was consumed during April'21 to September'21 from HDA. HPL will ensure that total water consumption does not exceed 10 MGD.</p> <p>Full Compliance</p>
viii	<p>Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.</p>	<p>Our Plant was commissioned in the year 2000 and started commercial production since 2001. It is to be noted that previous three ECs of the Plant for 420 KTA, 520 KTA & 700 KTA of Ethylene capacity, duly granted by MoEF&CC, did not have such condition of passing storm water drain through guard pond.</p> <p>Process Effluent reaches our Waste Water Treatment Plant (WWTP) through underground / above ground network of channels / pipelines. After physical, chemical & biological treatment, the treated effluent (Clarifier outlet) is stored in two Guard Ponds (Capacity: 4,000 cu.m. each) and is subsequently discharged after being mixed with the Cooling Tower Blowdown (CTBD) & DM Plant Regeneration Effluent into our Green Belt Canal (GBC). Hydrocarbon handling & storage areas in the Plant have been provided with dyke walls with two valve drain pits as per standard engineering practices. Storm water accumulated from within the dyke walls can be sent to WWTP through the under ground Oily Water System (OWS).</p> <p>In non-hydrocarbon handling areas, the storm water drains are open channel and have a wide network depending on the available slopes in the</p>

		<p>entire Complex. The storm water drains on the eastern side of the Complex is connected to the natural ponds wherein rain water is harvested. As per the initial design / layout of the Plant, duly approved by the statutory authorities, there is no provision of rerouting the entire storm water drain network through the guard ponds of our WWTP. As an additional safety measure, six sluice gates were installed in the storm water channel at different locations in the Complex to handle any emergency situation.</p> <p>Regular monitoring of the quality of various effluents, treated effluent & storm water is carried out by a third party laboratory, duly accredited by MoEF&CC, WBPCB and NABL.</p> <p>Over the past 19 years of commercial operations of our Complex no major incident has occurred with regard to non conformance of quality of treated effluent or storm water with respect to the statutory limits. Full Compliance</p>
ix	<p>Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc.</p> <p>Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.</p>	<p>All the hazardous chemicals will be stored in properly designed tanks, drums, carboys etc.</p> <p>Necessary fire water spray system/hydrant/monitors/foam chambers has been provided in the tank farm.</p> <p>Solvent will be transferred through pump only.</p> <p>Full Compliance</p>
x	<p>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.</p>	<p>Presently, biosludge from WWTP are incinerated in our captive incinerator and the oil impregnated coke & incinerator ash is sent to TSDF. The ash from the proposed boilers would be sold to cement industry/ brick manufacturers.</p>
xi	<p>The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSI HC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.</p>	<p>HPL will comply with all the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time.</p> <p>Most of the hazardous chemicals (inbound/outbound) will be directly unloaded from ship/tank or sphere through u/g pipelines. The road transportation of few hazardous chemicals/catalyst will be in accordance with the Motor Vehicles Act (MVA), 1989.</p>

		Full Compliance
xii	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 CFBC boiler project was under construction stage (nearing completion). For storage, Two silos for fly ash and One silo of bed ash of capacity 500 m3 each was constructed. As the ash would be stored in silos there would be no adverse effect on environment and direct exposure of workers would be negligible.
xiii	<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 vapour recovery system.</p> <p>(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.</p>	<p>HPL will adopt necessary measures for minimization of the wastes as applicable viz.</p> <p>(a) Resue of by-products like Ethylene, Propylene, C6 Raffinate, Py-Gas, C4-LPG as raw materials in different manufacturing processes of olefins/polymers.</p> <p>(b) Few chemicals manufactured by us are also used as raw materials in other industries.</p> <p>(c) Automated filling and loading system exists for continuous process reactors.</p> <p>(d) All process vents are connected with the flare stack of 120 m high. Benzene vapour is recovered in Benzene Recovery Unit during occasional tanker loading.</p> <p>(e) Hydrojetting techniques at a very high pressure (350-400 kg/cm²) are adopted for cleaning of process equipment.</p> <p>Full Compliance</p>
xiv	The green belt of at least 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	The plant is surrounded by a vast greenbelt (103 ha) of width 50-100 m. The proposed projects would come up in the land which is available within the plant boundary. Plantation of 10,132 nos. of saplings were completed at the east side of greenbelt in Fy 2020-21. Around 1.20 lacs of tress are present inside greenbelt surrounding HPL as on 31.03.2021.
xv	At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on public hearing issues. Item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	<ul style="list-style-type: none"> • A Solar Power Project (1 MWp) is being implemented in our residential colony (HREL) through Capex model. • For Capex Model – capital expenditure has been estimated to the tune of Rs.5 Crore with payback period of 5.5 years and Project IRR of around 18%. • Necessary Statutory Approvals from WBSEDCL & WBREDA were obtained.

		<p>Implementation Status:</p> <ol style="list-style-type: none"> 1. Detailed Engineering commenced in Jan 2021. 2. Solar power construction work was completed in Sept 2021. 3. Pre-commissioning & Commissioning activities were expected to be completed by Nov/Dec 2021
xvi	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.	<p>No additional DG sets were proposed.</p> <p>Full Compliance</p>
xvii	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.	<p>All the required fire protection system has been installed as per appropriate OISD guidelines along with gas and smoke detectors during setting up of the new plants (Butene-1 & PGDS) to control the fire hazards during manufacturing process.</p> <p>Full Compliance</p>
xviii	Continuous online (24x7) monitoring system for stack emissions (for measurement of flue gas discharge and the pollutants concentration) and effluent discharge shall be installed, and the data to be transmitted to the CPCB and SPCB server.	<p>Continuous online emission monitoring system would be installed in the proposed stack of the coal based boilers in the Captive Power Plant. Online Effluent Monitoring system was already installed in the existing WWTP wherein additional effluent from the proposed plant will be treated. Real time data from the online effluent analysers is sent to the servers of CPCB & WBPCB from 2016 onwards.</p>
xix	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<p>The periodic medical examination (PME) was conducted for 688 nos. of contractual employees from April'21 to September'21 as per the Factories Act. The records are maintained in our Occupational Health Center (OHC).</p> <p>Full Compliance</p>

General Conditions:

Sr. No.	Conditions	Compliance Status
i	The project authorities shall adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	HPL is committed to adhere to all the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority. Full Compliance
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and	We applied for bifurcation/amendment of EC for transferring of Butene-1 plant along with storage and associated pipelines from HPL to Advanced

	Climate Change. 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.	<p>Performance Materials Limited (AdPerMa), wholly owned subsidiary of HPL to MoEF&CC.</p> <p>Two separate ECs, after due bifurcation and amendment, were issued by MOEF & CC in the name of AdPerMA & HPL vide letter No. J-11011/194/2016-IA-II (I) dated 27.08.2020 with same terms and conditions with special mention of the following.</p> <p><i>“As committed HPL shall be responsible for environmental safeguards and overall compliance of the conditions of the said EC”.</i></p> <p>Annexure-6A and 6B</p> <p>Full Compliance</p>
iii	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	<p>Ambient air quality monitoring stations were already placed in 05 locations inside the plant and in 06 nos. of locations outside the plant within the radius of 10 km considering the upwind & downwind direction and in consultation with WBPCB. In addition, one online ambient air quality monitoring station is also operational inside the plant.</p> <p>Full Compliance</p>
iv	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	<p>HPL has been measuring all the parameters of ambient air as per the National Ambient Air Quality Standards. Annexure - 7</p> <p>Full Compliance</p>
v	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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	<p>The overall ambient noise level was maintained as per the prescribed standards by adopting adequate noise control measures in the work zone area for the new plants. Annexure - 8</p> <p>Full Compliance</p>
vi	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	<p>Roof top rain water harvesting in 7 nos. of office buildings, control room and sub-stations were already implemented, the accumulated rainwater is stored in North Pond/Fire Pond.</p> <p>The rainwater run-off was channelized through the eastern side drains to the East Ponds wherefrom it was being transferred to the North Pond and subsequently utilized to meet up the process requirement after subsequent treatment. We have utilized 1048143 KL rainwater during April'21 to September'21. Full Compliance</p>

vii	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Periodical training was imparted to the employees on various modules/aspects of fire, safety, health & environment. Specialised training on chemicals handling/MSDS/Lab safety was conducted periodically for the identified group of employees. Pre-employment & routine periodical medical examinations were carried out for all the employees. Full Compliance
viii	The company shall also 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	HPL will 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 will be implemented in various stages of construction as well as operation.
ix	The company shall undertake all relevant measures for improving the socio-- economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.	Ref. Response against Condition 11 (XV)
x	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Ref. Response against Condition 11 (XV)
xi	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Separate Environmental Management Cell has been functional since inception. Two full-fledged laboratory facilities (Water & Air) were set up inside the complex through a 3 rd party, duly recognized by MoEF&CC and WBPCB. The said laboratory of Scientific Research Laboratory (SRL) was accredited by NABL as one of their site laboratories within the premises of HPL, Haldia. Full Compliance
xii	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.	Total Rs. 309.24 lacs incurred in April'21 to September'21 towards implementation of Solar Power Project (1 MWp) in our residential colony (HREL). The budgeted funds for environmental activities will be solely utilized for meeting and implementing the conditions stipulated by MoEF&CC/WBPCB. These funds will not be diverted to any other job or activities.

xiii	A copy of the clearance letter shall be sent by the project proponent to concern 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.	The copy of the Environmental Clearance letter was sent to Haldia Municipality as well as Haldia Development Authority. Full Compliance
xiv	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.	Six monthly compliance reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data was sent by email to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB and the same was uploaded in the website of HPL. Full Compliance
xv	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.	The Environmental Statement in Form-V was submitted to WBPCB on 09.09.2021. Updated Environment Statement and Environmental Compliance Report was uploaded on the company website. Full Compliance
xvi	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 at http://moef.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 the copy of the same shall be forwarded to the concerned regional office of the Ministry.	Advertisement published in two local newspapers in English (The Telegraph) and in Bengali (Anandabazar Patrika) on 13.04.2018. A copy of the same was sent earlier as a proof of compliance. Full Compliance

xvii	<p>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</p>	<p>The projects are being implemented phase-wise. Consent to Operate was obtained from WBPCB vide Memo NO: 215-403/WPB (HRO)-K/2001 (Pt-VI) dated 06.03.19 and 14.08.19 for Butene-1, Pygas Desulfurisation Unit, Hydrocarbon Storage Tanks (Naphtha, Methanol, Methyl Tertiary Butyl Ether, Hydrogenated Py-Gas & Motor Spirit Blending Tank) in 1st Phase.</p> <p>Consent to Operate was obtained from WBPCB vide Memo no. 199-403/WPB (HRO)-K/2001 (Part-IX) dated 22.09.2021 for CFBC Boiler project in 1st Phase.</p> <p>HPL will continue to update Regional Office about the financial closure and approval of other projects.</p>
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WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Bhawan, 10A, Block - LA, Sector-III

Bidhannagar, Kolkata-700 098, India

Tel : 2335 - 9088 / 7428 / 8211 / 6731 / 0261 / 8861 / 5868 / 1625

Fax : 2335 - 5868 / 2813

City Code : 33, Country Code : 91

Website: www.wbpcb.gov.in

Memo No. 667-2N-58/2006(E)

Dated: 29.11.2018.

To
M/s Haldia Petrochemicals Ltd.
Post Box No. - 12, Durgachak
Haldia, Dist - Purba Medinipur
West Bengal, Pin - 721602, India

Sub : Amendment of the Consent to Establish (NOC) no. NO153414 issued vide memo no. 357-2N-58/2006(E) dated 29.06.2018.

Ref : 1. Your letter no. HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCB dated 11.10.2018.

2. Environmental Clearance issued by MoEF & CC vide memo no. J-11011/194/2016_IA II (I) dated 20.03.2018.

Sir,

With reference to the above this is to inform you that the Consent to Establish (NOC) no. NO153414 issued vide memo no. 357-2N-58/2006(E) dated 29.06.2018 is hereby amended as follows:-

In Annexure II of the above mentioned 'NOC', under section "A) Emission",

Sl. No	Emission sources	Air Pollution Control Device	Stack (Nos. & height from GL in m.)
1.	3X120 TPH Coal Fired Boilers	Electrostatic Precipitator	01 no., 140 m
2.	Heater (Fuel Gas (Mixture of hydrocarbon gases and hydrogen) Fired)	Nil	01 no., 40 m

should be read as

Sl. No	Emission sources	Air Pollution Control Device	Stack (Nos. & height from GL in m.)
1.	3X120 TPH Coal Fired Boilers	Electrostatic Precipitator	01 no., 140 m
2.	Heater (Fuel Gas (Mixture of hydrocarbon gases and hydrogen) Fired)	Nil	01 no., 40 m
3.	Heater (Fuel Gas (Mixture of hydrocarbon gases and hydrogen) Fired)	Nil	01 no., 30 m

This is to be treated as an annexure to the Consent to Establish (NOC) no. NO153414 issued vide memo no. 357-2N-58/2006(E) dated 29.06.2018. Please note that all other conditions as mentioned in the said NOC will remain unchanged.

Yours faithfully,

[Signature] 29.11.2018
Senior Environmental Engineer (ETM Cell)
West Bengal Pollution Control Board

**WEST BENGAL POLLUTION CONTROL BOARD***(Department of Environment, Govt. of West Bengal)*

Paribesh Bhawan, 10A, Block - LA, Sector-III

Bidhannagar, Kolkata-700 098, India

Tel : 2335 - 9088 / 7428 / 8211 / 6731 / 0261 / 8861 / 5868 / 1625

Fax : 2335 - 5868 / 2813

City Code : 33, Country Code : 91

Website: www.wbpcb.gov.inMemo No. **890**-2N-58/2006(E)Dated: **10**.07.2018.

To
M/s Haldia Petrochemicals Ltd.
Post Box No. - 12, Durgachak
Haldia, Dist - Purba Medinipur
West Bengal, Pin - 721602, India

Sub : Amendment of the Consent to Establish (NOC) no. NO153414 issued vide memo no. 357-2N-58/2006(E) dated 29.06.2018.

Ref : Your letter no. HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCB dated 05.07.2018.

Sir,

With reference to the above this is to inform you that the Consent to Establish (NOC) no. NO153414 issued vide memo no. 357-2N-58/2006(E) dated 29.06.2018 is hereby amended as follows:-

In Annexure I of the above mentioned 'NOC', under section "A. List of Products to be manufactured (With Production Capacity)", Sl. No. 9 should be read as follows:

Sl. No.	Product	Existing Production Capacity (KTA)	Proposed Production Capacity (KTA) (For Expansion Project)	Total Expansion Capacity (KTA) (After Expansion)
9.	Methyl Tertiary Butyl Ether (MTBE)	0	98.6	98.6

This is to be treated as an annexure to the Consent to Establish (NOC) no. NO153414 issued vide memo no. 357-2N-58/2006(E) dated 29.06.2018. Please note that all other conditions as mentioned in the said NOC will remain unchanged.

Yours faithfully,


Senior Environmental Engineer (EIM Cell)
West Bengal Pollution Control Board

NOC NO153414

WEST BENGAL POLLUTION CONTROL BOARD

Paribesh Bhawan
10A, Block-LA, Sector-III
Bidhannagar, Kolkata-700 098

Memo No. 357-2N-58/2006(E)

Dated 29.06.2018



From :
Member Secretary,
West Bengal Pollution Control Board

To : **M/s. Haldia Petrochemicals Limited,**
Post Box No.12, Durgachak, Haldia, Dist-purba Medinipur,
West Bengal, PIN-721602, India.

Sub : Consent to Establish (NOC) from Environmental Point of View

Ref : Your letter No. HPL/IMS/HSEF/R/4-3-2/08/ENV/Board/WBPCB dated
07.05.2018.

Dear Sirs,

In response to the application for Consent to Establish (NOC) for proposed Unit of M/s Haldia Petrochemicals Limited expansion for manufacturing/storage/installation expansion of the existing Naptha Cracking facility and Petrochemical manufacturing unit (for details see annexure-I) in the existing unit premises at Tehsil-Sutahata-I, Haldia, Dist-purba Medinipur, West Bengal, this is to inform you that this Board hereby grants the Consent to Establish (NOC) from the environmental point of the above subject to the following conditions and special conditions annexed.

1. The quality of sewage and trade effluent to be discharged from your factory shall satisfy the permissible limits as prescribed in IS : 2490 (Pt. I) of 1974, and/or its subsequent amendment and Environment (Protection) Rules 1986.
2. Suitable measures to treat your effluent shall be adopted by you in order to reduce the pollutional load so that the quality of the effluent satisfies the standards mentioned above.
3. You shall have to apply to this Board for its consent to operate and discharge of sewage and trade effluent according to the provisions of the water (Prevention & Control of Pollution) Act, 1974. No sewage or trade effluent shall be discharged by you without prior consent of this Board.
4. All emission from your factory shall conform to the standards as laid down by this Board.
5. No emission shall be permitted without prior approval of this Board and you shall apply to this Board for its consent to operate and atmospheric emission as per provision of the Air (Prevention & Control Pollution) act, 1981.
6. No industrial plant, furnace, flues, chimneys, control equipment.

NOC NO153414

7. You shall comply with
- Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
 - Water (Prevention and Control of Pollution) Cess Act, 1978, if applicable.
 - Environment (Protection) Act, 1986
 - Environment (Protection) Rules, 1986
 - Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000
 - Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000
 - Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms or Cell Rules, 1989
 - The Public Liability Insurance Act, 1991 and Amended Act, 1992
 - The Public Liability Insurance Rules, 1991 and Amended Rules 1993
 - Biomedical Wastes (Management & Handling) Rules, 1998 and Amended Rules 2000 if applicable.
 - Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
 - Ozone Depleting Substances (Regulation & Control) Rules, 2000, if applicable
8. You will have to abide by any other stipulations as may be prescribed by any authority/local bodies/Government Departments etc.

SPECIAL CONDITION :

See Annexure-II.

Gross Capital Investment-Rs.43100000000/-.

Any violation of the aforesaid conditions shall entail cancellation of this Consent to Establish (NOC)

Yours faithfully,

[Signature]
Sr. Env. Engineer (EIM Cell)
Member Secretary,
West Bengal Pollution Control Board

Memo No. 857-2N-58/2006(E) dtd. 29.05.2018

Dated.....

Copy forwarded for information to :

- Chief Inspector of Factories, Government of West Bengal, N. S. Building, Kolkata-700 001
 - Director of Industries/Director of Cottage & Small Scale Industries, Government of West Bengal, N. S. Building, Kolkata-700 001
 - Guard file, West Bengal Pollution Control Board.
 - Environmental Engineer, I/II/Alipur R.O./Howrah R.O./Hooghly R.O./B.R.O./D.R.O./Haldia R.O./S.R.O./Asansol/ Sub-R.O./WBPC Board

Himalaya Bhawan Delhi Road, Dankuni Dist. Hooghly	Vill, Panpur Kalyani Expressway P.O. Narayanpur Dist. 24 Pgs. (N)	Sahid Khudiram Sarani City Centre, Durgapur-16 Dist. Burdwan	10, Camac Street 2nd Floor Kolkata-700 017
Paribesh Bhawan 10A, LA-Block, Sector-III Salt Lake City, Kolkata - 700 098	Block-05 at 40 Flats Complex Adjacent to Priyambada Housing Estate P.O. :Khanjanchak, P.S. Durgachak Haldia-721602 Dist. : Purba Medinipur	Paribahan Nagar Matigara, Siliguri Dist.-Darjeeling	
- Satya Chowdhury
Indoor Stadium
- Asansol Sub-Regional Office
ADDA Commercial Market (2nd Floor) Sr. Env. Engineer (EIM Cell)

issued to M/s. Haldia Petrochemicals Limited for its Naphtha Cracking Facility and Petrochemical Manufacturing Unit at Tehsil – Satahata - I, Haldia, Dist – Purba Medinipur, West Bengal (Expansion Project)

A. List of Products to be manufactured (With Production Capacity)

Sl. No.	Product	Existing Production Capacity (KTA)	Proposed Production Capacity (KTA) (For Expansion Project)	Total Expansion Capacity (KTA) (After Expansion)
1.	Ethylene	700	70	770
2.	Propylene	350	35	385
3.	Polypropylene	341	0	341
4.	High Density Poly Ethylene (HDPE)	334	160	494
5.	Linear Low Density Poly Ethylene (LLDPE)	386	0	386
6.	Butadiene	101	10	111
7.	Benzene	132	43	175
8.	Butene-1	0	30.2	30.2
9.	Methyl Tertiary Butyl Ether (MTBE)	0	60	60
10.	Vinyl Acetate Ethylene (VAE)	0	60	60
11.	Mixed Butane	113	13	126
12.	Cyclo Pentane	5.2	3.	8.2
13.	Pyrolysis Gasoline	130.5	69.5	200
14.	Motor Spirit (MS) Euro IV	250.6	49.4	300
15.	Phenol	0	200	200
16.	Acetone	0	123	123
17.	Carbon Black Feed Stock (CBFS)	89	11	100
18.	Poly Butylene Terephthalate (PBT)	0	70	70
19.	Tetrahydrofuran (THF)	0	16	16
20.	C6 Raffinate	36.6	27.4	64

- B.** Additional Captive Power Plant (CPP) comprising of 3X120 TPH Steam Generation Capacity Coal Fired Boilers and 1X 35 MW Capacity Condensing Steam Turbine Generator (CSTG) to be installed.

Signature / 25.10.2018

Annexure II to NOC Sl. No. NO153414

Special Conditions issued to M/s. Haldia Petrochemicals Limited for its Naphtha Cracking Facility and Petrochemical Manufacturing Unit at Tehsil – Satahata - I, Haldia, Dist – Purba Medinipur, West Bengal (Expansion Project)

A) **Emission:-**

Sl. No	Emission sources	Air Pollution Control Device	Stack (Nos. & height from GL in m.)
1.	3X120 TPH Coal Fired Boilers	Electrostatic Precipitator	01 no., 140 m
2.	Heater (Fuel Gas (Mixture of hydrocarbon gases and hydrogen) Fired)	Nil	01 no., 40 m

Stacks to have sampling port, platform and ladder as per the emission regulation part-III of CPCB. Volatile organic compounds generated from different processes must be routed to the existing flare stack for combustion.

B) **Effluent:-**

- 1) Process – To be treated in integrated waste water treatment plant. Treated effluent to be discharged to river through Green Belt Canal.
- 2) Domestic – To be treated in integrated waste water treatment plant. Treated effluent to be discharged to river through Green Belt Canal.

C) **Solid Waste :-**

1. Hazardous waste including ETP sludge to be disposed off as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
2. Municipal solid wastes to be disposed off as per the Solid Waste Management Rules, 2016.

D) **General:-**

- 1) Noise Control – Ambient noise & D.G. Set noise level not to exceed the permissible limit.
- 2) The standards / guidelines for control of noise from stationary Diesel generator sets prescribed under notification of Ministry of Environment & Forest, Govt. of India, G.S.R.371(E), [17/5/2002] and its amendments should be followed.
- 3) Action to be taken to control fugitive emission.
- 4) Fire License to be obtained from competent authority.
- 5) The unit should obtain authorization from this Board under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 6) Good housekeeping to be maintained.

Kiran 25.06.2018

Annexure II to NOC Sl. No. **NO153414**

Special Conditions issued to M/s. **Haldia Petrochemicals Limited** for its **Naphtha Cracking Facility and Petrochemical Manufacturing Unit at Tehsil – Satahata - I, Haldia, Dist – Purba Medinipur, West Bengal (Expansion Project)**

- 7) No expansion / modification to be carried out without permission from this Board.
- 8) The unit should obtain Consent-to-Operate for the proposed expansion project from the Board before starting manufacturing activities.
- 9) Statutory clearance/license from competent authorities, as applicable to be obtained.
- 10) All conditions of the Environmental Clearance issued by MoEF & CC vide memo no. J-11011/194/2016-IA II (I) dated 20.03.2018 to be complied with.
- 11) This 'Consent to Establish' is valid up to **30.06.2025** for setting up the expansion unit.

 25.06.2018

**Member Secretary/ Sr. Environmental Engineer, EIM Cell
West Bengal Pollution Control Board**

**WEST BENGAL POLLUTION CONTROL BOARD**

(Department of Environment, Govt of West Bengal)

WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Bhawan

Bldg. No. 10 A, Block-LA, Sector-III, Bidhannagar

Kolkata - 700 106

Tel : 0091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

Fax : 0091 (033) 2335 6730 / 2813

Website : www.wbpcb.gov.in, e-mail : wbpcbnet@wbpcb.gov.in

Memo No: 01 - -hl-co-r/16/0054

Date: 14 / 08 / 2019

To
M/s. Haldia Petrochemicals Ltd.
 P.O & P.S- Durgachak,
 Dist-Purba Medinipur
 PIN-721602

Sub.: Amendment of Consent to Operate for your unit located at P.O& P.S.-Durgachak, Haldia,
 Dist-Purba Medinipur, Pin-721602.

Ref. (i) *Consent to Operate* certificate CO113738 issued vide memo no. 215-403/WPB(HRO)-
 K/2001(Pt-VI) dated 06/03/2019.
 (ii) Your letter Ref no. HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCB dated 25/03/2019

Sir,

In reference to the above, this is to inform you that the following amendments are made in the
 abovementioned Consent to Operate certificate issued by this office:-

Conditions:-

01. The consent is valid for manufacture of:-

SI No. 02- Mixed Butane - 13.0 KTA /Month in place of Mixed Butene -15.0 KTA/Month.

08. The industrial effluent parameters of pH - Between 6.5 to 8.5 in place of 6.5 to 5.5

13. The applicant shall install comprehensive control system consisting of pollution control
 equipment as is warranted with reference to generation of air emissions and operate and
 maintain the same continuously so as to achieve the level of pollutants of the Standard as
 given in Tabel-II below:- amended as

Stack No.	Stack height from G.L (in mts.)	Stack attached to (sources and control system if any)	Voulume Nm ³ /hr	Concentration of parameters not to exceed at 3% O ₂ , correction				Frequency of emission sampling
				SPM (mg/Nm ³)	CO (% v/v)	SO ₂ (mg/Nm ³)	NO _x (mg/Nm ³)	
S-1	30	RFG fired Heater for Py-gas Desulphurisation Unit	-	05	NA	50	250	Quarterly

Contd.....p/2

দূষণ মুক্ত নির্মল গঙ্গা চাই



WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt of West Bengal)

WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Bhawan

Bldg. No. 10 A, Block-LA, Sector-III, Bidhannagar

Kolkata – 700 106

Tel : 0091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

Fax : 0091 (033) 2335 6730 / 2813

Website : www.wbpcb.gov.in, e-mail : wbpcbnet@wbpcb.gov.in

-2-

17. Noise levels limit given below: amended as

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m to 10 p.m)	75
Night Time (10 p.m to 06 a.m)	70

This letter may be treated as an annexure to the *Consent to Operate* certificate no. CO113738 dated 06.03.2019. All other terms & conditions of the above mentioned Consent to Operate will remain unchanged.

Thanking you,

Yours faithfully,


Chief Engineer
W.B Pollution Control Board

দূষণ মুক্ত নির্মল গঙ্গা চাই

WEST BENGAL POLLUTION CONTROL BOARD



'Paribesh Bhawan'
Bldg. No. - 10A, Block - LA, Sector-III
Salt Lake City, Kolkata-700 098
EXPANSION

Consent Letter Number : CD113738

Memo Number : 215-403/WPB(HRO)-K/2001(Pt-VI)

Date : 06/03/2019

Consent to Operate

under

Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974 and
Section 21 of the Air (Prevention and Control of Pollution) Act, 1981

The West Bengal Pollution Control Board (hereinafter referred to as State Board) under the provisions of Section 25 & 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended and Rules and Orders made thereunder, hereby grants its consent to :

M/s. HALDIA PETROCHEMICALS LTD

(Address of Regd. office/Head/Office/City Office)

(hereinafter referred to as Applicant) for its unit located at P.O. & P.S: Durgachak, Haldia, Dist: Purba

Medinipur, PIN: 721602

(Detailed address of the manufacturing unit)

for a period from Date of issue to 30/11/2023

to operate the industrial unit and to discharge liquid effluent and to emit gaseous effluent from the premises/land of the industrial unit, in accordance with the conditions as mentioned in the Annexure to this consent letter provided on any day at any instance the quantity and quality of liquid discharge and gaseous emission shall not exceed the permissible limit as specified in the Table I & II of this consent letter and in the Environmental (Protection) Act, 1986.

Breach of the conditions and / or failure to comply with the directions as set out in the Annexure shall render the applicant liable for prosecution under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alter the conditions of this consent letter giving one month's notice to the applicant.



For and on behalf of the State Board

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
W.B. Pollution Control Board

(2)

ANNEXURE

Consent to M/s. HALDIA PETROCHEMICALS LTD
 for its unit at P.O. & P.S: Durgachak, Haldia,
 Purba Medinipur, PIN: 721602

Conditions :

01. This Consent is valid for the manufacture of :-

Sl. No.	Name of major products and by-products	Quantity manufactured per month
01	Butene - 1	30.20 KTA
02	Mixed Butene	15.00 KTA
03	Methyl Tertiary Butyl Ether	90.6 KTA
04	(MTBE)	
05		
06		
07		
08		
09		
10		
11		
12		

02. The Applicant shall remain responsible for quantity and quality of liquid effluent and air emissions.
03. Daily discharge of industrial liquid effluent shall not exceed 62.4 KL.
04. Daily discharge of domestic liquid effluent shall not exceed KL.
05. Daily discharge of mixed (industrial & domestic) liquid effluent shall not exceed KL.
06. The Applicant shall discharge liquid effluent to River Hooghly (place of discharge)
 through Green Belt Canal nos. outlets / outfalls.
07. To bring into any altered or new outlet/outfall or to change the place of discharge, the Applicant shall have to inform the Board and obtain prior permission of the Board in this effect.
08. The Applicant shall provide comprehensive facility for treatment of industrial liquid waste and domestic liquid waste (sewage, sullage and liquid effluent generated from canteen), and operate and maintain the same continuously so that the quality of final effluent conforms to the Standard as given in Table-I in page 03.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
 W.B. Pollution Control Board

Continued.....

Consent to M/s. HALDIA PETROCHEMICALS LTD
 for its unit at P.O. & P.S: Durgachak, Haldia,
 Purba Medinipur, PIN: 721602

Table-I

Outlet No.	Nature of effluent	Parameters	Standard	Frequency of effluent sampling
01	Industrial	pH	Between : 6.5 to 5.5	Quarterly
		Total Suspended Solids	Not to exceed : 100 mg/l.	
		Biochemical Oxygen Demand (3day at 27°C)	Not to exceed : 30 mg/l.	
		Chemical Oxygen Demand	Not to exceed : 250 mg/l.	
		Oil & Grease	Not to exceed : 10 mg/l.	
		Phenol	" 1.0 Mg/l	
		Phexide	" 5.0 Mg/l	
		Total Cr	" 2.0 Mg/l	
		CN	" 0.2 Mg/l	
		Cr + 6	" 0.1 Mg/l	
		Sulphide	" 2.0 Mg/l	
		Cu	" 1.0 Mg/l	
		Fe	" 1.0 Mg/l	
		Zn	" 1.0 Mg/l	
		Phosphate	" 5.0 Mg/l	
		Free Available Chlorine	" 0.5 Mg/l	
			Not more than 10°C than intake	

09. The Applicant falls in the Category of the Water (Prevention and Control of Pollution) Cess Act, 1977 and Rules made thereunder and the Applicant shall comply with the provisions of the said Act and Rules made thereunder.

10. Daily water consumption for the following purposes should not exceed :-

- Industrial cooling, spraying in mine pits and boiler feed water → KL
 (Water used for gardening should be included in this category of use)
- Domestic purpose → KL
- Processing whereby water gets polluted and the pollutants are easily biodegradable → KL
- Processing whereby water gets polluted and the pollutants are not easily biodegradable → KL

The Applicant shall regularly submit to the Board the Returns of Water Consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
 W.B. Pollution Control Board

Continued.....

(4)

Consent to M/s. HALDIA PETROCHEMICALS LTDfor its unit at P.O. & P.S: Durgachak, Haldia,Purba Medinipur, PIN: 721602

11. The *Applicant* shall install suitable device for measuring the volume of water consumed for different purposes as mentioned above giving correct result to the satisfaction of the *State Board*.
12. All the stacks connected to various sources of emissions must be designated by numbers such as S-1, S-2, S-3, etc., and this must be painted/displayed to facilitate identification.
13. The *Applicant* shall install comprehensive control system consisting of pollution control equipment as is warranted with reference to generation of air emissions and operate and maintain the same continuously so as to achieve the level of pollutants of the *Standard* as given in Table-II below :

Table-II

Stack No.	Stack height from G.L., (in mts.)	Stack attached to (sources and control system, if any):	Volume Nm ³ /hr.	Velocity of gas emission m/sec	Concentrations of parameters not to exceed					Frequency of emission sampling
					SPM (mg/Nm ³)	CO (%v/v)	SO ₂ (Mg/Nm ³)	NO _x (mg/Nm ³)	Correction	
S-I	40.0 m	RFG fired Heater for Py-gas Desulphurisation Unit	—	—	05	100	50	250	---	Quarterly
S-2										
S-3										
S-4										
S-5										
S-6										
S-7										
S-8										
S-9										
S-10										

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
W.B. Pollution Control E

Continued.....

Consent to M/s. HALDIA PETROCHEMICALS LTD

for its unit at P.O. & P.S: Durgachak, Haldia,

Purba Medinipur, PIN: 721602

14. The *Applicant* shall provide ports in the stack(s) and other necessary permanent facilities such as ladder, platform, etc. for monitoring/sampling the air emissions and the same shall be made available for inspection and use by the *State Board's* staff as well as *State Board's* authorised agencies.

15. The *Applicant* shall observe the following fuel consumption pattern :-

Sl. No	Type of fuel	Quantity consumed per day	Fuel burning operation where the fuel is used
01	Residual Fuel	Gas 1.44 KTA	Heater
02			
03			
04			
05			

16. The *Applicant* shall maintain the generation and treatment/disposal of non-hazardous solid waste as specified below :- *

Type of waste	Quantity	Treatment	Disposal
N I L			

17. The *Applicant* shall take adequate measures for control of noise levels from its own sources within the premises within the limit given below :-

Time	Limit in dB(A) L_{eq}
Day Time (06 a.m. to 06 p.m.)	65
Night Time (06 p.m. to 06 a.m.)	55

18. The *Applicant* shall at all times maintain good house-keeping, proper working order, and operate efficiently for control of pollution from all sources so as not to cause nuisance to surrounding areas/inhabitants and to achieve compliance with the terms and conditions of the consent.

19. The *Applicant* shall bring about at least 33% of the available open land under the green coverage / plantation.

20. The *Applicant* shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by the *Applicant* to maintain compliance with the terms and conditions of the consent. In absence of such an alternate electric power source, the *Applicant* shall stop, reduce or otherwise control production to abide by the terms and conditions of the Consent regarding pollution level.

21. The *Applicant* shall install a separate energy meter showing the consumption of energy for operation of pollution control devices.

22. The *Applicant* shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.

23. The *Applicant* shall provide drainage system for conveying industrial and domestic liquid waste. Storm-water drain shall be kept separate from the drainage system meant for industrial and domestic liquid waste

The unit must obtain Authorization under Hazardous Wastes

(M & H) Rules

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
W.B. Pollution Control Board

Continued.....

Consent to M/s. HALDIA PETROCHEMICALS LTD

for its unit at P.O. & P.S: Durgachak, Haldia,

..... Purba Medinipore, PIN: 721602

24. The *Applicant* shall maintain a separate register showing consumption of chemicals used in pollution control systems.
25. The *Applicant* shall get the samples of hazardous wastes/leachates analysed at least once in from the laboratory recognised of the West Bengal Pollution Control Board and ensure that they conform to the limits stipulated. Test reports shall be sent to the Board.
26. The *Applicant* shall provide adequate and safe facility for collection of air, waste water and solid waste samples by the *State Board's* staff as well as *State Board's* authorised agencies.
27. The *Applicant* shall submit to the *State Board* by the 30th September of every year the Environmental Statement Report for the financial year ending 31st March of the current year in the prescribed form (Form -V) as required under the provisions of rule 14 of the Environment (Protection) [Second Amendment] rules, 1992.
28. The *Applicant* shall allow the Officers of the *State Board* to enter into the applicant's premises at any reasonable time to inspect the pollution control systems as well as monitoring and measuring devices in connection with prevention & control of pollution.
29. The *Applicant* shall maintain an Inspection Book in the factory premises which shall be made available to Officers & employees of the *State Board* for inspection, review and to write down any direction or observation as is deemed necessary during the inspection from time to time.
30. The *Applicant* shall furnish to the *State Board* all information in respect of quality, quantity, rate of discharge, place of discharge of liquid effluent and air emissions.
31. The *Applicant* shall maintain adequate number of qualified and trained personnel among his staff for proper maintenance and operation of the effluent treatment and / or emission control devices and for overall environment management of the industry.
32. The *Applicant* shall have to make registration for the use of groundwater if any, with Central Ground Water Authority.
33. The *Applicant* shall intimate to the *State Board* immediately of any occurrence or apprehension of occurrence of discharge of any poisonous, noxious or pollutants in excess of quality as well as quality as mentioned earlier to any receiving water body/receiving system or to atmosphere owing to accident or other unforeseen incident/event including natural disaster. The *Applicant* Shall (i) take all steps adequate to prevent such accident discharge/release of poisonous, noxious or pollutants and to limit their consequences to persons and the environment, (ii) provide to the persons working on the site with the information, training and equipment including antidotes necessary to ensure their safety and mitigate the accidental release of poisonous noxious or pollutants to the environment.
34. The *Applicant* shall make an application to the *State Board* in the prescribed form for renewal of the consent at least 60 (sixty) days before the date of expiry of this Consent.
35. The *Applicant* shall not make any alternation/modification/expansion in the existing manufacturing process and equipment as well as the pollution control system without prior approval of the Board.
36. The *Applicant* shall comply with the conditions as laid down in the Manufacture, Storage and Import of hazardous Chemicals Rules, 1989 and Hazardous Wastes (Management & Handling) Rules, 1989.

Additional Conditions

See annexure -- 1

Attached Annexure 1 for storage tanks.

(Member Secretary/Chief Engr./ Sr. Env. Engr. / Env. Engr. / Asst. Env. Engr.)

Senior Environmental Engineer
W.B. Pollution Control Board

Annexure - i


Consent No.CO113738

Additional conditions issued to : M/S. HALDIA PETROCHEMICALS LIMITED
DURGACHAK, HALDIA,
DIST. – PURBA MEDINIPUR,
PIN – 721 602

1. Present hazardous waste storage facilities :

Sl. No.	Chemical	Storage Facility	No. of Tanks proposed	Working Volume, (m ³)	Storage Quantity, (MT)
1.	Naphtha	Tank	1	42,735	28,632
2.	Hydrogenated Py-Gas	Tank	1	4000	3,560
3.	MS Blending Tank	Tank	1	1210	932
4.	Methanol	Tank	2	4500	7,128
5.	MTBE	Tank	2	5000	7,400
6.	MTBE	Tank	1	2800	2,072

2. The unit should above all the conditions as mentioned in the Environmental Clearance issued by MoEF & CC vide Memo No.J-11-11/194/2016-1A-11(1) dated 20-03-2018 and Consent to Establish (NOC) issued by WBPCB vide Memo No.357-2N-58/2006 (E) Dated 29-06-2018 and its amendment thereafter.
3. This Consent may be revoked at any time on violation of environmental norms.


Sr. Environmental Engineer
Camac Street Circle Office
West Bengal Pollution Control Board

Senior Environmental Engineer
W.B. Pollution Control Board

F. No. 11-52/2020- IA III
Government of India
Ministry of Environment, Forest and Climate Change
IA-III Division (CRZ)

Indira Paryavaran Bhawan
Jor Bagh Road,
New Delhi -110003
Dated: 19th May, 2021

To,

The General Manager
M/s Haldia Petrochemicals Ltd,
P.O. Durgachak, City-Haldia,
District- East Medinipur-721602,
West Bengal

Subject: CRZ clearance for laying of pipelines at the Haldia Dock Complex, West Bengal- regarding.

Sir,

This has reference to your online proposal No. IA/WB/CRZ/183471/2020 received in this Ministry on the above mentioned project proposal for CRZ Clearance, in accordance with the provisions of the Coastal Regulation Zone (CRZ) Notification, 2011 issued under the Environment (Protection) Act, 1986.

2. The proposal was considered by the Expert Appraisal Committee (EAC) for Infrastructure Development, Coastal Regulation Zone, Building / Construction and Miscellaneous projects, in its 252nd EAC, 255th and 259th held on 29/12/2020, 12/02/2021 and 19/03/2021 respectively. The details of the project as per the documents submitted and presented during the aforesaid meeting are as under

- (i) M/s Haldia Petrochemicals Ltd. applied CRZ clearance for laying of pipelines from HPL facilities to the Oil Jetties of Haldia Dock Complex.
- (ii) Haldia Petrochemicals Limited (HPL), has a Naphtha based petrochemical manufacturing industry in Haldia, Purba Medinipur District. The facility is under expansion mode and has obtained the requisite Environmental Clearance on 20 March, 2018 from Ministry of Environment, Forest and Climate Change.
- (iii) The proposed Project site of Haldia Petrochemicals Ltd Geo-coordinates are as follows.
 - 22° 3'33.70"N and 88° 6'13.08"E (Boundary of HPL);
 - 22° 1'49.61"N and 88° 5'56.15"E (HOJ-1);
 - 22° 1'40.98"N and 88° 5'45.74"E (HOJ-2);
 - 22° 0'56.18"N and 88° 4'10.62"E (HOJ-3); and
 - 22°1'33.019"N and 88°5'30.735"E (Outer Terminal -2).
- (iv) The project facility is located approx. 125 km south-west of Kolkata. The project facility is accessible through NH-6 up to Kolaghat and then through NH-41, which runs approximately 4.22 km north-west from the project facility. Silpaprabesh station (part of south-eastern Railway Division) is within 1 km of the facility. On the



waterfront, the project facility is accessible through Haldia Dock Complex on Hooghly River.

- (v) Haldia Petrochemicals Ltd is within 2 km (aerial distance) of Hooghly River.
- (vi) There are three riverine jetties (HOJ-1, 2 and 3) and one proposed Outer Terminal 2 (OT-2) for oil and chemical handling, operated by Syamaprasad Mookerjee Port Trust.
- (vii) HPL imports and exports chemicals through these HOJ's. In 2018, HPL received environmental clearance for enhanced capacity of Naphtha cracking and diversification to new products. This also requires transport of chemicals through new pipeline from existing and proposed jetties.
- (viii) The proposed project site falls in CRZ IB and CRZ II area as per CRZ Notification, 2011.
- (ix) The total length of all the proposed pipelines are 58,496 m, of which 2511 m is proposed through the CRZ area (I B and II).
- (x) The total length of the existing pipelines is 38,770 m of which 2228 m lies in the CRZ area (I B and II).
- (xi) The proposed pipelines are as follows:
 - Benzene (1 X 12" NB) – HPL facility to HOJ-1;
 - Methyl Tert Butyl Ether (MTBE) (1 X 18" NB) – HPL facility to HOJ-3;
 - Nitrogen (3 X 4" NB) - HPL facility to HOJ-1, 2 & 3;
- (xii) Proposed Pipelines (to be laid after completion of proposed Outer Terminal- 2 by Haldia Dock Complex)
 - Hydrogenated Pyrolysis Gasoline (HPG)/Motor Spirit (MS) - (1 x 16" NB) - Extension from HOJ 2
 - Nitrogen (1 x 4" NB) - Extension from HOJ 2
 - Benzene (1 x 12" NB) - Extension from Marine Office
 - Methanol (1 x 8" NB) - Extension from Marine Office
 - Butadiene 2 x 6" NB) - Extension from Marine Office
- (xiii) Water requirement of 6 KLD during construction stage of the project is only for civil activities. During hydro-testing of the pipelines, a maximum of 760 m³/day of water for four days will be required. Haldia Petrochemicals Limited has an agreement with Haldia Development Authority (HDA) for supplying water to its facility. The quantity of water used in the construction and operation stage will be met from this water supply.
- (xiv) There is a wastewater treatment plant (WWTP) at Haldia Petrochemicals Limited.
- (xv) Wastewater will not be generated during construction phase. Mobile toilets will be provided at the construction site for the labourer's.
- (xvi) During operation, water will be required for hydro-testing that is a onetime activity. A maximum of 760 m³ of wastewater will be generated from hydro-testing for four days. This wastewater will be treated in the existing WWTP of capacity 3600 m³ per day. The treated water will be disposed into the Green Belt Channel.
- (xvii) During operation phase, approximately 3200 kVA of energy will be consumed, that will be sourced from HPL's Captive Power Plant (CPP).
- (xviii) During construction phase, a maximum of 1 ton of solid waste will be generated and generation of waste in non-CRZ area.
- (xix) Solid Hazardous Waste: This will include oil and paint drums. Oil and grease contaminated cotton wastes, etc. Hazardous waste will be initially segregated and stored at a designated area onsite followed by its disposal through agencies duly authorized by State Pollution Control Board in accordance to Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. HPL has an

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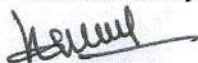
agreement with West Bengal Waste Management Limited for disposal of hazardous wastes;

- (xx) Solid waste such as food waste and recyclables viz. metal scraps, packaging material, etc. will be managed in coordination with municipal authorities, scrap dealers and local waste recyclers respectively;
- (xxi) Construction wastes would be managed in accordance to Construction and Demolition Waste Management Rules, 2016.
- (xxii) During construction phase, approximately maximum of 170 (contractual and permanent) people will be engaged and during operation phase approximately 30 (contractual and permanent) will be engaged.
- (xxiii) The CRZ map of 1:4000 has been prepared by Institute of Environmental Studies and Wetland Management, Govt. of West Bengal.
- (xxiv) The total cost of the project is ₹21 Crores.
- (xxv) West Bengal Coastal Zone Management Authority (WBCZMA) has recommended the project vide its letter No. 1436/EN/T-11-4/01/2019, dated 3rd November, 2020.

2. Based on the recommendation of the West Bengal Coastal Zone Management Authority (WBCZMA) issued vide its letter No. 1436/EN/T-11-4/01/2019, dated 3rd November, 2020 and information submitted as at para no. 2 above and information provided during the presentation before the Expert Appraisal Committee and others, the Ministry of Environment, Forest and Climate Change, in acceptance of the recommendation of the Expert Appraisal Committee (CRZ), hereby accords CRZ Clearance to the above project viz 'laying of pipelines except the existing Benzene pipeline (1 X 8" NB) at the Haldia Dock Complex, West Bengal', for CRZ clearance, under the provision of CRZ Notification, 2011 and amendments thereto and circulars issued thereon, and subject to compliance of the following specific and general conditions as under:

PART A – SPECIFIC CONDITIONS:

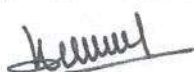
- (i) The existing pipeline project (Naphtha (1 X 24" NB) – HPL facility to HOJ- 3; Butene -1 (1 X 8" NB) – HPL facility to HOJ-1; Hydrogenated Pyrolysis Gasoline (HPG)/Motor Spirit (MS) - (2 x 16" NB)- HPL facility to HOJ-1, HOJ-2; Butadiene (2 X 6" NB)- HPL Facility to HOJ-1; and Benzene (1 X 8" NB) – HPL Facility to HOJ-1) at Haldia Dock Complex was constructed without obtaining prior clearance as per CRZ Notification 1991 and thus is in Violation of CRZ Notification. **The project proponent shall obtain the necessary clearance for the same in accordance with the Ministry's OM No. 19-75/2015-IA III, dated 19/02/2021 prescribing procedure for dealing violation cases arising due to not obtaining prior CRZ clearance for permissible activities as per CRZ Notification, before commissioning of proposed project.**
- (ii) No groundwater shall be extracted to meet with the water requirements during the construction phase of the project.
- (iii) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction of work.
- (iv) Any physical infrastructure setup during construction period shall be removed simultaneously with completion of laying of each segment of the project.



- (v) All conditions/recommendations stipulated by the West Bengal Coastal Zone Management Authority (WBCZMA) has recommended the project *vide* its letter No. 1436/EN/T-11-4/01/2019, dated 3rd November, 2020, shall strictly be complied with.

PART B - GENERAL CONDITIONS:

- (i) No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction.
- (ii) Management of solid waste in accordance with the Solid Waste Management Rules, 2016 shall be strictly implemented.
- (iii) 'Consent to Establish' and / or 'Consent to Operate' shall be obtained from State Pollution Control Board under the provisions of Air (Prevention and Control of Pollution) Act, 1981 and / or the Water (Prevention and Control of Pollution) Act, 1974, as may be applicable.
- (iv) No permanent labour camp, machinery and material storage shall be allowed in CRZ area.
- (v) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (vi) All liquid waste arising from the proposed development will be disposed of as per the norms prescribed by Central/State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea/coastal water bodies. It shall be ensured that the wastewater generated is treated in the STP as committed by the project proponent. The treated waste water shall be reused for landscaping, flushing and / or HVAC cooling purposes etc. within the development. The project proponent should also make alternate arrangement for situation arising due to malfunctioning of STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.
- (vii) Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- (viii) A copy of the clearance letter shall be uploaded on the website of the concerned State Coastal Zone Management Authority/State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries Centre and Collector's Office / Tehsildar's office for 30 days.
- (ix) A six-monthly monitoring report shall need to be submitted by the project proponent to the concerned regional Office of this Ministry regarding the implementation of the stipulated conditions.



- (x) The Ministry of Environment, Forest & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
- (xi) 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.
- (xii) The above stipulations would be enforced among others 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, the Public Liability (Insurance) Act, 1991, the EIA Notification, 2006 and the extant CRZ regulations.
- (xiii) Full co-operation shall be extended to the officials from the Regional Office of MoEF&CC, during monitoring of implementation of environmental safeguards stipulated. It shall be ensured that documents/data sought pertinent is made available to the monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.
- (xiv) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
- (xv) The Ministry reserves the right to add additional safeguard measures subsequently, if considered necessary, and to take action to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner, including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, for non-compliance.
- (xvi) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective competent authorities.
- (xvii) The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at <http://www.envfor.nic.in>. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the concerned Regional Office of this Ministry.

4. This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

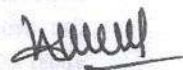
5. Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



6. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

7. The proponent shall upload the status of compliance of the stipulated 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 MoEF&CC, the respective Zonal Office of CPCB and the SPCB.

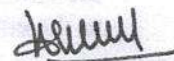
8. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of clearance conditions and shall also be sent to the respective Regional Office of the Ministry by e-mail.



(Dr. H. Kharkwal)
Additional Director /
Scientist 'E' (CRZ)

Copy to:

1. The Secretary, Department of Environment Forests, Science and Technology, Government of West Bengal State Council of Science & Technology Bikash Bhawan, North Block (4th Floor) Salt Lake, Sector III Kolkata – 700091, West Bengal.
2. The Chairman, West Bengal State Council of Science & Technology Bikash Bhawan, North Block (4th Floor) Salt Lake, Sector III Kolkata – 700091, West Bengal.
3. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032
4. The Member Secretary, West Bengal Pollution Control Board, Parivesh Bhawan, 10A, Block-L.A., Sector III, Salt Lake City, Kolkata – 700098, West Bengal.
5. The Member Secretary, West Bengal Coastal Zone Management Authority, Department of Environment, Government of West Bengal, 5th Floor, Prani Sampad Bhawan, Block LB-II, Salt Lake, Sector 3, Vidhan Nagar, Kolkata 700106, West Bengal.
6. The APCCF (C), MOEF&CC Regional Office (EZ), A/3, Chandrasekharapur, Bhubaneswar – 751023, Odisha.
7. Guard File / Record File / Notice Board.
8. Monitoring Cell.



(Dr. H. Kharkwal)
Additional Director /
Scientist 'E' (CRZ)

NOC/NO168852

WEST BENGAL POLLUTION CONTROL BOARD

Parbesh Bhawan
10A, Block-LA, Sector-III
Bidhannagar, Kolkata-700 098



Memo No. 200-403/NPB(HRO)-K/2001 (Pt-VII)

Dated 22/09/2021

From :
Member Secretary,
West Bengal Pollution Control Board

To :
M/s. Haldia Petrochemicals Ltd.
P.O. L.P.S. - Durgachak
Dist - Purba Medinipur, Pin - 721602

To :

WEST BENGAL

Sub : Consent to Establish (NOC) from Environmental Point of View

Ref : Your letter No. HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCLB

Dated 14/07/2021

Dear Sirs,

In response to the application for Consent to Establish (NOC) for proposed Unit of M/s Haldia Petrochemicals Ltd. for manufacturing/storage installation of pipeline (detail in annexure)

at P.O. L.P.S. - Durgachak, Dist - Purba Medinipur, Pin - 721602

this is to inform you that this Board hereby grants the Consent to Establish (NOC) from the environmental point of the above subject to the following conditions and special conditions annexed.

1. The quality of sewage and trade effluent to be discharged from your factory shall satisfy the permissible limits as prescribed in IS : 2490 (Pt. I) of 1974, and/or its subsequent amendment and Environment (Protection) Rules 1986.
2. Suitable measures to treat your effluent shall be adopted by you in order to reduce the pollutional load so that the quality of the effluent satisfies the standards mentioned above.
3. You shall have to apply to this Board for its consent to operate and discharge of sewage and trade effluent according to the provisions of the water (Prevention & Control of Pollution) Act, 1974. No sewage or trade effluent shall be discharged by you without prior consent of this Board.
4. All emission from your factory shall conform to the standards as laid down by this Board.
5. No emission shall be permitted without prior approval of this Board and you shall apply to this Board for its consent to operate and atmospheric emission as per provision of the Air (Prevention & Control Pollution) act, 1981.
6. No industrial plant, furnace, flues, chimneys, control equipment, etc. shall be constructed/reconstructed/erected/re-erected without prior approval of this Board.

NOC NO 168852

7. You shall comply with

- (i) Water (Prevention and Control of Pollution) Cess Act, 1977, if applicable.
- (ii) Water (Prevention and Control of Pollution) Cess Act, 1978, if applicable.
- (iii) Environment (Protection) Act, 1986
- (iv) Environment (Protection) Rules, 1986
- (v) Hazardous Wastes (Management and Handling) Rules, 1989 and Amended Rules, 2000
- (vi) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Amended Rules, 2000
- (vii) Manufacture, Use, Import and Storage and Hazardous Micro-Organisms, Genetically Engineered Organisms or Cell Rules, 1989
- (viii) The Public Liability Insurance Act, 1991 and Amended Act, 1992
- (ix) The Public Liability Insurance Rules, 1991 and Amended Rules 1993
- (x) Biomedical Wastes (Management & Handling) Rules, 1998 and Amended Rules 2000 if applicable.
- (xi) Recycled Plastics Manufacture and Usage Rules 1999, if applicable and
- (xii) Ozone Depleting Substances (Regulation & Control) Rules, 2000, if applicable

8. You will have to abide by any other stipulations as may be prescribed by any authority/local bodies/Government Departments etc.

SPECIAL CONDITION:

See Annexure I

Gross Capital Investment of Rs. 210000000/-

Any violation of the aforesaid conditions shall entail cancellation of this Consent to Establish (NOC)

Yours faithfully,

Mandi
22/09/21
Member Secretary,
West Bengal Pollution Control Board
Environmental Engineer
Dated... W.B. Pollution Control Board
Operation & Execution Cell

Memo No.

Copy forwarded for information to :

1. Chief Inspector of Factories, Government of West Bengal, N. S. Building, Kolkata-700 001
2. Director of Industries/Director of Cottage & Small Scale Industries, Government of West Bengal, N. S. Building, Kolkata-700 001
3. Guard file, West Bengal Pollution Control Board.
4. Environmental Engineer, I/II/Alipur R.O./Howrah R.O./Hooghly R.O./B.R.O./D.R.O./Haldia R.O./S.R.O./Asansol/ Sub-R.O./WBPC Board

Himalaya Bhawan
Delhi Road, Dankuni
Dist. Hooghly

Vill, Panpur
Kalyani Expressway
P.O. Narayanpur
Dist. 24 Pgs. (N)

Sahid Khudiram Sarani
City Centre, Durgapur-16
Dist. Burdwan

10, Camac Street
2nd Floor
Kolkata-700 017

Paribesh Bhawan
10A, LA-Block, Sector-III
Salt Lake City,
Kolkata - 700 098

Block-05 at 40
Flats Complex
Adjacent to Priyambada
Housing Estate
P.O. : Khanjanchak,
P.S. Durgachak
Haldia-721602
Dist. : Purba Medinipur

Paribahan Nagar
Matigara, Siliguri
Dist. Darjeeling

Satya Chowdhury
Indoor Stadium
Balurchar Bandh Road
Malda-732101

Asansol Sub-Regional Office
ADDA Commercial Market (2nd Floor)
Opposite Asansol Fire Station
G.T. Road, Asansol-713 301

Member Secretary,
West Bengal Pollution Control Board

Annexure – I

Annexure to NOC Sl. NO168852

NOC issued to **M/s Haldia Petrochemicals Ltd** located at P.O & P.S-Durgachak, Dist-Purba Medinipur, Pin-721602

for installation of proposed pipeline are as follows:

- Benzene(1x12" NB) – HPL facility to HOJ-1 and Extension from Marine office to proposed OT-2 of HDC(1X12")
- Methyl Tertiary-Butyl Ether(MTBE) (1x18" NB) – HPL facility to HOJ-3
- Nitrogen (3x4" NB) – HPL facility to HOJ-1, 2 & 3 (3x4" NB) and Extension from HOJ-2 to proposed OT-2 of HDC(1X4" NB).
- HPG/MS – Extension from HOJ-2 to proposed OT-2 of HDC(1X16" NB)
- Methanol- Extension from Marine office to proposed OT-2 of HDC(1X8" NB)
- Butadiene – Extension from Marine office to proposed OT-2 (2X6" NB).


Environmental Engineer
West Bengal Pollution Control Board

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

Special Conditions issued to: M/s. Haldia Petrochemicals Ltd. for laying of Pipeline from HPL Facility to the Oil Jetties of Haldia Dock Complex for transportation of different chemicals through new pipeline from existing and proposed jetties.

Emission:-

- I. Process: Nil
- II. DG sets at pump station to be equipped with stacks of appropriate height and to be provided with acoustic enclosures and residential silencer. Stacks to have sampling port, platform and ladder as per the Emission Regulation part -III of CPCB.

A) Effluent:-

- III. Process: Nil
- IV. Domestic (at pump station): to be discharged through septic tank to soak-pit within the unit premises.

B) Solid Waste:-

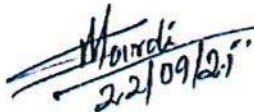
Process: Nil

At Pump Station:

- I. Municipal Solid Waste to be segregated, collected and disposed off through onsite compost plant regularly as per the Solid Wastes Management Rules, 2016 and Plastic Waste Management & Handling Rules 2016, as proposed.
- II. Hazardous Waste to be collected and disposed of as per the Hazardous Wastes (Handling and Trans-boundary Movement) Rules, 2016.

C) Special Condition:-

1. The surface facilities shall be installed as per the applicable codes and standards, international practices and applicable local regulations.
2. The project authorities shall install SCADA system with dedicated optical fiber based telecommunication link for safe operation of pipeline and Leak Detection System. Additional sectionalizing valves in the residential area and sensitive installations shall be provided to prevent the amount of gas going to the atmosphere in the event of pipeline failure. Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.
3. The design, material of construction, assembly, inspection, testing and safety recommendations of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by and OISD standard 141. Pipeline wall thickness and minimum depth of burial at river crossing and casings at rails, major road crossings should be in conformity with ANSI/ASME requirements.
4. Annual safety audit should be carried out for the initial three years by an independent agency and report submitted to this State Board for ensuring the strict compliance of safety regulations on operations and maintenance.
5. The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting non-destructive method (s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey should be carried out at regular intervals to ensure the adequacy of cathodic protection system.
6. Emergency Response Plan shall be based on the guidelines prepared by OISO, DGMS and Govt. of India. Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be strictly followed.
7. Project proponent shall comply with the environment protection measures and safeguards recommended in the /risk analysis report/disaster management plan.
8. Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.
9. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care,


22/09/25
Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell

10. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.
11. The project authorities must strictly comply with the rules and regulation with regarding to handling and disposal of Hazardous and Other Wastes (Management, Handling and Transboundary Movement) Rules, 2016 wherever applicable. Authorization from the State Pollution Control Board must be obtained for collections / treatment / storage / disposal of hazardous wastes.

1. The project proponent/authorities must obtain all other approvals from concerned Central/State Govt. agencies including consent to operate from State Pollution Control Board under Air and Water Acts at the time of commissioning.
2. Noise control – Ambient noise level & D.G. set noise level not to exceed the permissible limit. The standards/guidelines for control of noise from stationary D.G. set prescribed under notification of Ministry of Environment & Forest, Govt. of India dated 22.12.1998 namely Environment (Protection) (Second amendment) Rules 1998 to be followed
3. Permission from local authority to be obtained.
4. No equipment or machinery to be installed without prior permission of the State Board.
5. Use of energy efficient construction materials should be ensured. Energy efficient systems should be installed.
6. Ground water should not be abstracted without prior permission of the Local body as well as the Competent Authority as per the West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.
7. The proponent shall undertake awareness programs for the local residents to promote water and energy conservation and to ensure environmental protection.
8. The unit is directed to maintain the norms of the State Board with respect to emission and discharge.
9. All other statutory clearances as applicable to be obtained from the competent authority.
10. The unit shall abide by all other condition as mentioned in Coastal Regulation Zone (CRZ) issued vide no. F.No.J-11-52/2020-1A III dated 19.05.2021.
11. This NOC is valid up to 31.08.2028 for laying of Pipeline from HPL Facility to the Oil Jetties of Haldia Dock Complex for transportation of different chemicals through new pipeline from existing and proposed jetties.

Environmental Engineer
W. B. Pollution Control Board
Operation & Execution Cell



WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Bhawan

Bldg. No. 10 A, Block-LA, Sector-III, Bidhan Nagar,

Kolkata - 700 098

Tel : 0091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

2335-0261 / 8212 / 8213 / 7428 / 5975

Fax : 0091 (033) 2335 6730 / 2813

Website : www.wbpcb.gov.in, e-mail : wbpcbnnet@wbpcb.gov.in

Date: 23.02.2016

Memo No. 59 /2S(HW)-294/99-2000 (Pt-I)

Form - II

Grant of Authorization under the provisions of the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 & amendments made thereafter.

Ref.: Application for renewal of authorization dated 24.11.2015 for management & handling of hazardous waste.

Authorization for Operating a facility for generation, handling, collection, reception, storage, transport, recycling, reprocessing, reuse and disposal of hazardous wastes under Rules 5(4) of the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 & amendments made thereafter.

1. Memo No. and date of previous Authorizations issued by the Board 66/2S(HW)-294/99-2000 dt. 06.04.2011.

2. M/s. Haldia Petrochemicals Ltd.

P.O. & P.S.: Durgachak, Haldia, District: Purba Medinipur, Pin- 721 602, West Bengal is hereby granted an authorization to operate a facility for generation, handling, collection, reception, transport, storage and disposal of hazardous waste of category (s) "3.3, 1.7, 5.1, 5.2, 15.2, 33.3, 34.2, 34.3, 35.3, 36.1, 36.2, B4" on the premises situated in P.O. & P.S.: Durgachak, Haldia, District: Purba Medinipur, Pin- 721 602, West Bengal.

3. The authorization shall be in force for a period upto 31.12.2020.

4. The authorization is subject to the condition stated below and such conditions are as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986.

Ghose
22.02.16

[Chief Engineer]

Waste Management Cell

on behalf of

Member Secretary

West Bengal Pollution Control Board

Encl.: Terms & conditions for authorization.

Terms and conditions of authorization

1. The authorization shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made thereunder.
2. The unit shall not store hazardous waste for more than 90 Days under any circumstances.
3. The authorisation or its renewal shall be produced during inspection at the request of an officer authorized by the State Pollution Control Board.
4. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the State Pollution Control Board.
5. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
6. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
7. An application for the renewal of authorization shall be made as laid down in Rule 5 (7) of the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 & amendments made thereafter.
8. Without Board's permission the authorized person cannot dispose of any category of hazardous waste of the unit outside the factory premises.
9. The person authorized is allowed to store the hazardous wastes inside the factory with all precautionary measures to avoid any leaching. Moreover direct land filling of any hazardous wastes is not permitted.
10. The occupier will not be allowed to dispose / recycle / reuse or reprocess any of their hazardous wastes by any unauthorized external agency / or without the consent of State Board.
11. The occupier / generator will not be allowed to transport any types of hazardous wastes through any unauthorized transporters as per Motor Vehicles Act, 1988 and Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 & amendments made thereafter.
12. Hazardous waste storing drums / pits should be properly covered.
13. Proper display arrangement showing characteristic / category / quantity per month etc. to be made at the storing site.
14. The occupier should maintain all other formalities viz. Form - 3, 4, 6, 11, 12 & 13 as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 & amendments made thereafter.
15. Any off-specification product and containers of hazardous chemicals should not be disposed of outside or sold to any unauthorized agency without the knowledge of the Board.
16. All safety precautions and procedures to be adopted during handling of hazardous wastes.
17. Good housekeeping to be maintained in the factory.
18. Authorization may be withdrawn any time if hazardous wastes storage facilities are not found satisfactory and in case of non-compliance of any statutory provisions under the said rules.

Terms and conditions of authorization

19. The unit shall store the hazardous wastes (category wise separately) under shade in an environment friendly safe manner within the premises at designated places.
20. The unit shall not store hazardous wastes onsite for more than 90 (ninety) days.
21. Oil soaked jute/cotton waste, molecular sieves, spent ion exchange resins, incineration ash, oil impregnated coke /spent carbon, discarded asbestos, damaged & discarded oil filters ,waste refractory bricks of the incinerators, furnaces etc., sludge from wet scrubbers shall be disposed to the CHWTSDF, Haldia.
22. Used oil, spent catalyst, waste electrical & electronic assemblies shall be sold through manifest system to the recyclers having valid registration of the Central Pollution Control Board (CPCB) /State Pollution Control Board (SPCB). During each sale, the original registration Pass-book issued by the CPCB/SPCB to the registered recyclers shall be endorsed mentioning the quantity and copy of the same should be kept as record. Non recyclable spent catalyst shall be disposed to the CHWTSDF, Haldia.
23. Waste oil/oil sludge is to be analyzed as per Part B of Schedule V of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008. Waste oil (Oil sludge) can be used as a fuel in furnaces for energy recovery if it meets the above mentioned specifications either as such or after reprocessing through reprocessors of Waste Oil having valid registration of CPCB/SPCB. Waste oil (Oil sludge) which does not meet the aforementioned specification shall either be disposed to the CHWTSDF, Haldia, Purba Midnapur or to be disposed of in cement kilns through co-incineration having co-incineration facilities with prior approval from the CPCB.
24. Discarded & empty chemical containers contaminated with hazardous chemicals shall be disposed only after passivation/cleaning (if possible) and the resulting effluent to be treated in the ETP. In case, passivation is not possible, then the same to be disposed to the CHWTSDF, Haldia or to be sent to the State Boards' authorised drum cleaning units having approval from the CPCB under Rule 11 of the Hazardous Waste (Management, Handling & Transboundary Movement) Rules'2008.
25. Used lead acid battery shall be managed as per the Batteries (Management & Handling) Rules, 2001.
26. E-wastes shall be managed as per E-waste (Management & Handling) Rules, 2011.
27. The unit shall submit Annual return in Form 4 on a regular basis.
28. Records of hazardous waste generation, storage and disposal shall be maintained properly and shall be available to the inspecting officials of the State Board during inspection.
29. The unit shall update regularly the environmental information in Display Boards as per the order of the Hon'ble Supreme Court dated. 14.10.2003 in W.P.(C) NO.657 of 1995.
30. Authorisation will be revoked in case of non-compliances with any of the above conditions.
31. The unit shall apply for the renewal of hazardous waste authorisation at least 60 (sixty) days before the expiry of this authorisation.

M/s. Haldia Petrochemicals Ltd.
P.O.& P.S.: Durgachak, Haldia,
District: Purba Medinipur, Pin- 721 602. West Bengal

Ghose
22.02.16

[Chief Engineer]
Waste Management Cell
on behalf of
Member Secretary
West Bengal Pollution Control Board



Plant :
Post Box No.-12, Durgachak,
Haldia, Dist.-Purba Medinipore
West Bengal, Pin-721602, India
TEL. : + 91(03224) 274007/384/400/876
WEBSITE: www.haldiapetrochemicals.com
CIN: U24100WB2015PLC205383

HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCB

January 15, 2021

Ms. Manjira Biswas
Asst. Environmental Engineer (WMC)
West Bengal Pollution Control Board
Paribesh Bhawan,
10A, Block – LA, Sector-III,
Kolkata – 700 098

Sub: Application for Renewal of Hazardous Waste Authorisation under the provisions of Hazardous Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereafter

Madam,

This has reference to our online application (No.96890) submitted on 27.11.2020 and subsequent letter no. HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCB dated 18.12.20 for renewal of hazardous waste authorization vide Memo No. 59/2S (HW)-294/99-2000 (Pt-I) dated 23.02.16, expired on 31.12.2020.


Enclosed please find herewith the On-line filled-in Application for Renewal of 'Authorisation' for management of various types of Hazardous Wastes generated in our petrochemical manufacturing processes along with all necessary enclosures for your perusal.

The requisite fee of Rs. 14300/- (Rupees Fourteen Thousand Three Hundred Only) was credited online through the portal of WBPCB (www.wbocmms.nic.in) on 13.01.21 and the receipt no.21011385651688 of the said payment is attached along with this application for your reference.

We request your kind consideration towards renewal of the said "Hazardous Waste Authorisation" for next 5 years w.e.f 01.01.2021 to 31.12.2025.

Thanking you,

Yours sincerely,
For Haldia Petrochemicals Limited


Ashok Kumar Ghosh
Head-Plant & EVP
15/1/2021

Encl.: As above

- | | |
|------------------|---|
| Annexure – I: | Online Application Form |
| Annexure – II: | Online Payment Receipt |
| Annexure – III: | Copy of Consent to Establish granted by WBPCB for 700 KTA Ethylene Plant |
| Annexure – IV: | Copy of Consent to Operate granted by WBPCB for 700 KTA Ethylene Plant |
| Annexure – V: | Hazardous Waste storage and handling system/procedure (with photographs) |
| Annexure – VI: | Copy of Agreement of Membership of Common HW Treatment Storage and disposal Facility (CHWTSDF) |
| Annexure – VII: | Photographs of one English and one Bengali updated Environmental Information on display boards (English and Bengali formats) of size 6'x4' installed outside the main gate. |
| Annexure – VIII: | Compliance report w.r.t previous authorisation |



Plant :
Post Box No.-12, Durgachak,
Haldia, Dist.-Purba Medinipore
West Bengal, Pin-721602, India
TEL. : + 91(03224) 274007/384/400/876
WEBSITE: www.haldiapetrochemicals.com
CIN: U24100WB2015PLC205383

HPL/IMS/HSEF/R/4.3.2/08/ENV/E-04/WBPCB

December 18, 2020

Mr. Sisir Mandal
Environmental Engineer (WMC)
West Bengal Pollution Control Board
Paribesh Bhawan,
10A, Block – LA, Sector-III,
Kolkata – 700 098

Sub: Collective Hazardous Waste Quantity for the application of renewal of Hazardous Waste Authorization under the provisions of Hazardous Wastes (Management & Transboundary Movement) Rules, 2016 and amendments thereafter

Sir,

This has reference to our online application (No.96890) for renewal of hazardous waste authorization Memo No. 59/25 (HW)-294/99-2000 (Pt-I) dated 23.02.16 valid up to 31.12.20. We applied for the renewal of Hazardous waste authorization online on 27.11.20 but the application got rejected by mentioning that "do not repeat the similar type of waste rather, mention it collectively" on 07.12.20.

This is to inform you that in the online portal we can put the details of the hazardous wastes as per the category numbers and against each hazardous waste only one disposal route can be selected. But we are generating wastes of similar category which have different disposal routes because of that it was not possible to provide consolidated amount into the said format. So as discussed with you we are submitting the consolidated quantity of the wastes in **Annexure-1**.


This is also to informing you that some of our wastes are not generated on regular basis, the wastes only used to generate during process shutdown/cleaning/change of material etc. once in 4/5/10 years (approximately). We have given the quantity by dividing it in proportionate quantity per year basis but the generation quantity may be higher for a particular year as compared to the per year figure. The details are given in Annexure -1.

Please note that we did not find any suitable category for disposal of Dry Cell Battery for secured land filling to TSDF. You are requested to advise on the same.

In this context we request you to consider our application favorably and renew our Hazardous Waste Authorization at the earliest.

Thanking you,

Yours very truly,
For Haldia Petrochemicals Ltd.,


Ashok Kumar Ghosh 18/12/2020
Head-Plant & EVP

Encl.: As above

Annexure - 1

Sl. NO.	Name of Process	Name of Process Waste (Category No)	Waste Stream	Quantity (MT/Year)	Total Consolidated Quantity (MT/Year)	Waste Type	Waste Storage	Waste Disposal	Actual Waste Quantity & Frequency of generation (approx.)
1	Petrochemical processes pyrolytic operations	Furnace or reactor residue and debris	1.1	10	10	Landfillable	Jumbo Bag	Common Hazardous Waste TSDF Facility,	50 MT in 5 years
2	Petrochemical processes pyrolytic operations	Spent catalyst and molecular sieves (Spent Catalysts)	1.6	40	75	Recyclable	MS Drums	Recovery and Reuse-Authorized recyclers	160 MT in 4 years
		Spent catalyst and molecular sieves (Molecular Sieve)		35		Landfillable	Jumbo Bag	Common Hazardous Waste TSDF Facility, Haldia	140 MT in 4 years
3	Cleaning, emptying and maintenance of petroleum oil storage tanks including ships	Sludge and filters contaminated with oil	3.3	80	104	Incinerable	Gunny Bag	Common Hazardous Waste TSDF Facility, Haldia	520 MT in 5 years
				24		Incinerable	Gunny Bag	Incineration in own Incinerator	
4	Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	Used or spent oil	5.1	200	200	Recyclable	MS Drums	Recovery and Reuse-Authorized recyclers	
5	Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	Wastes or residues containing oil (Slop Oil)	5.2	1200	1452	Recyclable	MS Tanks	Recovery and Reuse-Authorized recyclers	
		Wastes or residues containing oil (Quench Oil/Exhaust Oil etc.)		250		Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	
		Wastes or residues containing oil (Polymeric material mixed with hydrocarbon (popcorn))		2		Incinerable	MS Drums	Incineration in own Incinerator	
6	Handling of hazardous chemicals and wastes	Empty barrels / containers / liners contaminated with hazardous chemicals/wastes	33.1	100 (Numbers/year)	100 (Numbers/year)	Landfillable	Oil Scrap Yard	Common Hazardous Waste TSDF Facility, Haldia	
7	Handling of hazardous chemicals and wastes	Contaminated cotton rags or other cleaning materials	33.2	3	3	Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	
8	Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	Spent ion exchange resin containing toxic metals	35.2	20	30	Incinerable	Jumbo Bag	Common Hazardous Waste TSDF Facility, Haldia	
				10		Incinerable	Jumbo Bag	Incineration in own Incinerator	

9	Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	Chemical sludge from waste water treatment	35.3	250	1000	Incinerable	Sludge Drying Bed	Incineration in own incinerator	
				50		Incinerable	Sludge Drying Bed	Common Hazardous Waste TSDF Facility, Haldia	
				700		Incinerable	Surge Pond	TSDF/Co-processing/ Bioremediation	10500 MT in 15 years
10	Purification process for organic compounds/solvents	Spent carbon or filter medium (Oil Impregnated Coke)	36.2	20	30	Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	
		Spent carbon or filter medium (Oil Impregnated Coke)		10		Incinerable	MS Drums	Incineration in own incinerator	
11	Hazardous waste treatment processes, e.g. pre-processing, incineration and concentration	Sludge from wet scrubbers	37.1	2	2	Recyclable	Recycled to WWTP	Recycled to WWTP	
12	Hazardous waste treatment processes, e.g. pre-processing, incineration and concentration	Ash from incinerator and flue gas cleaning residues	37.2	100	100	Landfillable	Plastic Drums	Common Hazardous waste TSDF Facility, Haldia	

FORM 1

[See Rules 6(1)]

Application Required For Grant/Renewal Of Authorisation For Generation Or Collection Or Storage Or Transport Or Reception Or Recycling Or Reuse Or Recovery Or Pre Processing Or Co- Processing Or Utilisation Or Treatment Or Disposal Of Hazardous And Other Waste

Part A: General(to be filled by all)

	Application No.	96890
	Category	RED
	Date of Submission	2020-06-12 11:10:00.739
1.	Name and address of the unit and location of facility:	Haldia Petrochemicals Limited HPL Link Road
(a)		
(b)	Name of the Occupier of the facility or operator of disposal facility with designation, Tel, Fax and e-mail:	Subhasendu Chatterjee/Whole Time Director/9810003866/s.chatterjee@hpl.co.in
(c)	Authorisation required for(Please tick mark appropriate activity or activities:)	Generation, Collection, Storage, Transportation, Reception, Disposal, Incineration
(d)	In case of renewal of authorization previous authorization numbers and dates and provide copies of annual returns of last three including the compliance reports with respect to the conditions of Prior Environmental Clearance, wherever applicable:)	Attached
2	Nature and quantity of Hazardous waste handled in T/Annum (or) KL/Annum	


-----This is computer generated application -----

Name of Process	Name of Hazardous Waste (Category No)	Quantity	Waste Type	Waste Storage	Waste Disposal	Source of generation of waste	Physical status	Quantity stored at any time	Quantity accumulated as on 31st March
1. Petrochemical processes pyrolytic operations	1.1 Furnace or reactor residue and debris	10 Metric Tonnes/Year	Landfillable	Jumbo Bag	Common Hazardous Waste TSDF Facility, Haldia	Furnace/Heater/Incinerator refractory	Solid	3	0 Metric Tonne
1. Petrochemical processes pyrolytic operations	1.6 Spent catalyst and molecular sieves	40 Metric Tonnes/Year	Recyclable	MS Drums	Recovery and Reuse-Authorized recyclers	Process Plant	Solid	10	19 Metric Tonne
1. Petrochemical processes pyrolytic operations	1.6 Spent catalyst and molecular sieves	35 Metric Tonnes/Year	Landfillable	Jumbo Bag	Common Hazardous Waste TSDF Facility, Haldia	Process Plant	Solid	9	112.57 Metric Tonne
3. Cleaning, emptying and maintenance of petroleum oil storage tanks including ships	3.3 Sludge and filters contaminated with oil	80 Metric Tonnes/Year	Incinerable	Gunny Bag	Common Hazardous Waste TSDF Facility, Haldia	Hydrocarbon Storage Tank	Semi solid	20	35.96 Metric Tonne
3. Cleaning, emptying and maintenance of petroleum oil storage tanks including ships	3.3 Sludge and filters contaminated with oil	24 Metric Tonnes/Year	Incinerable	Gunny Bag	Incineration in own incinerator	Hydrocarbon Storage Tank	Semi solid	6	0 Metric Tonne
5. Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	5.1 Used or spent oil	200 Metric Tonnes/Year	Recyclable	MS Drums	Recovery and Reuse-Authorized recyclers	Process Plant	Oily	50	164.31 Metric Tonne
5. Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	5.2 Wastes or residues containing oil	1200 Metric Tonnes/Year	Recyclable	MS Tanks	Recovery and Reuse-Authorized recyclers	Process Plant	Oily	120	0 Metric Tonne

5. Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	5.2 Wastes or residues containing oil	250 Metric Tonnes/Year	Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	Process Plant	Oily	65	0 Metric Tonne
5. Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	5.2 Wastes or residues containing oil	2 Metric Tonne	Incinerable	MS Drums	Incineration in own incinerator	Process Plant	Solid	0.5	1.8 Metric Tonne
33. Handling of hazardous chemicals and wastes	33.1 Empty barrels / containers / liners contaminated with hazardous chemicals/wastes	100 Numbers/Year	Landfillable	Oil Scrap Yard	Common Hazardous Waste TSDF Facility, Haldia	Container contaminated with hazardous chemical/waste	Solid	25	0 Number of
33. Handling of hazardous chemicals and wastes	33.2 Contaminated cotton rags or other cleaning materials	3 Metric Tonnes/Year	Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	Cleaning of equipments	Solid	1	8.56 Metric Tonne
35. Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	35.2 Spent ion exchange resin containing toxic metals	20 Metric Tonnes/Year	Incinerable	Jumbo Bag	Common Hazardous Waste TSDF Facility, Haldia	Water Treatment Plant	Solid	5	0 Metric Tonne

----This is computer generated application ----

35.Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	35.2 Spent ion exchange resin containing toxic metals	10 Metric Tonnes/Year	Incinerable	Jumbo Bag	Incineration in own incinerator	Water Treatment Plant	Solid	3	1.8 Metric Tonne
35.Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	35.3 Chemical sludge from waste water treatment	250 Metric Tonnes/Year	Incinerable	Sludge Drying Bed	Incineration in own incinerator	Waste Water Treatment Plant	Solid	75	0 Metric Tonne
35.Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	35.3 Chemical sludge from waste water treatment	50 Metric Tonnes/Year	Incinerable	Sludge Drying Bed	Common Hazardous Waste TSDF Facility, Haldia	Waste Water Treatment Plant	Solid	0	0 Metric Tonne

	35. Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	35.3 Chemical sludge from waste water treatment	700 Metric Tonnes/Year	Incinerable	Surge Pond	TSDF/Co-Processing/Bioremediation	Surge Pond of Waste Water Treatment Plant	Semi solid	0	0 Metric Tonne
	36. Purification process for organic compounds/solvents	36.2 Spent carbon or filter medium	20 Metric Tonnes/Year	Incinerable	MS Drums	Common Hazardous waste TSDF Facility, Haldia	Process Plant	Solid	5	8.71 Metric Tonne
	36. Purification process for organic compounds/solvents	36.2 Spent carbon or filter medium	10 Metric Tonnes/Year	Incinerable	MS Drums	Incineration in own incinerator	Process Plant	Solid	0	0 Metric Tonne
	37. Hazardous waste treatment processes, e.g. pre-processing, incineration and concentration	37.1 Sludge from wet scrubbers	2 Metric Tonnes/Year	Recyclable	Recycled to WWTP	Recycled to WWTP	Waste Water Treatment Plant	Liquid	0	0 Metric Tonne
	37. Hazardous waste treatment processes, e.g. pre-processing, incineration and concentration	37.2 Ash from incinerator and flue gas cleaning residues	100 Metric Tonnes/Year	Landfillable	Plastic Drums	Common Hazardous waste TSDF Facility, Haldia	Incinerator	Solid	25	52.97 Metric Tonne
3 a)	Year of commissioning and commencement of Production?					2020 2001 				
b)	Whether the industry works 1 shift/2 shifts/round the clock?					Round the clock				

A. K. GHOSH
Head Plant Executive Vice President
Haldia Petrochemicals Ltd.
Haldia

4	<p>Provide copy of the Emergency Response Plan (ERP) which should address procedures for dealing with emergency situations (viz. Spillage or release or fire) as specified in the guidelines of Central Pollution Control Board. Such ERP shall comprise the following, but not limited to:</p> <ul style="list-style-type: none"> • Containing and controlling incidents so as to minimise the effects and to limit danger to the persons, environment and property; • Implementing the measures necessary to protect persons and the environment; • Description of the actions which should be taken to control the conditions at events and to limit their consequences, including a description of the safety equipment and resources available; • Arrangements for training staff in the duties which they are expected to perform; • Arrangements for informing concerned authorities and emergency services; and • Arrangements for providing assistance with off-site mitigatory action. <p>(To be attached separately)</p>	Attached
5	<p>Provide undertaking or declaration to comply with all provisions including the scope of submitting bank guarantee in the event of spillage, leakage or fire while handling the hazardous and other waste</p> <p>(To be attached separately)</p>	Attached

Part B: To be filled by hazardous waste generators

a	Products and by-products manufactured (names and product wise quantity per annum):
---	--

Product/By product Name		Production Capacity(Per Month)	Average Production(Per Month)
Benzene		132000 Metric Tonnes/Year	10931 Metric Tonnes/Month
Butadiene		101000 Metric Tonnes/Year	6941 Metric Tonnes/Month
Ethylene		700000 Metric Tonnes/Year	54098 Metric Tonnes/Month
High Density Polyethylene (HDPE)		334000 Metric Tonnes/Year	25484 Metric Tonnes/Month
Linear Low Density Polyethylene (LLDPE)		386000 Metric Tonnes/Year	28809 Metric Tonnes/Month
Mixed C4		214000 Metric Tonnes/Year	15854 Metric Tonnes/Month
Polypropylene (PP)		341000 Metric Tonnes/Year	26840 Metric Tonnes/Month
Propylene		350000 Metric Tonnes/Year	28033 Metric Tonnes/Month
Raw Pyrolysis Gasoline (RPG)		481000 Metric Tonnes/Year	39796 Metric Tonnes/Month
C6 Raffinate		36600 Metric Tonnes/Year	4601 Metric Tonnes/Month
CBFS		899300 Metric Tonnes/Year	5990 Metric Tonnes/Month
Cyclopentane		5200 Metric Tonnes/Year	517 Metric Tonnes/Month
LPG		113000 Metric Tonnes/Year	2417 Metric Tonnes/Month
Motor Spirit (MS)		250600 Metric Tonnes/Year	0 Metric Tonnes/Month
Power Output (CPP)		116 Megawatt	77.2 Megawatt
Py Gas		130500 Metric Tonnes/Year	13454 Metric Tonnes/Month
Steam		377712 Metric Tonnes/Year	16948 Metric Tonnes/Month
b	Process description including process flow sheet indicating Inputs and Outputs (raw materials, chemicals, products, by-products,wastes, emissions, wastewater etc.) Please attach separate sheets:)		Attached
c)	Characterstics(waste-wise) and Quantic of waste generation per annum:		

----This is computer generated application ----

Schedule	Name of Process	Name of Hazardous Waste (Category No)	Quantity	Characteristics of each waste	The details of utilization with in the plants such as Reuse/ Recycling/ Recovery/ Reprocessing etc	If not utilised within the plant, provide details of what is done with this waste	Details of arrangements for transportation to actual users/ TSDF	Details of the environmental safeguards and environmental facilities provided for safe handling
Schedule I	1. Petrochemical processes pyrolytic operations	Furnance or reactor residue and debris	10 Metric Tonnes/ Year	Solid Inorganic material	NA	Send to BWML for secured landfill	By designated truck of BWML	Store in designated place at scrap yard in jumbo bags
Schedule I	1. Petrochemical processes pyrolytic operations	Spent catalyst and molecular sieves	35 Metric Tonnes/ Year	Solid Inorganic material	NA	Spent Molecular Sieve is sent to BWML for secured landfill	By designated truck of BWML	Spent Molecular Sieve is stored in designated place at scrap yard in jumbo bags
Schedule I	5. Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	Wastes or residues containing oil	2 Metric Tonne	Solid Polymeric Material Mixed with Hydrocarbon (Popcorn)	Incineration in own incinerator	NA	NA	Store in covered metallic drums
Schedule I	3. Cleaning, emptying and maintenance of petroleum oil storage tanks including ships	Sludge and filters contaminated with oil	24 Metric Tonnes/ Year	Semi solid (Tank Bottom Sludge) hydrocarbon mixture	Incineration in own incinerator	NA	NA	Store in sludge drying bed

Schedule I	3.Cleaning, emptying and maintenance of petroleum oil storage tanks including ships	Sludge and filters contaminated with oil	80 Metric Tonnes/ Year	Solid (Filter), Semi solid (Tank Bottom Sludge) hydrocarbon mixture	NA	Send to WBWML for Incineration	By designated truck of WBWML	Waste Filter is stored in metallic drums and Tank bottom sludge is stored in gunny bags
Schedule I	5.Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	Used or spent oil	200 Metric Tonnes/ Year	Liquid Mixed Hydrocarbon	NA	Send to Authorised Recycler	By designated truck of Recycler	Store in covered metallic drums at Oil Scrap Yard
Schedule I	5.Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	Wastes or residues containing oil	1200 Metric Tonnes/ Year	Liquid Mixed Hydrocarbon	NA	Send to Authorised Recycler	By designated tanker of Recycler	Store in Tank
Schedule I	5.Industrial operations using mineral/synthetic oil as lubricant in hydraulic systems or other applications	Wastes or residues containing oil	250 Metric Tonnes/ Year	Liquid & Semi solid Mixed Hydrocarbon	NA	Send to WBWML for Incineration	By designated truck of WBWML	Store in covered metallic drums at Oil Scrap Yard

----This is computer generated application ----

Schedule I	33.Handling of hazardous chemicals and wastes	Empty barrels / containers / liners contaminated with hazardous chemicals/wastes	100 Numbers /Year	Metallic container	NA	Send to WBWML for secured landfill	By designated truck of WBWML	Store at Scrap Yard
Schedule I	33.Handling of hazardous chemicals and wastes	Contaminated cotton rags or other cleaning materials	3 Metric Tonnes/ Year	Cotton mixed with oil/grease	NA	Send to WBWML for Incineration	By designated truck of WBWML	Store in covered metallic drums
Schedule I	35.Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	Spent ion exchange resin containing toxic metals	20 Metric Tonnes/ Year	Solid Inorganic material	NA	Send to WBWML for Incineration	By designated truck of WBWML	Store in designated place at scrap yard in jumbo bags
Schedule I	35.Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETPs)	Spent ion exchange resin containing toxic metals	10 Metric Tonnes/ Year	Solid Inorganic material	Incineration in own incinerator	NA	NA	Store in jumbo bags

	Schedule I	1. Petrochemical processes pyrolytic operations	Spent catalyst and molecular sieves	40 Metric Tonnes/Year	Solid Inorganic material	NA	Spent Catalyst is sent to Authorised Recycler	By designated truck of Recycler	Spent Catalyst is stored in covered metallic drums at Scrap Yard
d)	Hazardous and other wastes generated from storage of hazardous chemicals as defined under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.						Sludge from Hydrocarbon Storage Tank		

Part C: To be filled by Treatment, storage and disposal facility operators

1)	Provide details of the facility including:	
i)	Location of site with layout map:	HPL Link Road
ii)	Safe storage of the waste and storage capacity	
iii)	The treatment processes and their capacities	
iv)	Secured Landfills	
v)	Incineration, if any	
vi)	Leachate Collection and Treatment System	
vii)	Fire Fighting Systems	
viii)	Environmental management plan including monitoring	
ix)	Arrangement for transportation of waste from generators	
2)	Provide details of Any other activities undertaken at the Treatment, storage and disposal facility site.	Not Attached
3)	Attach a Copy of prior Environmental Clearance	Not Attached

Part D: To be filled by recyclers or pre-processors or co-processors or users of hazardous or other wastes

1.	Nature and quantity of different wastes received per annum from domestic sources or imported or both:		
	Hazardous Wastes Type	Quantity	Source (Domestic/Imported)
2.	Installed capacity as per registration issued by the District Industries Centre or any other authorised Government agency. Provide copy:	Not Attached	
3.	Provide details of secured storage of wastes including the storage capacity	Not Attached	
4.	Process description including process flow sheet indicating equipment details, inputs and outputs (input wastes, chemicals, products, by-products, waste generated, emissions, waste water, etc.) Attach separate sheets:	Not Attached	

5.	Provide details of end users of products or by-products	Not Attached
6.	Provide details of pollution control systems such as Effluent Treatment Plant, scrubbers, etc. including mode of disposal of waste	Not Attached
7.	Provide details of occupational health and safety measures	
8.	Has the facility been set up as per Central Pollution Control Board guidelines? If yes, provide a report on the compliance with the guidelines:	Not Attached
9.	Arrangements for transportation of waste to the facility	

Place: Haldia

Date: 15.01.2021

A. K. Ghosh
Signature of the Applicant 15/1/2021
Name and Designation

A. K. GHOSH
Head Plant & Executive Vice President
Haldia Petrochemicals Ltd.
Haldia

By Speed Post/Online

**F.No.J-11011/194/2016- IA II(I)
Government of India
Ministry of Environment, Forest and Climate
Change
(IA-II Section)**

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 110003

Dated: 27th August, 2020

To

M/s Advanced Performance Materials Private Limited

(Wholly owned subsidiary of M/s Haldia Petrochemicals Ltd.)

Tehsil Sutahata -I, Haldia

District East Medinipur

West Bengal - 721 602

E.Mail: rabin.mukhopadhyay@adperma.co.in

Sub: Expansion of Naphtha cracking facility and Petrochemical products at Tehsil Sutahata -I, Haldia, District East Medinipur, West Bengal- Amendment/Bifurcation of Environmental Clearance between M/s Haldia Petrochemicals Limited & M/s Advanced Performance Materials Private Limited- reg.

Sir,

This has reference to the proposal No. IA/WB/IND2/67219/2016 dated 17th April, 2019 for amendment/bifurcation and proposal No. IA/WB/IND2/138269/2020 dated 13th March, 2020 for transfer (split) of the environmental clearance dated 20th March, 2018 between M/s Haldia Petrochemicals Limited (HPL) to M/s Advanced Performance Materials Private Limited (AdPerMa), wholly owned subsidiary of HPL, without change of ownership.

2. The Ministry vide letter dated 20th March 2018 has granted environmental clearance to the project for expansion of Naphtha cracking facility and



petrochemical products at Tehsil Sutahata -I, Haldia District, East Medinipur, West Bengal in favour of M/s Haldia Petrochemicals Limited (HPL).

3. Now, amendment/bifurcation/transfer of the said environmental clearance has been sought due to the business transfer agreement between M/s Haldia Petrochemicals Limited (HPL) and M/s Advanced Performance Materials Private Limited (AdPerMa). It was informed that M/s HPL has incorporated a wholly owned subsidiary in the name of M/s Advanced Performance Materials Private Limited (AdPerMa) in July 2017 to explore new opportunities downstream of HPL, which will help to de-risk HPL's cash flows by driving business in performance chemicals with flexibility to venture with technology partner and/or other value added partners. Butene -1 Project will be the initial project that will be transferred to AdPerMa and HPL has no objection in transferring applicable part of the EC to AdPerMa for Butene -1 plant along with associated infrastructure like storage and pipelines. The changes in EC would include the following:

Description	Existing Conditions		Bifurcation of products and infrastructure			
			HPL		AdPerMa	
Products as per EC 20/03/2018	Name of Product	of KTA	Name of Product	of KTA	Name of Product	of KTA
1.	Ethylene	770	Ethylene	770	-	-
2.	Propylene	385	Propylene	385	-	-
3.	Polypropylene	341	Polypropylene	341	-	-
4.	High Density Poly Ethylene (HDPE)	494	High Density Poly Ethylene (HDPE)	494	-	-
5.	Linear Low Density Poly Ethylene (LLDPE)	386	Linear Low Density Poly Ethylene (LLDPE)	386	-	-
6.	Butadiene	111	Butadiene	111	-	-
7.	Benzene	175	Benzene	175	-	-
8.	Butene-1	30.2			Butene-1*	30.2
9.	MTBE	98.6			MTBE*	98.6
10.	C4 Raffinate	-	C4 Raffinate	126 ^{Note-1}		

Signature

11.	Vinyl Acetate Ethylene (VAE)	60	Vinyl Acetate Ethylene (VAE)	60	-	-
12.	Mixed Butane	126 ^{Note -2}	Mixed Butane	126 ^{Note -2}	-	-
13.	Cyclo Pentane	8.2	Cyclo Pentane	8.2	-	-
14.	Pyrolysis Gasoline	200	Pyrolysis Gasoline	200	-	-
15.	Motor Spirit (MS) Euro IV	300	Motor Spirit (MS) Euro IV	300	-	-
16.	Phenol	200	Phenol	200	-	-
17.	Acetone	123	Acetone	123	-	-
18.	Carbon Black Feedstock (CBFS)	100	Carbon Black Feedstock (CBFS)	100	-	-
19.	Poly Butylene Terephthalate (PBT)	70	Poly Butylene Terephthalate (PBT)	70	-	-
20.	Tetrahydrofuran (THF)	16	Tetrahydrofuran (THF)	16	-	-
21.	C6 Raffinate	64	C6 Raffinate	64	-	-
Additional Hazardous Chemical Storage Tank	Name of Product (No. of tanks)	Total Storage Quantity (MT)	Name of Product (No. of tanks)	Total Storage Quantity (MT)	Name of Product (No. of tanks)	Total Storage Quantity (MT)
1.	Naphtha (1)	28,632	Naphtha (1)	28,632	-	-
2.	Motor Spirit (1)	3,080	Motor Spirit (1)	3,080	-	-
3.	Hydrogenated Py-Gas (1)	3,560	Hydrogenated Py-Gas (1)	3,560	-	-
4.	MS Blending Tank (1)	932	MS Blending Tank (1)	932	-	-
5.	Butadiene (1)	1,271	Butadiene (1)	1,271	-	-
6.	Fuel Grade Naphtha (1)	9,380	Fuel Grade Naphtha (1)	9,380	-	-
7.	LPG (1)	10,000	LPG (1)	10,000	-	-
8.	Methanol (2)	7,128			Methanol (2)	7,128

3/20/20

9.	MTBE (2)	7,400			MTBE (2)	7,400
10.	MTBE (1)	2,072			MTBE (1)	2,072
11.	Phenol (3)	16,050	Phenol (3)	16,050	-	-
12.	Acetone (2)	7,910	Acetone (2)	7,910	-	-
13.	Butanediol (2)	6,324	Butanediol (2)	6,324	-	-
14.	THF (2)	3,556	THF (2)	3,556	-	-
15.	VAM (2)	10,274	VAM (2)	10,274	-	-
16.	VAE (2)	7,520	VAE (2)	7,520	-	-
17.	NaOH 50% (Caustic Soda) (2)	795	NaOH 50% (Caustic Soda) (2)	795	-	-
18.	H ₂ SO ₄ 98% (1)	478	H ₂ SO ₄ 98% (1)	478	-	-
Land (ha)	453.00		451.48		1.519	
Manpower (Permanent)	40-50		40-50		5 (additional shall be sourced)	
Manpower (Contractual)	100-150		100-150			
Power (MW)	19		18.24		0.76	
Steam (TPH)	172.25		148.55		23.7	
Power and Steam Source	Additional 1X35 MW CSTG and 3X120 TPH Coal Fired Boiler in existing Captive Power Plant		Additional 1X35 MW CSTG and 3X120 TPH Coal Fired Boiler in existing Captive Power Plant		Sourced from HPL	
Water (MGD)	10 (Sourced from Geonkhali Water Supply System)		9.842 (Sourced from Geonkhali Water Supply System)		0.158 (Sourced from HPL)	
Effluent (m ³ /day)	1000 (Effluent discharged will be treated in Integrated Wastewater Treatment Plant of HPL)		937.6 (Effluent discharged will be treated in Integrated Wastewater Treatment Plant of HPL)		62.4 (Effluent discharged will be treated in Integrated Wastewater Treatment Plant of HPL)	
Catalysts MT/3-5 years	150 (To be handled by HPL)		104.32 (To be handled by HPL)		45.68 (To be handled by	

Signature

(Hazardous waste)			AdPerMa and finally disposed by HPL)
Project Cost in Crores (INR)	4310	4064	246

Note-1: In EC approved by MoEFCC on 20th Mar 2018, C4 Raffinate from Naphtha Cracker Associated Unit was considered transferred as feedstock to Butene-1 plant to produce Butene-1 and MTBE. Accordingly, C4 Raffinate was not shown in the product slate of HPL. After proposed bifurcation of EC, HPL would produce and transfer C4 Raffinate to AdPerMa as feedstock to Butene-1 plant. Thus, HPL's product slate shall include C4 Raffinate as product.

Note-2: Maximum production in case Butene-1 plant is non-operational. Normal production would be 33 kTA.

4. The proposal for amendment/bifurcation was considered by the Expert Appraisal Committee (Industry-2) in its meetings held during 30-31 May, 2019, 28-29 August, 2019 and 20-22 November, 2019. Subsequent to submission of the proposal for transfer of environmental clearance by the project proponent, the proposal has been referred to the Committee. The proposal was considered by the EAC in its meeting held on 17th July, 2020.

M/s HPL has informed that M/s Advanced Performance Materials Private Limited (AdPerMa) is its wholly owned subsidiary and M/s HPL shall be responsible for all the environmental safeguards and compliance of the EC conditions. M/s AdPerMa shall be responsible for the production of Butene-1 & MTBE and subsequent process and marketing.

The Committee after detailed deliberations, is of the considered view that the Ministry may take a view on the applicability of the proposal in its present form, however, taking cognizance of submission of M/s HPL that they shall be responsible for all the environmental safeguards and compliance of the EC conditions, has recommended that M/s AdPerMa may be allowed to carry out production of Butene-1 and MTBE with all its associated facilities.

5. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval to the amendment/bifurcation of the environmental clearance dated 20th March, 2018, to allow M/s AdPerMa to carry out production of Butene-1 and MTBE with all its associated facilities, with additional terms and conditions as under:-

- i. M/s AdPerMa and M/s HPL shall comply with all the terms and conditions stipulated in the environmental clearance dated 20th March, 2018. As

Signature

committed, M/s HPL shall be responsible for the environmental safeguards and overall compliance of the conditions in the said EC.

6. This issues with approval of the competent authority.

Ashok
27/08/2020

(Ashok Kr. Pateshwary)
Director
Tel.No. 24695290

Copy to:-

1. The Deputy DGF (C), MoEF&CC Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar - 23 (Odisha).
2. The Secretary, Department of Environment, Government of West Bengal, Poura Bhavan, 4th Floor, FD-415/A, Sector-III, Bidhannagar, Kolkata - 106 (WB).
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32.
4. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector 3, Salt Lake City, Kolkata - 98 (WB).
5. M/s Haldia Petrochemicals Limited, Tehsil Sutahata -I, Haldia, District East Medinipur, West Bengal - 721602.
6. Guard File/Monitoring File/Website/Record File.

By Speed Post/Online

**F.No.J-11011/194/2016- IA II(I)
Government of India
Ministry of Environment, Forest and Climate
Change
(IA-II Section)**

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 110003

Dated: 27th August, 2020

✓ To

M/s Haldia Petrochemicals Limited
Tehsil Sutahata -I, Haldia
District East Medinipur
West Bengal - 721 602
E.Mail: Ashok.Ghosh@hpl.co.in

Sub: Expansion of Naphtha cracking facility and Petrochemical products at Tehsil Sutahata -I, Haldia, District East Medinipur; West Bengal- Amendment/Bifurcation of Environmental Clearance between M/s Haldia Petrochemicals Limited & M/s Advanced Performance Materials Private Limited- reg.

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3/2/2018

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3/2/21

Catalysts MT/3-5 years (Hazardous waste)	150 (To be handled by HPL)	104.32 (To be handled by HPL)	45.68 (To be handled by AdPerMa and finally disposed by HPL)
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5. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval to the amendment/bifurcation of the environmental clearance dated 20th March, 2018, to allow M/s AdPerMa to carry out production of Butene-1 and MTBE with all its associated facilities, with additional terms and conditions as under:-



- i. *M/s AdPerMa and M/s HPL shall comply with all the terms and conditions stipulated in the environmental clearance dated 20th March, 2018. As committed, M/s HPL shall be responsible for the environmental safeguards and overall compliance of the conditions in the said EC.*
6. This issues with approval of the competent authority.

8/2/2018
27/08/2018

(Ashok Kr. Pateshwary)
Director
Tel.No. 24695290

Copy to:-

1. The Deputy DGF (C), MoEF&CC Regional Office (EZ), A/3, Chandersekharpur, Bhubaneswar - 23 (Odisha)
2. The Secretary, Department of Environment, Government of West Bengal, Pura Bhavan, 4th Floor, FD-415/A, Sector-III, Bidhannagar, Kolkata - 106 (WB)
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector 3, Salt Lake City, Kolkata - 98 (WB)
5. M/s Advanced Performance Materials Private Limited, Tehsil Sutahata -I, Haldia, District East Medinipur, West Bengal - 721602
6. Guard File/Monitoring File/Website/Record File

	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	Pb(µg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP(ng/m ³)	As(ng/m ³)	Ni(ng/m ³)	CO(mg/m ³)
	47.98	23.65	19.31	22.59	28.61	0.135	8.24	1.70	0.23	4.28	12.09	0.551
	39.23	19.34	13.58	16.91	25.65	0.079	5.91	1.33	0.05	2.21	8.09	0.362
100 (8 Hrs. avg)	100	60	80	80	100 (8 Hrs. avg)	1.0	400	5	1	6	20	100 (8 Hrs. avg)

Off-Site Locations (06 nos.): Nandarampur, Basudevpur, Haldia Bhavan near CPT Hospital, Hatiberia Swati Complex, IOC Township, Manaharpur.

Total rain fall in the period of April'21 to September'21: 3201.30 mm

Sl. No.	Name of Off-Site Locations	Direction from HPL Complex	Distance from HPL Complex (km)
1.	Nandarampur	North	2.6 Km
2.	Basudevpur	North- East	5.0 Km
3.	CPT Hospital	South	6.0 Km
4.	Hatiberia (Swati Complex)	South of South-West	4.0 Km
5.	IOC Township	South	5.0 Km
6.	Manaharpur	West of North-West	3.5 Km

Location	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	H ₂ S (µg/m ³)	NO _x (µg/m ³)	NH ₃ (µg/m ³)	Ozone (µg/m ³)	Benzene (µg/m ³)	CO (µg/m ³)	THC (PPM)	CH ₄ (PPM)	NMHC (PPM)
SCR	44.69	19.00	9.83	15.63	24.85	14.65	44.18	1.63	0.58	3.03	1.39	1.25
	WS (m/s)	Wind Degree	Tempera ture(°C)	RH (%)	Pressure (mbar)							
	1.55	312.56	28.82	72.25	726.82							
	THC (PPM)	CH ₄ (PPM)	NMHC (PPM)									
Central Lab	2.90	1.94	0.95									

Ambient - Noise monitoring (April 2021 to September 2021):

LOCATION	April 2021		July 2021	
	Day	Night	Day	Night
Near Gate No-1	54.61	54.29	56.0	54.8
Near Gate No-3	66.04	67.20	66.1	65.5
Near South Gate	56.03	55.68	66.1	65.6
Near CPP Security Office	54.60	53.92	67.9	65.6
Near North Gate	64.84	65.96	55.9	53.7
Norms of CPCB For Industrial Area	75	70	75	70

Note: Sound Pressure Level in leq dB (A)