MCPI Private Limited
(Formerly **MCC PTA India** *Corp. Private Limited*,
Materials Chemicals and Performance Intermediaries Private Limited)

Ref. No. MOEF&CC /05/23/1209 **Date: 20.11.2023**

The IGF& In charge,
GOI, MoEF &CC, Integrated Regional Office, Kolkata
IB – 198, Sector-III, Salt Lake City,
Kolkata - 700106

KA: MS. SOMA DAS, IFS

Sub: Six Monthly Status Report on the Compliance of the Conditions of the Environment Clearance for the Old plant.

Ref: Environment Clearance no. J-11011/33/97. IA. II (I) dated 20/7/98 & MoEF&CC EC Transfer: J-11011/33/97. IA. II (I) dated 19.01.2021

Dear Sir / Madam

We are enclosing herewith the status report for the period from (**April'2023–September'2023**) on the point wise compliance to the conditions as mentioned in the Environmental clearance.

The necessary 'Consent to Operate' under Air & Water Act, Public Liability Insurance Policy, and authorization for hazardous waste etc. is being periodically renewed and updated. We sincerely hope that the above compliance status report is in line with the approval letter accorded by MoEF&CC for our Old plant and would meet your requirement. We are ready to provide any further clarifications, if necessary.

Thanking You,

Sincerely yours,
For **MCPI Private Limited**

A.C.Mishra
Plant Head

Encl: as stated.
CC: Sr. Env. Engineer (Planning), WBPCB
Sr. Env. Engineer, CPCB, Kolkata

Corporate Office: Bengal Eco Intelligent Park, Tower-1, 3rd Floor, Block-EM, Plot No. 3, Salt Lake, Sector-V, Kolkata-700 091, India, Tel: +91 33 7112 2334/2445
Plant: Vill. & P.O. Bhuniaraichak, Via Sutahata (Haldia), Purba Medinipur, West Bengal-721 635, India, Tel: +91 3224 275572/5573, Fax: +91 3224 275574
CIN: U24299WB1997PTC088796

HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS

1. Name of the Project: **M/s MCPI Private Limited – Haldia (West Bengal)**
2. MOEF&CC EC Clearance: J-11011/33/97. IA. II (I) dated 20/07/1998.
   &
   MoEF&CC EC Transfer: J-11011/33/97. IA. II (I) dated 19.01.2021.
3. **Period of Compliance Report: From 01.04.2023 to 30.09.2023**

Sl. No	Conditions	Compliance Status
(i)	Gaseous and emissions (SPM, SO2, CO, HC & NOx) from the various process units should conform to the standards prescribed by the competent authorities from time to time. At no time, the emissions level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.	It is complied.
(ii)	Adequate number of air quality monitoring station should be set up in the down wind direction as well as where maximum ground level concentrations of SPM, SO2, NOx are anticipated in consultation with the State Pollution Control Board. The air quality monitoring stations should be selected based on modeling exercise to represent short term ground level concentrations, sensitive targets etc., Stack emission should be monitored regularly by setting stack monitoring devices in consultation with the state pollution control board. Data on stack emissions and ambient air quality including work zone should be submitted to this Ministry once in six months and the state pollution control Board once in three months along with the statistical analysis.	We have conducted ambient air quality monitoring from different locations inside as well as outside of the Factory (Within 10 km radius) depending upon predominant wind direction with the help of the approved vendor of WBPCB from each location on 24 hourly bases. The monitoring started in **April'23** and continued up to **June'23** at six different locations (Five outside the factory & One inside the factory). Results enclosed in **Annexure- IIa.** An online ambient air quality monitoring station was commissioned in the month of April'12. Result of **April'23 to September'23** is enclosed in **Annexure – IIb**

MCPI HALDIA PRIVATE LIMITED

Sl. No	Conditions	Compliance Status
		We had been continuing our monitoring of various Stacks with the help of approved Vendor of WBPCB / MoEF&CC on periodic basis. Only quarterly monitoring of stacks is required as per the guidelines of the Air Consent letter & WBPCB is monitoring the same on quarterly basis. Analysis results from these stacks are enclosed as **Annexure - I**. Attached Stack Monitoring and AAQM monitoring vendor's NABL / MOEF&CC approval copies as **Annexure-1a**
(iii)	Work area air quality should meet the standards prescribed by the competent authorities/ OSHA. Fugitive emissions (HC) should be controlled, regularly monitored and data recorded.	Work environment monitoring is being done by the on-line static gas detectors, which are installed at various strategic locations inside the process plant & Tank farm area. These are being continuously monitored from DCS, which are provided with audio-visual signal & alarm. Work zone air quality monitoring was done in the month of **December'22** for SPM, RPM, organic and inorganic vapors throughout the plant by third party. The result is enclosed in **Annexure – IIc**. LDAR monitoring was done in our DP plant. Report is enclosed as **Annexure -IId**
(iv)	Liquid effluents coming out of the plant and the township should conform to the standards prescribed by the competent authorities from time to time. Recycling and reuse of the treated wastewater should be maximized to the extent possible. Tertiary treatment facilities should be provided as committed in the EMP	Our Effluent Treatment Plant is operated under activated sludge with diffused aeration system. The treated effluent is being monitored on-line (pH & Temp.) regularly through DCS. WBPCB also collects samples of final discharge treated effluent every month. The Final discharge effluent quality results are enclosed as **Annexure-III**.

Sl.No	Conditions	Compliance Status
(v)	Guard ponds of sufficient holding capacity should be provided to cope up with the effluents discharge during the process disturbances. The contributing units should be immediately shut down and should not be restarted without bringing the system back to normalacy.	We have installed four number of wastewater storage tanks having sufficient holding capacity for storage of Wastewater coming from various process discharges of the plant. This influence is being fed to the Aeration Tank at controlled rate as per their BOD & COD load through DCS. Besides, we have ETP pit of capacity 16,250 m^3 (Big pit) & Small pit (17.85 m^3) from where the treated effluent is pumped and discharged to the river Hoogly through underground pipeline after monitoring pH, Temperature, COD, BOD & TSS.
(vi)	Adequate number of effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for PH, SS, BOD, COD. The monitored data along with statistical analysis and interpretation in the form of a report should be submitted to this ministry once in six months and the SPCB once in three months.	Effluent Quality Monitoring Station has been installed in the final effluent discharge stream. The treated effluent from ETP is collected in the ETP pit from where it is discharged through underground pipeline through sluice gate by pump to the river after continuously monitoring pH, Temp. by on-line analyzers. As the final treated effluent discharge is through a closed system there is no chance of any contamination/mixing. In view of the above one monitoring station in the final effluent discharge stream is considered adequate. This was also physically inspected by WBPCB, Kolkata & Haldia officials. The total Effluent Treatment Plant is being monitored through DCS (Distributed Control System). The analysis of different waste-water streams (COD & BOD) is being done by Laboratory regularly and the results are fed to DCS. Thus, the feed rate of different wastewater streams (Influent loads) to the inlet of ETP is controlled, so that the treated effluent quality meets the permissible limit. Hence the Effluent Treatment Plant is operated smoothly.

Sl.No	Conditions	Compliance Status
		The final treated effluent samples before discharge are tested for all the parameters at our own laboratory once in a month, which is well equipped with all testing facilities. The test result of the final discharge effluent is enclosed as **Annexure-III**. Online effluent monitoring system was installed at final discharge point and the online effluent monitoring data is transferring to CPCB server & WBPCB website.
(vii)	A study to assess the impact on Hooghly River due to disposal of treated effluent should be carried out. The marine outfall point, and route of the pipeline should be finalized based on the recommendation of the marine impact study before commissioning the project. Approval from WBPCB should be obtained for the above.	The Marine Impact Assessment study for assessing the impact on Hooghly River due to disposal of treated effluent had been done and the same report had been submitted to MOEF&CC & WBPCB, Kolkata before commissioning of the Project. From the report it was concluded that no impact on the river body is envisaged due to discharge of our treated effluent.
(viii)	Permission under CRZ Notification must be obtained for the proposed facilities in the coastal stretch, if applicable and the conditions strictly adhered to.	Permission under CRZ notification is not necessary for the location of our Factory as per the notification since Haldia development area is categorized as CRZ-II. The distance prescribed for CRZ-II is 100m for HTL. A Certificate on this issue provided by Haldia Development Authority along with the endorsed drawing of site-location had already been submitted to your office earlier.
(ix)	A secured double lined landfill should be developed for disposal of solid waste by providing impervious liner and leachate collection system. The design of the landfill site should be submitted within 3 months for Ministry's consideration and approval.	All the hazardous & non-hazardous wastes are stored at our site in an integrated scrap yard in a segregated manner. Refer **Annexure – IV** for details. The hazardous waste is finally disposed through CHW-TSDF at Haldia & CPCB approved parties from the Scrap yard complying with all the necessary legal requirements. A separate shed for used oil & waste oil had been constructed for storage of some to avoid environmental pollution. The number of hazardous wastes disposed to TSDF during this period is enclosed. **Refer Annexure – V**.

MCPI Private Limited
(Formerly MCC PTA India Corp. Private Limited,
Materials Chemicals and Performance Intermediaries Private Limited)

Ref. No. MOEF&CC/11/23/1210 **Date: 20.11.2023**

The IGF& In charge,
GOI, MoEF&CC, Integrated Regional Office, Kolkata
IB – 198, Sector-III, Salt Lake City,
Kolkata - 700106

KA: MS. SOMA DAS, IFS

Sub: Six monthly status reports on the Compliance of the Conditions of the Environment Clearance for new plant.

Ref: Environment Clearance No: J-11011/139/2006-IA II (I) Dated. June 19, 2006 & MOEF&CC EC Transfer: J-11011/139/2006-IA II (I) Dated: 19.01.2021

Dear Sir / Madam,

We are enclosing herewith the EC compliance status report for the period **(April'2023 – September'2023)** on the point wise compliance to the conditions as mentioned in Environmental clearance for your kind perusal. It may kindly be noted that all the Annexure mentioned in this letter as supplementary evidence/report are common & attached with the status report of Compliance of the Environment Clearance of Existing PTA plant.

The necessary 'Consent to Operate' under the Air & Water Act, Public Liability Insurance Policy, and authorization for hazardous waste etc. is being periodically renewed and updated. We sincerely hope that the above compliance status report is in line with the approval letter accorded by MoEF&CC for our new plant and will meet your requirements. We are ready to provide any further clarifications, if necessary.

Thanking You,

Sincerely yours,
For **MCPI Private Limited**

A. C. Mishra
Plant Head

Encl: as stated.
CC: Sr. Env. Engineer (Planning), WBPCB
Sr. Env. Engineer, CPCB, Kolkata

Corporate Office: Bengal Eco Intelligent Park, Tower-1, 3rd Floor, Block-EM, Plot No.3, Salt Lake, Sector-V, Kolkata-700 091, India, Tel: +91 33 7112 2334/2445
Plant: Vill. & P.O. Bhuniaraichak, Via Sutahata (Haldia), Purba Medinipur, West Bengal-721 635, India, Tel: +91 3224 275572/5573, Fax: +91 3224 275574
CIN: U24299WB1997PTC088796

HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS

1. Name of the Project: **M/s MCPI Private Limited – Haldia (West Bengal)**
2. MOEF&CC EC Clearance: J-11011/139/2006-IA II (I) Dated:19.06.2006.
   &
   MOEF&CC EC Transfer: J-11011/139/2006-IA II (I) Dated: 19.01.2021.
3. **Period of Compliance Report: From 01.04.2023 to 30.09.2023**

Sl. No	Specific conditions	Compliance Status
(i)	The gaseous emissions (SO_2, NOX, HC & VOCs) from the various process units shall conform to the standards prescribed under Environment (Protection) Rules, 1986 or norms stipulated by the SPCB whichever is more stringent. At no time, the emissions level shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the units, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	It is complied.
(ii)	Requisite numbers of ambient air quality monitoring stations, [SPM, SO_2, NO_X, &HC] shall be set up in the Petrochemical complex in consultation with SPCB, based on occurrence of maximum ground level concentration and down-wind direction of wind i.e maximum impact zone. The monitoring network must be decided based on modeling exercise to represent short-term GLCs. Continuous on-line stack monitoring equipment shall be installed for measurement of SO_2 and NO_X. Data on VOCs shall be monitored and submitted to the SPCB / Ministry.	Emissions are monitored from various units and within the permissible limit. Stack monitoring is being done by an approved third party. The result of stack emission is attached herewith. **Refer Annexure – I** The Ambient Air Quality monitoring started in **April'23** and was continued up to **June'23** at six different locations (Five outside the factory & One inside the factory). Results enclosed in **Annexure- IIa.** An online Continuous ambient air quality monitoring station was commissioned in the month of April'2012. Result of **April'23 to September'23** is enclosed in **Annexure – IIb** Online stack monitoring data is transferring to WBPCB & CPCB server. Online effluent monitoring data is transferring to CPCB /WBPCB server.

Sl. No	Specific conditions	Compliance Status
(iii)	The company shall take measures for control of fugitive emissions for storage of Para –Xylene. Measures shall be taken for provision of double mechanical seals to all the pumps handling high vapors pressure materials, sensors for detecting HC/ toxic gas leakages at strategic locations, regular inspection of fixed roof tanks, maintenance of valves and other equipments.	Work environment monitoring is being done by the on-line static gas detectors, which are installed at various strategic locations inside the process plant & Tank farm area. These are being continuously monitored from DCS, which are provided with audio-visual signal & alarm. Work zone air quality monitoring was done in the month of **December'22** for SPM, RPM, organic and inorganic vapors throughout the plant by third party. The result is enclosed in **Annexure – IIc**.
(iv)	All new standards/norms that are being proposed by the CPCB for petrochemical plants shall be applicable for the proposed PTA plant. The company shall conform to the proposed vent standards for organic chemicals including non-VOCs and all possible VOCs i.e. TOCs standard and process vent standards for top priority chemicals. The company shall install online monitors for VOC measurements. The project authorities shall take necessary measures to comply with the above proposed emission norms including monitoring facilities and intimate the same to this Ministry.	The new standards are being followed. The process of vents is being monitored regularly. Online VOC monitors have been installed at various strategic locations.
(v)	M/s MCPI shall adopt Leak Detection and Repair (LDAR) program for quantification and control of fugitive emissions.	LDAR monitoring was done in our new plant. LDAR report is enclosed as **Annexure-IId**.
(vi)	To mitigate NOx emissions, the company shall install low NOx burners for hot oil heaters. Adequate stack height for discharge of flue gas emissions from the hot oil heater, the DG set and incinerator shall be provided as per the CPCB guidelines.	Low NOx burner already provided for HOH. Adequate stack heights for HOH, DEG & Incinerator made as per CPCB guidelines.
(vii)	The company shall undertake measures for control of emissions by installation of scrubbers with adequate height as per the CPCB guidelines. All vents from the scrubber units shall be connected to off gas combustion system for complete incineration of off gases.	Scrubbers installed at various stages of the process & the vents from the scrubbers are connected to off-gas unit for complete destruction.

MCPI HALDIA PRIVATE LIMITED

Sl.No	Specific conditions	Compliance Status
(viii)	As reflected in the EIA/EMP reports, the effluent generation shall not exceed 20832 m3/d (8100 m3/d of process effluent, 6615 m3/d from DM plant, and 120 m3/d of domestic effluent and 600 m3/d from other sources). The treated effluent after primary and secondary treatment shall comply with the standards stipulated by WBPCB/ Central Pollution Control Board. The treated effluent shall be discharged into the river Hooghly after conforming the prescribed standards.	The treated effluent is discharged to river Hoogly only after meeting the prescribed standards. A separate effluent treatment plant has been constructed and the treated water of both the plants is being discharged through a common outlet. Monitoring data is attached herewith. **(Refer Annexure – III)**
(ix)	The company shall install incinerator for incineration of ETP and process sludge. The incinerator shall meet CPCB specifications.	The new incinerator was installed based on CPCB specifications & norms. At present Incinerator was stopped on temporary basis. Process and utility Sludge (ETP) send to OCL India Ltd (Cement Unit) for Co-processing and WBWML (authorized TSDF) for safe disposal.
(x)	Green belt shall be provided to mitigate the effects of fugitive emissions all around the plant in an area of 10 ha in consultation with DFO as per CPCB guidelines.	Total plantations around the project have been completed & yearly maintenance of green belt is going on. Taken consultation from DFO – Enclosed copy of letter received from DFO as **Annexure -VIII** and as per recommendations we will further develop by plantation with local plants in existing green belt. Every Year we are celebrating World Environment Day and distributing plants to local community and doing plantation inside our Factory Green Belt, some photographs are enclosed as **Annexure -VI**
(xi)	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	The Occupational health surveillance is conducted for the existing plant as well as new plant.

MCPI HALDIA PRIVATE LIMITED

Sl.No	General conditions	Compliance Status
(i)	The project authorities must strictly adhere to the stipulations made by the West Bengal State Pollution Control Board and the State Government.	Complied
(ii)	No further expansion or modernization in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	No expansion is done
(iii)	At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective units should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved.	Yes, it is complied
(iv)	All the recommendations made in the EIA/EMP report and risk assessment reports should be implemented.	The recommendations of the EIA/ EMP report and risk assessment report have been completed.
(v)	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noise levels are being monitored periodically in the work environment as well as the ambient noise levels. Test Reports are enclosed as **Annexure-VII**
(vi)	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the project.	All the relevant provisions of the Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended till date will be followed. Approval/ License from CCOE, Nagpur already taken for Storage for Petroleum products. (No. P/HQ/WB/15/854(P28267)

Sl.No	General conditions	Compliance Status
(vii)	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2008. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	All the relevant provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended till date followed and necessary approval/ amendment is being taken from WBPCB.
(viii)	The project authorities will provide adequate funds both recurring and nonrecurring to implement the conditions stipulated by the Ministry of environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Adequate funds for recurring and non-recurring for the implementation of the Environment Management Plan (EMP) have already been allocated. Separate HSE expense budget prepared and approved. Last 3 years Environmental Expenditure details are also attached as **Annexure IX**
(ix)	The stipulated conditions will be monitored the Regional of this Ministry at ~~Bhubaneswar~~ Kolkata (new Regional office was established in Kolkata in the year 2020)/Central Pollution Control Board/State Pollution Control Board. A six-monthly compliance report and the monitored data shall be submitted to them regularly.	Six monthly compliance report and monitoring data submitted to new MoEF&CC, Regional Office located in Kolkata, periodically.
(x)	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 State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://www.envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.	Complied
(xi)	The Project Authorities should inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of commencing of the land development work.	Complied

Annexure - I

STACK EMISSION MONITORING & ANALYSIS DATA BASE

(April'2023 to September'2023)

Stack Physical Parameters

Existing Plant		
Stack connected to	**Height from GL (m)**	**Internal dia at sampling point (m)**
DEG	58	3.16
Hot oil Heater	69	1.9
Boiler/Incinerator	88	1.7
PX oxidation off gas (PX - Paraxylene)	21.85	2.2
Vent gas scrubber -I (Scrubbing of Process off) gas from	18.35	1.6
Vent gas scrubber -II (PTA Storage Scrubber)	15.15	2.1

Expansion Plant		
Stack connected to	**Height from GL (m)**	**Internal dia at sampling point (m)**
Hot oil Heater	30	1.4
DEG & Incinerator	70	2.2
Off Gas Combustion Unit	30	

Note:

1. Stack emissions are monitored wrt to PM ,CO, SO2, NO2. However as per the Air & Water Consent to operate only PM & CO are to be monitored. Hydrocarbon monitoring done on quarterly basis in Hot oil heater stacks.
2. As there is no PM, SO_2 & NO2 from Process emission (PX off gas, Vent gas scrubber- I & II, off gas combustion unit)
3. Incinerator emission is through Boiler stack ie Boiler & Incinerator stack is common in the existing plant.
4. Boiler not running during normal operation. It is operated only during start up & shut down of the Plant.
5. Stack sampling from Hot Oil Heater, DEG, Incinerator in the Existing & Expansion Plant are conducted by third party, whereas for vent gas scrubber I,II, PX Off Gas stack, off gas combustion emission sampling is conducted in-house.

ANALYSIS RESULTS

Month -April'23

		Existing Plant						Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	25.60	stop**	stop*		Not venting	Stop	38.50	Standby	-
2	CO (ppm)	28.90			0.11			32.70		-
3	SO_2 (mg/Nm3)	134.40						145.30		-
4	NO_2 (mg/NM^3)	196.60						261.60		-

ANALYSIS RESULTS

Month - May'23

		Existing Plant						Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	29.40	stop**	stop*		Not venting	Not venting	31.20	Standby	-
2	CO (ppm)	27.80			0.13			21.90		-
3	SO_2 (mg/Nm3)	158.50						138.40		-
4	NO_2, (mg/Nm3	196.80						172.20		-

WBPCB SAMPLING:

May'23

		Existing Plant			Expansion Plant	
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	108.02	stop**	stop	98.72	stop

May'23		Existing Plant			Expansion Plant	
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	NMHC (ppm)	<0.5	stop**	stop	<0.5	stop

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ANALYSIS RESULTS

Month -June'23

		Existing Plant						Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	40.40	stop**	stop*		Not venting	Not venting	31.10	standby	-
2	CO (ppm)	25.70			0.15			32.40		-
3	SO_2 (mg/Nm3)	154.50						132.80		-
4	NO_2, (mg/Nm3	268.10						188.40		-

ANALYSIS RESULTS

Month - July'23

		Existing Plant						Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	27.60	stop**	stop*		Not venting	Not venting	23.20	standby	-
2	CO (ppm)	72.20			0.13			67.80		-
3	SO_2 (mg/Nm3)	165.90						148.60		-
4	NO_2, (mg/Nm3	96.50						87.70		-

ANALYSIS RESULTS

Month - August'23

		Existing Plant						Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	SDM	stop**	stop*		Not venting	Not venting	41.40	standby	-
2	CO (ppm)				0.14			47.40		-
3	SO_2 (mg/Nm3)							136.90		-
4	NO_2, (mg/Nm3							87.50		-

WBPCB SAMPLING: August'23

		Existing Plant			Expansion Plant	
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	PM (mg/Nm3)	SDM	stop**	stop	201.92	stop

ANALYSIS RESULTS

Month -September'23

		Existing Plant						Expansion Plant		
S No.	Parameter	Hot oil heater	DEG	Incinerator	PX off gas Stack	Vent gas scrubber-I	Vent gas scrubber-II	Hot Oil Heater	DEG & Incinerator	Off Gas Combustion
1	PM (mg/Nm3)	25.30	stop**	stop*		Not venting	Not venting	32.30	standby	-
2	CO (%, v/v)	41.70			0.12			38.60		-
3	SO_2 (mg/Nm3)	161.80						142.70		-
4	NO_2, (mg/Nm3	98.50						87.80		

September'23		Existing Plant			Expansion Plant	
S No.	Parameter	Hot oil heater	DEG	Incinerator	Hot Oil Heater	DEG & Incinerator
1	NMHC (ppm)	<0.5	stop**	stop	<0.5	stop

* Co- processing activity is on process with M/S Orisha Cement Ltd (Dalmia) as per CPCB approval
3rd party Laboratory Vendor's NABL / MOEFCC approval copies as Annexure-1a,
NA- Not Analyzed

** April'2015 onwards we are using Grid power & Bothe the In-house Inceinerators are in stop condition.

MCPI HALDIA PRIVATE LIMITED

TABLE-A

AMBIENT AIR QUALITY RESULTS

Annexure-IIa

MONITORING STATION:MCPI Plant

SL.	DATE	Pollutant's Concentration											
		PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	Ozone (O_3) $\mu g/m^3$	Lead (Pb) $\mu g/m^3$	CO mg/m3	Ammonia (NH_3) $\mu g/m^3$	Benzene (C_6H_6) $\mu g/m^3$	Benzo(a)Pyrene (BaP) ng/m^3	Arsenic (As) ng/m^3	Nickel (Ni) ng/m^3
1	18.05-19.05.23	78.30	43.50	7.90	28.30			0.42					
2	21.05-22.05.23	84.70	49.80	8.30	28.50			0.36					
3	24.05-25.05.23	89.50	49.70	9.80	28.60			0.36					
4	15.05-16.05.23	86.80	47.90	7.80	37.50	27.2	<0.01	0.53	42.6	<4.2	<0.5	<1.0	<5.0
5	27.05-28.05.23	79.20	44.00	8.40	26.10			0.52					
6	30.05-31.05.23	82.70	48.80	9.60	26.50			0.48					
7	02.06-03.06.23	83.70	46.50	8.90	26.10			0.46					
8	05.06-06.06.23	89.10	42.40	9.60	28.30			0.52					
9	08.06-09.06.23	74.90	44.10	8.30	26.50			0.42					
10	11.06-12.06.23	79.20	44.00	8.30	24.50			0.52					
11	14.06-15.06.23	89.50	47.10	10.40	29.60			0.60					
12	17.06-18.06.23	76.20	44.80	8.10	26.20			0.48					
13	18.06-19.06.23	64.20	35.70	6.80	21.80			0.36					
14	20.06-21.06.23	77.30	42.90	8.20	23.50			0.46					
15	23.06-24.06.23	74.90	39.40	7.80	22.80			0.38					
16	26.06-27.06.23	78.10	45.90	8.30	24.30			0.44					
17	29.06-30.06.23	90.30	43.00	9.20	29.20			0.54					
AVERAGE		81.09	44.68	8.57	26.96	27.2	<0.01	0.46	42.6	<4.2	<0.5	<1.0	<5.0
Limit as per CPCB		100	60	80	80	180	1	2	400	5	1	6	20

TABLE-B
AMBIENT AIR QUALITY RESULTS
MONITORING STATION: BASUDEB PUR

SL.	DATE	Pollutant's Concentration											
		PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	Ozone (O_3) $\mu g/m^3$	Lead (Pb) $\mu g/m^3$	CO mg/m3	Ammonia (NH_3) $\mu g/m^3$	Benzene (C_6H_6) $\mu g/m^3$	Benzo(a)Pyrene (BaP) ng/m^3	Arsenic (As) ng/m^3	Nickel (Ni) ng/m^3
1	19.05-20.05.23	98.30	54.60	11.70	36.40			0.62					
2	22.05-23.05.23	94.20	52.30	10.60	32.50			0.42					
3	25.04-26.05.23	79.50	41.80	8.10	27.60			0.40					
4	16.05-17.05.23	83.60	45.90	7.00	35.20	23.50	<0.01	0.38	49.60	<4.20	<0.5	<1.0	<5.0
5	28.05-29.05.23	97.30	57.20	11.70	33.70			0.68					
6	31.05-01.06.23	88.50	49.20	9.50	26.30			0.46					
7	03.06-04.06.23	81.30	45.20	9.90	27.80			0.48					
8	06.06-07.06.23	78.50	43.60	8.50	25.40			0.54					
9	09.06-10.06.23	75.00	41.70	7.90	24.70			0.44					
10	12.06-13.06.23	82.70	48.60	8.90	26.30			0.54					
11	15.06-16.06.23	82.60	45.90	9.20	26.10			0.54					
12	18.06-19.06.23	81.30	45.20	9.40	27.50			0.50					
13	21.06-22.06.23	94.70	55.70	10.90	32.80			0.62					
14	24.06-25.06.23	82.70	45.90	9.50	25.10			0.46					
15	27.06-28.06.23	84.20	46.80	9.60	26.10			0.52					
16	30.06-01.07.23	75.20	41.80	8.10	25.10			0.48					
AVERAGE		84.98	47.59	9.41	28.66	23.50	<0.01	0.51	49.6	<4.2	<0.5	<1.0	<5.0
Limit as per CPCB		100	60	80	80	180	1	2	400	5	1	6	20

TABLE-C
AMBIENT AIR QUALITY RESULTS
MONITORING STATION:RAMNAGAR

SL.	DATE	Pollutant's Concentration											
		PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	Ozone (O_3) $\mu g/m^3$	Lead (Pb) $\mu g/m^3$	CO mg/m3	Ammonia (NH_3) $\mu g/m^3$	Benzene (C_6H_6) $\mu g/m^3$	Benzo(a)Pyrene (BaP) ng/m^3	Arsenic (As) ng/m^3	Nickel (Ni) ng/m^3
1	18.05-19.05.23	87.50	51.50	8.70	30.70			0.48					
2	21.05-22.05.23	92.80	48.80	10.20	30.60			0.48					
3	24.05-25.05.23	97.30	51.20	11.20	35.70			0.44					
4	15.05-16.05.23	87.50	54.60	7.30	36.50	26.20	<0.01	0.48	48.60	<4.2	<0.5	<1.0	<5.0
5	27.05-28.05.23	86.70	51.00	10.50	29.30			0.56					
6	30.05-31.05.23	78.50	41.30	8.50	24.70			0.38					
7	02.06-03.06.23	92.50	54.40	10.90	31.50			0.56					
8	05.06-06.06.23	79.60	41.90	8.40	23.50			0.42					
9	08.06-09.06.23	81.30	45,2	8.70	28.60			0.46					
10	11.06-12.06.23	86.10	50.60	9.60	27.30			0.58					
11	14.06-15.06.23	85.10	50.10	9.80	25.70			0.58					
12	17.06-18.06.23	87.50	48.60	10.30	28.30			0.56					
13	20.06-21.06.23	82.50	48.50	9.60	24.70			0.54					
14	23.06-24.06.23	80.50	47.40	8.90	23.90			0.48					
15	26.06-27.06.23	80.50	44.70	8.70	24.70			0.46					
16	29.06-30.06.23	82.90	46.10	8.90	26.10			0.48					
AVERAGE		85.55	48.71	9.39	28.24	26.20	<0.01	0.50	48.60	<4.2	<0.5	<1.0	<5.0
Limit as per CPCB		100	60	80	80	180	1	2	400	5	1	6	20

TABLE-D
AMBIENT AIR QUALITY RESULTS
MONITORING STATION:GIRISHMORE

SL.	DATE	Pollutant's Concentration											
		PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	Ozone (O_3) $\mu g/m^3$	Lead (Pb) $\mu g/m^3$	CO mg/m3	Ammonia (NH_3) $\mu g/m^3$	Benzene (C_6H_6) $\mu g/m^3$	Benzo(a)Pyrene (BaP) ng/m^3	Arsenic (As) ng/m^3	Nickel (Ni) ng/m^3
1	19.05-20.05.23	72.60	38.20	7.50	26.50			0.38					
2	22.05-23.05.23	72.50	42.60	6.90	25.10			0.34					
3	25.04-26.05.23	76.30	42.40	7.50	26.10			0.34					
4	16.05-17.05.23	91.50	55.80	7.80	45.70	32.80	<0.01	0.67	57.20	<4.2	<0.5	<1.0	<5.0
5	28.05-29.05.23	74.20	39.10	7.90	25.70			0.42					
6	31.05-01.06.23	69.20	38.40	7.20	23.50			0.32					
7	03.06-04.06.23	90.70	47.70	11.20	30.90			0.58					
8	06.06-07.06.23	83.70	38.00	8.90	26.50			0.48					
9	09.06-10.06.23	76.20	34.60	8.10	25.10			0.48					
10	12.06-13.06.23	96.20	53.40	11.80	35.70			0.68					
11	15.06-16.06.23	74.20	43.60	7.90	22.70			0.44					
12	18.06-19.06.23	72.80	38.30	1.60	24.10			0.42					
13	21.06-22.06.23	82.50	45.80	9.70	27.90			0.52					
14	24.06-25.06.23	72.80	42.80	7.7	22.70			0.42					
15	27.06-28.06.23	92.50	48.70	10.80	31.70			0.60					
16	30.06-01.07.23	72.80	38.30	7.60	23.80			0.42					
AVERAGE		79.42	42.98	8.13	27.73	32.80	<0.01	0.47	57.20	<4.2	<0.5	<1.0	<5.0
Limit as per CPCB		100	60	80	80	180	1	2	400	5	1	6	20

TABLE-E
AMBIENT AIR QUALITY RESULTS
MONITORING STATION:- KUMARCHAK

SL.	DATE	Pollutant's Concentration											
		PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	Ozone (O_3) $\mu g/m^3$	Lead (Pb) $\mu g/m^3$	CO mg/m3	Ammonia (NH_3) $\mu g/m^3$	Benzene (C_6H_6) $\mu g/m^3$	Benzo(a)Pyrene (BaP) ng/m^3	Arsenic (As) ng/m^3	Nickel (Ni) ng/m^3
1	18.05-19.05.23	95.10	52.80	10.30	33.50			0.54					
2	21.05-22.05.23	93.50	51.90	9.10	32.80			0.44					
3	24.05-25.05.23	72.50	42.60	6.70	24.80			0.32					
4	15.05-16.05.23	78.60	42.70	6.80	28.90	22.50	<0.01	0.38	39.50	<4.2	<0.5	<1.0	<5.0
5	27.05-28.05.23	94.20	52.30	11.30	32.70			0.64					
6	30.05-31.05.23	89.10	49.50	11.00	28.60			0.60					
7	02.06-03.06.23	75.60	39.80	8.40	24.60			0.42					
8	05.06-06.06.23	62.80	34.90	6.8	20.90			0.34					
9	08.06-09.06.23	92.60	48.70	11.20	31.90			0.52					
10	11.06-12.06.23	92.70	51.50	10.70	33.50			0.64					
11	14.06-15.06.23	90.40	50.20	10.30	31.90			0.62					
12	17.06-18.06.23	98.30	51.70	12.10	36.10			0.72					
13	20.06-21.06.23	95.10	52.80	11.40	32.90			0.68					
14	23.06-24.06.23	86.10	47.80	10.00	25.70			0.52					
15	26.06-27.06.23	72.90	38.40	7.50	23.10			0.42					
16	29.06-30.06.23	78.10	41.10	8.30	22.70			0.42					
AVERAGE		85.48	46.79	9.49	29.04	22.5	<0.01	0.51	39.5	<4.2	<0.5	<1.0	<5.0
Limit as per CPCB		100	60	80	80	180	1	2	400	5	1	6	20

TABLE-F
AMBIENT AIR QUALITY RESULTS
MONITORING STATION:- JHIKURKHALI

SL.	DATE	Pollutant's Concentration											
		PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	Ozone (O_3) $\mu g/m^3$	Lead (Pb) $\mu g/m^3$	CO mg/m3	Ammonia (NH_3) $\mu g/m^3$	Benzene (C_6H_6) $\mu g/m^3$	Benzo(a)Pyrene (BaP) ng/m^3	Arsenic (As) ng/m^3	Nickel (Ni) ng/m^3
1	19.05-20.05.23	85.00	50.00	8.60	29.10			0.46					
2	22.05-23.05.23	89.10	49.50	9.70	29.30			0.46					
3	25.04-26.05.23	65.10	36.20	6.40	22.90			0.26					
4	16.05-17.05.23	78.60	40.80	6.50	27.90	20.00	<0.01	0.38	38.20	<4.2	<0.5	<1.0	<5.0
5	28.05-29.05.23	84.70	47.10	10.80	28.50			0.54					
6	31.05-01.06.23	76.10	44.80	8.40	24.70			0.42					
7	03.06-04.06.23	81.30	45.20	9.90	27.80			0.48					
8	06.06-07.06.23	74.20	39.10	8.30	24.70			0.38					
9	09.06-10.06.23	82.50	45.80	8.90	26.90			0.52					
10	12.06-13.06.23	70.30	37.00	7.40	23.60			0.42					
11	15.06-16.06.23	95.10	52.80	11.30	34.20			0.66					
12	21.06-22.06.23	72.80	38.30	7.50	24.60			0.44					
13	24.06-25.06.23	65.10	36.20	6.90	19.60			0.34					
14	27.06-28.06.23	64.90	36.10	6.70	18.90			0.36					
15	30.06-01.07.23	84.60	38.50	8.70	26.20			0.56					
AVERAGE		77.96	42.49	8.40	25.93	20.00	<0.01	0.45	38.20	<4.2	<0.5	<1.0	<5.0
Limit as per CPCB		100	60	80	80	180	1	2	400	5	1	6	20

Annexure - 11b

MCPI PVT. LTD.
CAAQMS DATA
DAILY AVERAGE
MONTH- APRIL-2023

DATE	Parameter								
	PM10	PM25	SO2	CO	NO2	NH3	OZONE	BENZENE	TEMP
01/04/2023	21.74	11.2	17.35	0.39	15.32	14.2	25	0.22	24.45
02/04/2023	29.05	13.7	28.83	0.39	19.29	13.8	24.5	0.22	26.58
03/04/2023	31.34	16.7	23.62	0.42	15.68	14.5	23.5	0.22	27.87
04/04/2023	26.38	12.4	18.92	0.4	12.89	14.7	19	0.22	28.31
05/04/2023	51.15	18.6	24.74	0.36	18.01	14.3	30.6	0.22	30.28
06/04/2023	73.46	30.2	26.74	0.43	19.72	14	35.4	0.22	30.64
07/04/2023	51.28	22	30.93	0.38	18.51	13.8	26.2	0.22	30.06
08/04/2023	45.45	20.8	34.6	0.39	19.98	13.1	23	0.22	29.74
09/04/2023	57.39	27.6	30.59	0.41	19.01	13.6	29.3	0.22	29.75
10/04/2023	60.92	29.3	31.35	0.43	18.71	13.3	26.3	0.22	30.57
11/04/2023	65.8	32.6	29.32	0.47	21.22	13.2	29.7	0.22	31.55
12/04/2023	108.02	30.5	28.74	0.42	19.4	13.9	37.2	0.22	31.92
13/04/2023	80.52	33.5	54.76	0.44	22.98	13.2	40.7	0.22	33.31
14/04/2023	67.66	29.9	38.31	0.42	18.68	13.9	28.8	0.22	33.87
15/04/2023	52.35	26.5	18.61	0.46	13.04	15	25	0.22	33.16
16/04/2023	63.73	31	30.05	0.45	16.55	14.5	31.3	0.22	34.09
17/04/2023	58.04	28.6	22.21	0.43	14.21	14.8	29.2	0.22	33.67
18/04/2023	45.41	2.6	18.64	0.44	12.17	15.3	25.8	0.22	33.17
19/04/2023	41.73	0	15.06	0.45	12.65	15.2	26.1	0.22	33.21
20/04/2023	57.28	0	19.41	0.46	14.68	15	29.4	0.22	33.7
21/04/2023	90.08	7.5	29.81	0.48	21.15	13.7	31.4	0.91	33.92
22/04/2023	79.21	31.7	53.76	0.44	20.89	13.9	36	0.29	31.97
23/04/2023	47.9	15	46.13	0.43	17.69	14.5	30.6	0.29	29.93
24/04/2023	26.73	14.7	20.75	0.57	17.27	14.2	27.7	0.28	29.3
25/04/2023	69.06	25.5	37.33	0.54	24.04	12.8	27.4	0.28	30.36
26/04/2023	49.03	22	25.94	0.44	17.17	14.4	22.7	0.32	31.16
27/04/2023	46.7	15.9	24.75	0.53	16.1	14.3	22.7	0.31	30.85
28/04/2023	35.09	18	21.52	0.44	15.04	14.6	24.1	0.31	30.61
29/04/2023	30.38	16.8	19.35	0.61	14.81	14.8	26.6	0.32	31.23
30/04/2023	30.31	17	21.03	1.13	17.62	14.5	24.2	0.32	29.08
Minimum	21.74	0	15.06	0.36	12.17	12.8	19	0.22	24.45
Maximum	108.02	33.5	54.76	1.13	24.04	15.3	40.7	0.91	34.09
Average	53.11	20.1	28.11	0.47	17.48	14.2	28	0.27	30.94

MCPI HALDIA PRIVATE LIMITED

MCPI PVT. LTD.
CAAQMS DATA
DAILY AVERAGE
MONTH- MAY-2023

DATE	Parameter								
	PM10	PM25	SO2	CO	NO2	NH3	OZONE	BENZENE	TEMP
5/1/2023	45.28	19.2	18.32	0.58	17.4	14.4	21.9	0.32	28.29
5/2/2023	34.46	14.1	19.78	0.42	16.19	15	23.7	0.32	30.38
5/3/2023	28.82	11.7	30.93	0.39	17.87	14	20.9	0.32	31.2
5/4/2023	22.67	9.1	25.13	0.41	14.95	14.6	18	0.32	30.35
5/5/2023	19.81	8.3	26.93	0.43	15.67	14.2	18.8	0.32	30.55
5/6/2023	22.52	12.5	38.7	0.4	16.69	14.2	24.1	0.32	31.63
5/7/2023	35.9	18.9	37.02	0.43	16.83	14.5	29.8	0.32	33.31
5/8/2023	32.94	16.8	35.75	0.44	17.72	14.2	25.3	0.32	33.54
5/9/2023	38.09	19.2	26.74	0.44	16.21	14.3	24.1	0.31	33.16
5/10/2023	32.13	14.8	21.26	0.42	13.83	14.8	21.9	0.3	32.99
5/11/2023	28.81	12.3	23.15	0.4	13.75	14.8	19.5	0.31	33.1
5/12/2023	22.88	12	13.45	0.46	12.5	15.5	19.3	0.31	33.1
5/13/2023	31.85	11.8	17.95	0.93	16.35	14.5	27.2	0.29	33.23
5/14/2023	65.55	18.6	17	0.56	16.27	14.7	36.1	0.29	33.14
5/15/2023	55.71	16.8	20.26	0.49	16.86	14.4	29.6	0.29	31.42
5/16/2023	38.06	16.8	32.01	0.48	16.34	14.5	25.9	0.29	32.08
5/17/2023	30.47	11.5	20.23	0.39	12.27	15.5	26.6	0.3	32.98
5/18/2023	25.06	9.9	14.9	0.41	11.8	15.2	28.4	0.27	31.52
5/19/2023	31.48	14.8	26.57	0.44	14.1	14.6	25.4	0.25	32.01
5/20/2023	29.41	12.9	29.19	0.48	14.26	14.8	25.5	0.25	32
5/21/2023	44.01	21.8	39.21	0.38	13.46	15	22.4	0.26	32.92
5/22/2023	36.67	16.7	38.82	0.39	13.43	15.1	25.1	0.27	32.95
5/23/2023	43.06	13.4	42.69	0.68	23.43	14.8	33.8	0.29	32.39
5/24/2023	26.52	11.2	20.1	0.62	15.72	14.8	29.2	0.29	31.76
5/25/2023	32.36	14.1	19.88	0.61	14.31	14.4	27.6	0.29	31.25
5/26/2023	17.74	8.5	15.5	0.57	13.58	14.8	29.5	0.28	30.16
5/27/2023	20.94	9.5	21.47	0.57	16.56	14.2	31.1	0.29	31.98
5/28/2023	30.36	16.8	18.79	0.49	19.86	14.7	29.6	0.29	32.18
5/29/2023	38.68	19	35.34	0.43	17.75	14.9	29.8	0.3	33.14
5/30/2023	39.21	18.1	27.31	0.39	14.49	14.9	21.3	0.31	33.27
5/31/2023	34.35	15.1	24.13	0.4	14.93	15.1	23.7	0.31	33.58
Minimum	17.74	8.3	13.45	0.38	11.8	14	18	0.25	28.29
Maximum	65.55	21.8	42.69	0.93	23.43	15.5	36.1	0.32	33.58
Average	33.41	14.4	25.76	0.48	15.66	14.7	25.6	0.3	32.11

MCPI PVT. LTD.
CAAQMS DATA
DAILY AVERAGE
MONTH- JUNE-2023

DATE	Parameter								
	PM10	PM25	SO2	CO	NO2	NH3	OZONE	BENZENE	TEMP
6/1/2023	38.18	19.8	16.31	0.4	14.38	15.3	31.2	0.3	33.79
6/2/2023	48.27	25.3	24.3	0.43	14.03	14.9	33.7	0.3	33.96
6/3/2023	44.28	22.6	18.18	0.39	12.3	15	27.4	0.3	33.94
6/4/2023	37.88	17.5	14.93	0.39	10.87	15.2	27.2	0.3	33.84
6/5/2023	36.85	15.1	16.65	0.39	11.32	15.4	27.2	0.3	33.98
6/6/2023	37.82	17.1	20.68	0.4	13.35	14.9	27.7	0.29	34.26
6/7/2023	43.68	21.5	13.02	0.4	13.57	14.9	30.7	0.3	34.24
6/8/2023	35.78	16.8	12.39	0.37	11.97	15.1	30.5	0.3	33.85
6/9/2023	32.74	14.6	21.75	0.65	17	14.2	29.4	0.3	32.59
6/10/2023	26.42	12.4	19.04	0.36	13.59	15	38.3	0.29	33.1
6/11/2023	30.58	11.2	10.06	0.44	12	15.6	32.1	0.29	34.3
6/12/2023	34.23	13.1	22.21	0.44	17.66	14.1	33.8	0.28	32.48
6/13/2023	37.77	16.1	16.46	0.59	16.85	14.9	33.4	0.28	33.55
6/14/2023	46.92	17.4	50.91	0.36	17.25	14.5	32.9	0.29	34.6
6/15/2023	36.47	15.3	17.82	0.39	13.73	15	29.9	0.31	34.47
6/16/2023	40.55	13.5	21.97	0.4	12.41	15.4	26	0.3	34.29
6/17/2023	33.74	13	10.02	0.39	11.29	15.7	25.5	0.29	33.12
6/18/2023	30.35	8.8	11.37	0.38	10.47	15.9	23.8	0.29	33.28
6/19/2023	24.02	11.2	17.51	0.46	13.59	15.1	25	0.29	32.2
6/20/2023	25.48	8.8	17.22	0.37	10.83	15.9	20	0.28	33.44
6/21/2023	23.47	7.1	14.44	0.37	8.38	15.1	19.6	0.28	33.61
6/22/2023	17.39	8.1	12.33	0.56	6.86	14.4	20.9	0.24	32.05
6/23/2023	15.43	7.9	14.68	0.67	6.95	14.5	22.8	0.24	32.41
6/24/2023	21.02	12	11.62	0.65	6.82	14.5	21.7	0.26	30.14
6/25/2023	11.18	7.9	10.51	0.69	6.86	14.3	21	0.26	30.68
6/26/2023	11.02	7.8	11.84	0.89	7.03	14.1	18	0.27	29.36
6/27/2023	6.04	3.9	13.46	0.62	6.97	14.1	13.8	0.26	28.96
6/28/2023	16.16	7.8	10.73	0.35	6.63	14.3	14	0.27	29.29
6/29/2023	16.19	7.9	12.47	0.39	7.01	14.4	14.6	0.28	30.86
6/30/2023	20.63	8.2	11.23	0.38	6.93	14.3	14.2	0.3	32.32
Minimum	6.04	3.9	10.02	0.35	6.63	14.1	13.8	0.24	28.96
Maximum	48.27	25.3	50.91	0.89	17.66	15.9	38.3	0.31	34.6
Average	29.35	13	16.54	0.47	11.3	14.9	25.5	0.28	32.77

MCPI PVT. LTD.
CAAQMS DATA
DAILY AVERAGE
MONTH- JULY-2023

DATE	Parameter								
	PM10	PM25	SO2	CO	NO2	NH3	OZONE	BENZENE	TEMP
7/1/2023	17.67	7.5	11.07	0.41	6.97	14.5	14.2	0.3	32.55
7/2/2023	21.16	7.2	10.12	0.39	6.76	14.4	13.6	0.3	33.14
7/3/2023	18.01	8.7	12.96	0.4	6.8	14.4	13.1	0.3	33.07
7/4/2023	14.29	5.3	10.05	0.4	6.85	14.3	12.6	0.3	33.27
7/5/2023	9.17	4.6	10.67	1.14	7.12	14.3	13.4	0.29	31.21
7/6/2023	4.68	3	9.16	0.52	6.89	14.3	11.6	0.3	31.17
7/7/2023	9.5	3.7	10.95	0.39	6.86	14.3	12.4	0.3	31.67
7/8/2023	9.11	4.9	8.96	0.56	6.87	14.3	13.5	0.3	30.59
7/9/2023	17.38	6.8	9.46	0.37	7.06	14.4	12.8	0.3	32.39
7/10/2023	23.13	8.7	10.1	0.39	6.86	14.4	11.7	0.31	32.39
7/11/2023	15.19	7.3	9.45	0.4	6.74	14.5	11.5	0.3	32.52
7/12/2023	11.97	6.1	9.73	0.39	6.9	14.3	10.9	0.28	32.28
7/13/2023	6.99	2.8	6.86	0.4	6.84	14.4	10.7	0.29	32.36
7/14/2023	21.31	9.3	10.31	0.42	7	14.4	14	0.3	31.53
7/15/2023	16.18	9.3	9.85	0.65	6.96	14.3	14.6	0.22	30.28
7/16/2023	10.58	6.6	10	0.36	6.66	14.4	10.5	0.22	31.1
7/17/2023	7.69	4.1	9.88	0.72	6.62	14.4	10.8	0.22	31.71
7/18/2023	10.99	5.8	10.82	1.05	7.03	14.4	11.7	0.22	32.15
7/19/2023	8.6	3.1	10.6	0.82	7.04	14.4	12.8	0.22	32.55
7/20/2023	8.96	5.7	13.84	0.74	6.65	14.4	13.2	0.22	32.44
7/21/2023	12.14	7.2	9.61	0.6	6.99	14.4	12.2	0.22	31.9
7/22/2023	14.6	7.7	9.32	0.68	6.88	14.4	11.5	0.22	31.29
7/23/2023	8.11	4.2	10.04	0.44	6.94	14.3	10.8	0.22	31.93
7/24/2023	9.55	4.9	11.76	0.47	6.93	14.3	10	0.22	32.43
7/25/2023	9.91	4.1	10.85	0.56	6.77	14.4	9.7	0.27	32.22
7/26/2023	9.32	3.9	7.83	0.48	7.04	14.5	9.4	0.3	31.95
7/27/2023	9.84	3.1	6.86	0.42	6.88	14.4	9.8	0.31	31.84
7/28/2023	8.35	5.4	11.39	0.42	6.85	14.4	9.9	0.3	31.31
7/29/2023	14.35	7.5	12.09	0.59	6.72	14.3	9.9	0.24	31.01
7/30/2023	14.95	10.3	11.69	0.51	6.94	14.4	10.8	0.26	32.17
7/31/2023	18.65	10.8	11.31	0.43	6.9	14.3	10.8	0.26	31.86
Minimum	4.68	2.8	6.86	0.36	6.62	14.3	9.4	0.22	30.28
Maximum	23.13	10.8	13.84	1.14	7.12	14.5	14.6	0.31	33.27
Average	12.66	6.1	10.24	0.53	6.88	14.4	11.8	0.27	31.94

MCPI PVT. LTD.
CAAQMS DATA
DAILY AVERAGE
MONTH- AUGUST-2023

DATE	Parameter								
	PM10	PM25	SO2	CO	NO2	NH3	OZONE	BENZENE	TEMP
8/1/2023	15	8.7	10.54	0.42	6.81	14.4	9.6	0.25	30.66
8/2/2023	8.8	3.9	11.04	0.41	6.68	14.5	9.8	0.24	29.74
8/3/2023	20.77	8.2	10.28	0.4	6.76	14.5	10.1	0.27	32.07
8/4/2023	23.05	9.4	9.81	0.38	6.78	14.4	10.2	0.27	32.12
8/5/2023	26.17	12.5	11.5	0.44	6.92	14.3	11	0.27	31.55
8/6/2023	29.31	15.9	11.48	0.43	6.91	14.4	10.5	0.24	30.63
8/7/2023	27.64	13.9	10.33	0.4	6.87	14.3	9.5	0.24	29.86
8/8/2023	27.77	10.6	10.8	0.43	6.79	14.5	10.1	0.22	30.01
8/9/2023	46.37	18.5	11.88	0.44	7.08	14.4	10.4	0.22	32.48
8/10/2023	51.2	22.8	10.68	0.51	6.76	14.3	13.6	0.23	32.19
8/11/2023	42.52	21.1	10.14	0.46	6.95	14.3	11.8	0.24	31.71
8/12/2023	33.53	18.1	10.64	0.42	6.96	14.4	11.4	0.23	31.24
8/13/2023	31.6	15.3	9.99	0.44	6.6	14.4	10.9	0.23	30.39
8/14/2023	32.85	14.4	11.19	0.42	6.94	14.4	11.2	0.22	31.09
8/15/2023	37.79	20.3	12.19	0.41	6.71	14.3	11.1	0.22	32.3
8/16/2023	38.77	22.5	9.46	0.43	7.23	14.3	13.4	0.22	32.16
8/17/2023	24.83	11.6	10.92	out of order	7.09	14.3	14	0.23	30.55
8/18/2023	23.69	14.8	11.85	out of order	6.85	14.5	11.3	0.22	31.13
8/19/2023	13.92	5.5	11.25	out of order	7	14.4	10.2	0.22	31.54
8/20/2023	28.22	8.3	11.89	out of order	6.9	14.4	10.9	0.22	32
8/21/2023	26.68	7.6	12.14	out of order	7.05	14.4	11.1	0.22	32.22
8/22/2023	29.19	12.1	11.61	out of order	7.03	14.4	9.8	0.22	31.81
8/23/2023	27.32	12.9	11.02	out of order	7.05	14.3	8.9	0.22	31.79
8/24/2023	19.36	9.6	11.38	out of order	6.85	14.3	9.1	0.22	30.27
8/25/2023	22.54	11.5	11.02	out of order	6.92	14.4	9.3	0.22	28.89
8/26/2023	25.08	12.1	11.33	out of order	7.02	14.3	9.9	0.22	30.26
8/27/2023	60.84	21.5	12.05	out of order	6.99	14.5	9.4	0.22	32.65
8/28/2023	84.95	28.3	11.27	out of order	6.73	14.5	9.5	0.22	33.66
8/29/2023	103.7	32.7	9.77	out of order	7.02	14.4	9.7	0.22	33.31
8/30/2023	93.41	31.1	11.27	out of order	7.07	14.3	9.3	0.22	33.58
8/31/2023	74.6	26.7	11.27	out of order	6.9	14.5	9.1	0.22	32.97
Minimum	8.8	3.9	9.46	0.38	6.6	14.3	8.9	0.22	28.89
Maximum	103.7	32.7	12.19	0.51	7.23	14.5	14	0.27	33.66
Average	37.14	15.6	11.03	0.43	6.91	14.4	10.5	0.23	31.51

MCPI HALDIA PRIVATE LIMITED

MCPI PVT. LTD.
CAAQMS DATA
DAILY AVERAGE
MONTH- SEPTEMBER-2023

DATE	Parameter								
	PM10 ug/m3	PM25 ug/m3	SO2 ppb	CO mg/m3	NO2 ug/m3	NH3 ug/m3	OZONE ppb	BENZENE ug/m3	TEMP degreC
9/1/2023	63.7	25.4	11.07	0.44	6.85	14.4	8.9	0.23	33.28
9/2/2023	53.22	25.2	9.07	0.55	6.95	14.3	8.9	0.22	33.13
9/3/2023	32.37	16.6	9.62	0.68	6.87	14.4	9.3	0.22	32.29
9/4/2023	12.7	7.1	10.37	1.02	7.21	14.3	9	0.22	29.93
9/5/2023	7.89	5.1	12.4	1.18	6.76	14.5	9.3	0.22	30.41
9/6/2023	9.62	7	9.77	1.3	7.12	14.3	9	0.22	31.59
9/7/2023	7.77	3.2	8.95	0.73	6.88	14.5	9.5	0.22	29.85
9/8/2023	8.69	4.3	10.72	0.47	6.81	14.3	8.7	0.22	29.61
9/9/2023	11.88	6.6	10.26	0.41	6.88	14.4	8.6	0.22	31.18
9/10/2023	18.22	6.4	10.41	0.42	6.79	14.4	8.7	0.22	32.19
9/11/2023	13.55	7.2	11.08	0.42	6.76	14.4	8.8	0.22	32.63
9/12/2023	11.97	5.3	8.84	0.82	6.93	14.4	9	0.22	31.35
9/13/2023	11.44	6.3	9.46	0.7	6.68	14.5	8.8	0.22	30.81
9/14/2023	12.38	6.7	9.59	1.18	6.91	14.4	9	0.22	30.57
9/15/2023	8.36	4	11.27	1.04	6.84	14.5	9.3	0.22	30.26
9/16/2023	14.45	7	8.73	0.62	7.09	14.3	9.1	0.22	32
9/17/2023	16.86	9.7	9.35	0.69	7.02	14.3	8.9	0.22	32.52
9/18/2023	20.2	7.8	9.64	0.63	6.76	14.4	9.4	0.22	30.7
9/19/2023	9.45	5.6	10.59	0.69	6.94	14.3	8.8	0.22	29.8
9/20/2023	11.08	6.5	11.16	0.46	6.78	14.3	9.3	0.22	30.43
9/21/2023	11.61	5.7	10.58	0.4	7	14.4	8.8	0.22	30.29
9/22/2023	13.78	6.1	9.48	0.39	6.77	14.5	9	0.22	30.85
9/23/2023	12.91	5.5	8.29	0.4	6.86	14.4	9.1	0.22	31.25
9/24/2023	15.38	6.7	6.21	0.42	6.78	14.4	8.9	0.22	30.76
9/25/2023	18.98	10.3	10.3	0.37	6.96	14.2	9.6	0.22	31.14
9/26/2023	11.62	4.1	8.89	0.29	6.83	14.3	9.2	0.22	31.93
9/27/2023	25.35	10.6	9.41	0.39	6.88	14.4	9	0.22	32.27
9/28/2023	39.33	14.7	8.48	0.31	7.03	14.5	9.4	0.22	32.61
9/29/2023	39.39	17	8.91	0.33	6.66	14.5	10.1	0.22	29.8
9/30/2023	11.96	6.7	9.52	0.29	7.09	14.3	10.1	0.22	28.15
Minimum	7.77	3.2	6.21	0.29	6.66	14.2	8.6	0.22	28.15
Maximum	63.7	25.4	12.4	1.3	7.21	14.5	10.1	0.23	33.28
Average	18.54	8.7	9.75	0.6	6.89	14.4	9.1	0.22	31.12

Annexure-IIc

WORK ZONE MONITORING REPORT OF DP PLANT

No.	Department / Area	Locations/ Activty	Date of sampling	Parameters	No. of samples	Results in (mg/m^3)	TWA in (mg/m^3)
1	DP Utility	Water Treatment plant	09.12.2022	Chlorine	3	0.96	3
				Sulphuric acid	3	ND	1
				Carbon Monoxide	3	0.2939	55
				Carbon Dioxide	3	9.36	No Limit
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
2		Waste Water Treatment plant, DP Plant	09.12.2022	Ammonia	3	5.62	18
				Carbon Monoxide	3	0.2906	55
				Carbon Dioxide	3	10,19	No Limit
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
3		Residue Pit	05.12.2022	Ammonia	3	5.81	18
				Carbon Monoxide	3	0.2844	55
				Carbon Dioxide	3	10.29	No Limit
				Hydrogen Sulphide	3	3.19	14
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
4	Process (CTA)	Main Reactor Bottom	02.12.2022	Methyl acetate	3	ND	No Limit
				Acetic Acid	3	2.42	25
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				P'xylene	3	15.56	435
				Carbon Dioxide	3	10.58	No Limit
				Carbon Monoxide	3	0.2852	55
5		HBr Charging area(unloading)	01.12.2022	Carbon Monoxide	3	0.2804	55
				Carbon Dioxide	3	10.67	No Limit
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
6		Belt filter 13 mtr (During mtc.)	01.12.2022	Acetic Acid	3	ND	25
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				Carbon Monoxide	3	0.2784	55
				Carbon Dioxide	3	10.48	No Limit
				p'Xylene	3	4.39	435
7	Process (CTA)	Main Reactor Top	02.12.2022	Methyl acetate	3	ND	No Limit
				Acetic Acid	3	1.54	25
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				P'xylene	3	29.8	435
				Carbon Dioxide	3	11.41	No Limit
				Carbon Monoxide	3	0.2673	55

WORK ZONE MONITORING REPORT OF DP PLANT							
No.	**Department / Area**	**Locations/ Activty**	**Date of sampling**	**Parameters**	**No. of samples**	**Results in(mg/m^3)**	**TWA in (mg/m^3)**
8	Process (PTA)	Recovery Section	08.12.2022	Acetic acid	3	1.11	25
				Carbon Monoxide	3	0.2562	55
				Carbon Dioxide	3	9.51	No Limit
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				P'Xylene	3	12.73	435
9		Tank Farm area near F-4904	03.12.2022	p'Xylene	3	ND	435
				Acetic Acid	3	ND	25
				Carbon Dioxide	3	11.72	No Limit
				Carbon Monoxide	3	0.2883	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
10		Tank Farm area near F-4901	13.12.2022	p'Xylene	3	ND	435
				Acetic Acid	3	ND	25
				Carbon Dioxide	3	11.37	No Limit
				Carbon Monoxide	3	0.2838	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
11	DP Logistic	Packing area -1	07.12.2022	SPM	3	0.471	10
				RPM	3	0.0992	5
				Carbon Dioxide	3	10.39	No Limit
				Carbon Monoxide	3	0.2816	55
12		Packing area -2	09.12.2022	SPM	3	1.29	10
				RPM	3	0.688	5
				Carbon Dioxide	3	10.93	No Limit
				Carbon Monoxide	3	0.2826	55
13		Bulk Silo F-6955	01.12.2022	RPM	3	0.368	5
				Carbon Dioxide	3	11.02	No Limit
				Carbon Monoxide	3	0.2848	55
14		PWH 90 deg side	05.12.2022	RPM	3	0.259	5
				SO2	3	0.005	5
				NO2	3	0.009	6
				Carbon Monoxide	3	0.2857	55
				Carbon Dioxide	3	10.99	No Limit
15		PWH 180 deg side	02.12.2022	RPM	3	0.525	5
				SPM	3	1.308	10
				Carbon Monoxide	3	0.278	55
				Carbon Dioxide	3	11.37	No Limit

WORK ZONE MONITORING REPORT OF HP PLANT							
No.	**Department / Area**	**Locations/ Activty**	**Date of sampling**	**Parameters**	**No. of samples**	**Results in (mg/m^3)**	**TWA in (mg/m^3)**
16	HP Utility	Waste Water Treatment plant	07.12.2022	Ammonia	3	0.91	18
				Carbon Dioxide	3	10.81	No Limit
				Carbon Monoxide	3	0.2793	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
17		Water Treatment plant	07.12.2022	Chlorine	3	1.13	3
				Sulphuric acid	3	ND	1
				Carbon Dioxide	3	9.38	No Limit
				Carbon Monoxide	3	0.2779	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
18		Residue Pit Top	15.12.2022	Hydrogen Sulphide	3	0.41	14
				Ammonia	3	5.28	18
				Carbon Dioxide	3	9.55	No Limit
				Carbon Monoxide	3	0.2739	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
19		Residue Pit Bottom	16.12.2022	Hydrogen Sulphide	3	0.28	14
				Ammonia	3	3.04	18
				Carbon Dioxide	3	9.72	No Limit
				Carbon Monoxide	3	0.281	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
20	HP Proceass(CTA)	Main Reactor top	8.12.2022	Xylene (P-isomer)	3	60.85	435
				Acetic acid	3	3.35	25
				Carbon Dioxide	3	11.46	No Limit
				Carbon Monoxide	3	0.2829	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				Methyl Acetate	3	ND	No Limit
21		Main Reactor bottom	12.12.2022	Xylene (P-isomer)	3	64.45	435
				Acetic acid	3	3.72	25
				Carbon Dioxide	3	11.47	No Limit
				Carbon Monoxide	3	0.2892	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				Methyl Acetate	3	ND	No Limit
22		CTA Decenter 5 mtr	14.12.2022	Xylene (P-isomer)	3	51.00	435
				Acetic acid	3	2.15	25
				Carbon Dioxide	3	11.36	No Limit
				Carbon Monoxide	3	0.285	55
				VOC as Benzene	3	ND	20

				VOC as Toluene	3	ND	375
				Methyl Acetate	3	ND	No Limit
		CTA Decenter 13 mtr	16.12.2022	Xylene (P-isomer)	3	48.07	435
				Acetic acid	3	2.50	25
				Carbon Dioxide	3	11.26	No Limit
23				Carbon Monoxide	3	0.2843	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				Methyl Acetate	3	ND	No Limit
		CTA Decenter 20 mtr	14.12.2022	Xylene (P-isomer)	3	56.8	435
				Acetic acid	3	2.45	25
				Carbon Dioxide	3	9.95	No Limit
24				Carbon Monoxide	3	0.279	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				Methyl Acetate	3	ND	No Limit
				Acetic Acid	3	2.46	25
				Carbon Dioxide	3	10.74	No Limit
25	HP Process (PTA)	Recovery Section	8.12.2022	Carbon Monoxide	3	0.2931	55
				VOC as Benzene	3	ND	20
				VOC as Toluene	3	ND	375
				P'Xylene	3	32.93	435
				RPM	3	0.626	5
				SPM,	3	1.211	10
26		Packing area-1	09.12.2022	CO2	3	10.47	No Limit
				CO	3	0.2843	55
	HP Logistics			RPM	3	0.688	5
				SPM,	3	1.29	10
27		Packing area-2	13.12.2022	CO2	3	10.93	No Limit
				CO	3	0.2868	55
				Acetic Acid	3	2.66	25
				Carbon Dioxide	3	10.91	No Limit
				Carbon Monoxide	3	0.287	55
28	Laboratory	Instrument Room A	15.12.2022	VOC as Benzene	3	ND	20
				Methyl Acetate	3	ND	No Limit
				VOC as Toluene	3	ND	375

Annexure – II d.

DECLARATION

This report has been prepared by **Bureau Veritas India Private Limited** on behalf of and for the use of the Customer with due consideration and skill as per our general terms and conditions of business and the terms of agreement with the customer.

Date: 15th Dec 2022

Manager-Environment

Executive Summery

This report includes the detail of a study carried out to measure the total Hydrocarbons to the production plant through component emission.

The aim of study was to find out the emission component wise the TVOC concentration on annual basis. MCPI Private Limited engaged M/s. Bureau Veritas India Pvt.Ltd, Chennai, for carrying out the study.

The TVOC measurement was conducted as per EPA method 21 using PID analyzer. Total number of point measured 2007 point in Fifteen days (between 30.11.2022 to 15.12.2022). Total number of points measured are 2007 points for TVOC with concentration of 50.25 kg/Year considering all the components with all units.

All points for TVOC, leakage was well within the limit of MoEF Guideline in the LDAR study.

MCPI HALDIA PRIVATE LIMITED

Introduction:

MCPI Private Limited (MCPI), a member of The Chatterjee Group (TCG), is a front runner in the manufacture of Purified Terephthalic Acid (PTA) which is the basic raw material for the polyester industry. With its Headquarters in Kolkata and plant located on the picturesque western bank of the river Hooghly in the industrial hub at Haldia, West Bengal, MCPI has established itself as a leading manufacturer of PTA, ensuring a stable supply to the polyester industry in the country.

To meet the needs of our client, Bureau Veritas India Pvt. Ltd has developed leading edge expertise to run turnkey LDAR projects (Leak Detection and Repair) and report the gathered Fugitive Emission monitoring data.

A fugitive emission monitoring project is typically conducted in following phases :

About LDAR: Leak Detection and Repair (LDAR) is a program implemented to comply with environmental regulations for reducing the fugitive emissions of targeted chemicals into the environment. Several standards such as Maximum Achievable Control Technology (MACT) Standards, New Source Performance Standards (NSPS), National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Central Pollution Control Boards (CPCB) require the monitoring and reporting of these fugitive emissions from process equipment.

Process components of about 2007 points were monitored as LDAR and as per the EPA act the leaks detected with maximum concentration of Hydrocarbons 2.634 ppmv for flanges & valves (1000 ppmv Benzene for flanges & Valves).

A typical chemical company can emit some tons per year of VOCs from leaking equipment, such as valves, connectors, pumps, sampling connections, compressors, pressure relief devices and open ended lines.

The environmental regulations are prescribed LDAR programs as a means of reducing emissions have very specific standards and applied to a monitoring and repair program. The LDAR study included the following protocols:

- Chemical Streams that must be monitored
- Types of components (pumps, valves, connectors, etc.) to be monitored
- Measured concentration to PPM that indicates a leak
- Frequency of monitoring
- Method of monitoring
- Actions to be taken if a leak is discovered
- Length of time in which an initial attempt to repair the leak must be performed
- Length of time in which an effective repair of the leak must be made
- Actions that must be taken if a leak cannot be repaired within guidelines
- Record-keeping and reporting requirements

VOCs are contributed to the formation of ground level ozone. Many of the areas where Refineries are located do not meet the NAAQ standards for ozone. Ozone can be transported in the atmosphere are contribute to nonattainment in downwind areas.

Affected Sources: Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, flange and connector that contains or contracts a fluid or gas that is exceeding more than 5000ppm of pump and compressor seals and 3000 ppm other components is an affected source.

Equipment Leak : A leak is defined as greater than or equal to 3000 & 5000 ppmv as methane, for organic compounds, as determined by EPA Reference Method 21, Most of the emissions are from valves and connectors because these are most prevalent components an can number in the thousands. The major cause of emissions from valves and connectors is seal or gasket failure due to normal wear or improper maintenance. More than 90% of the emissions from ended lines and sampling connections account for as much as 5 – 10% of total VOC emissions from equipment leaks.

Minimum Requirements for an Acceptable Organic LDAR Program:

- Each affected source is screened initially using Method21, Sources that are unsafe to monitor is not screened, but documentation is provided to substantiate the unsafe nature.
- Monthly visual inspections has to be performed by industry on each affected source for signs of leakage (e.g. dripping liquid, spraying, misting, clouding, ice formation, distinctive odors, etc).
- Monitoring of each affected source is to be conducting quarterly using Method 21.

All potential leak points associated with a component must be identified and screened for leaks, For AER purposes, potential leak points are counted as individual components. The detected leaks by Method 21 test was tagged and repaired. The leak sources are measured after repair and the same is recorded.

METHODOLOGY OF THE STUDY:

EPA has found significant widespread noncompliance with Leak Detection and Repair regulations and more specifically noncompliance with Method 21 requirements.

Step 1: Preparation of LDAR project

Information exchange meeting

- Project introduction
- Project scoping
- Coding & naming conventions
- Prepare technical information (medium, Stream, drawings)
- Stream composition
- YTD production time per stream
- Leak definition, repair definition and tag definition per stream
- Detection equipment to use

Annexure-III

Discharge Effluent Quality Result

April'2023 ~ June'2023

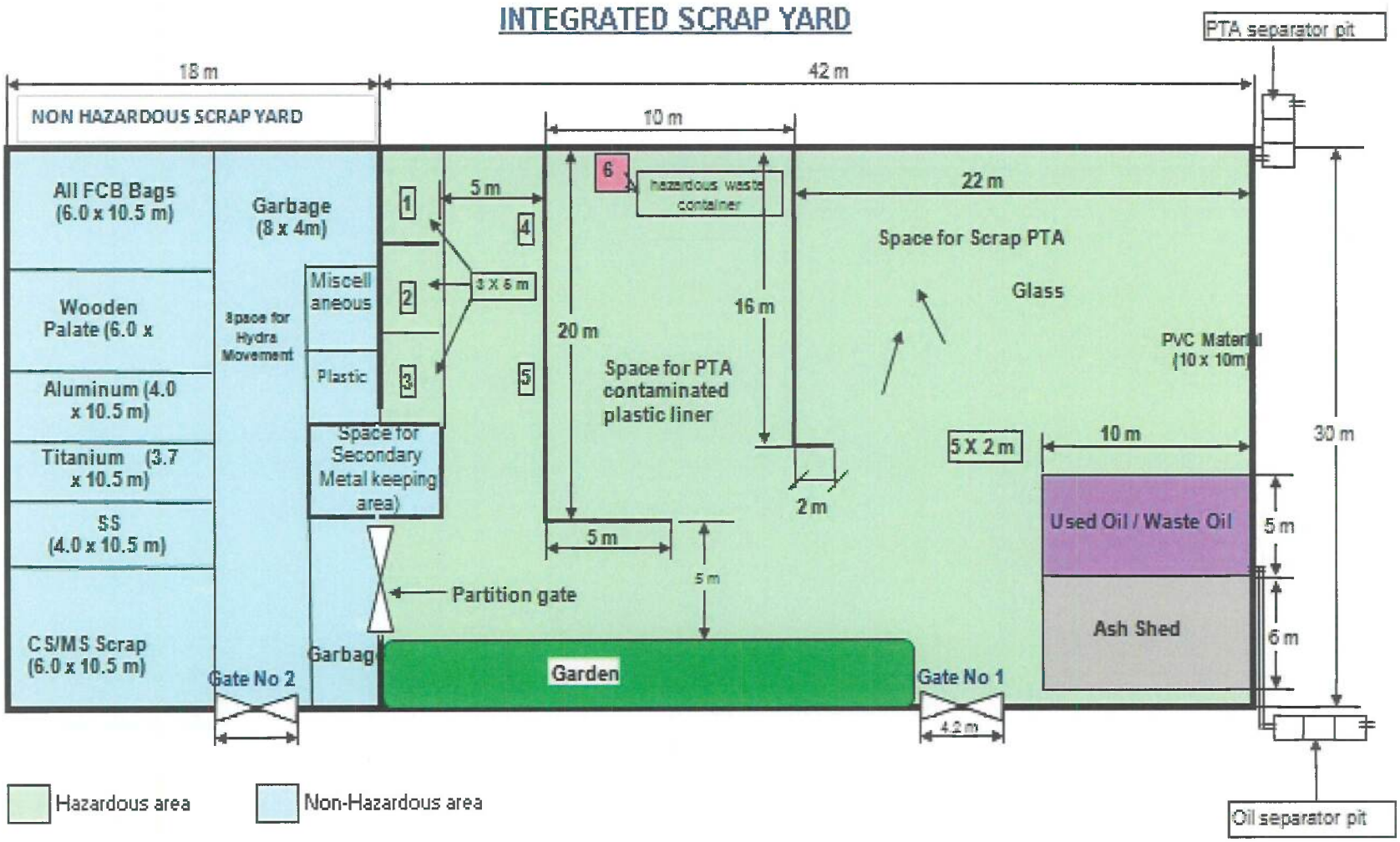
			April'23		May'23			June'23	
Parameter	Unit	Permissible Limit	3rd Party	MCPI	WBPCB	3rd Party	MCPI	3rd Party	MCPI
pH		6.5-8.5	7.9	7.9	8.20	8.00	8.0	8.32	7.9
COD	mg/Lit	250.00	60.00	59.0	38.14	52.00	65.0	64.00	65.00
BOD	"	30.00	5.70	12.0	8.20	12.00	12.0	15.0	13.0
O & G	"	10.00	1.4	1.80	1.40	1.40	1.50	1.40	1.90
Flouride (F)	"	2.00	0.5	0.49		0.58	0.53	0.49	0.44
Hexavalent Chromium (Cr+6)	"	0.10	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Iron (Fe)	"	3.00	0.86	0.55		0.30	0.22	0.77	0.97
Total Chromium (Cr)	"	2.00	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Manganese (Mn)	"	2.00	0.02	0.32		0.02	0.43	0.02	0.51
TSS	"	100.00	12.00	13.0	14.00	9.70	5.0	22.00	6.0
Cyanide (CN)	"	0.20	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Phenolic Compound	"	1.00	<0.001	0.01		<0.001	0.01	<0.001	0.01
Sulfide	"	2.00	<0.1	<0.1		<0.1	<0.1	<0.1	<0.1

Discharge Effluent Quality Result

July'23~September'23

			July'23		August'23			September'23	
Parameter	Unit	Permissible Limit	3rd Party	MCPI	WBPCB	3rd Party	MCPI	3rd Party	MCPI
pH		6.5-8.5	8.29	8.20	8.40	7.6	8.00	8.1	8.1
COD	mg/Lit	250.00	64.00	75.00	48.48	72	72.00	36.00	78.0
BOD	"	30.00	16.0	16.00	8.40	20	15.00	9.2	15.0
O & G	"	10.00	1.40	2.40	1.00	1.4	2.40	1.40	2.9
Flouride (F)	"	2.00	0.50	0.43		0.21	0.39	0.18	0.77
Hexavalent Chromium (Cr+6)	"	0.10	<0.01	0.01		<0.01	0.02	<0.01	0.02
Iron (Fe)	"	3.00	0.70	0.51		0.49	0.59	0.48	0.37
Total Chromium (Cr)	"	2.00	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Manganese (Mn)	"	2.00	0.02	0.570		0.02	0.47	0.02	0.52
TSS	"	100.00	16.00	6.00	16.00	5.80	5.00	12.00	10.0
Cyanide (CN)	"	0.20	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Phenolic Compound	"	1.00	<0.001	<0.01		<0.001	<0.01	<0.001	<0.01
Sulfide	"	2.00	<0.1	<0.1	BDL	<0.1	<0.1	<0.1	<0.1

INTEGRATED SCRAP YARD



Hazardous area

Non-Hazardous area

1	Space for Lead Acid Battery
2	Space for asbestos cloth & CAF gasket
3	Space for Empty paint & dye penetration containers
4	Space for Rejected water treatment resin
5	Space for undeclared hazardous wastes
6	Allotted for oil & chemical soaked cotton waste

MCPI HALDIA PRIVATE LIMITED

Annexure –V

HAZARDOUS WASTE DISPOSED TO TSDF AND CO PROCESSING

(West Bengal Waste Management Limited – WBWML and OCL India Limited (Dalmia Cement Unit) - OCL)

DURING APRIL'23 to SEPTEMBER'23

Sl. No.	Hazardous Waste	Generated quantity (Ton)
1	Ash from De-Sox	0.00
2	Scrap PTA	0.00
3	Empty PTA contaminated plastic liners	0.00
4	Empty paint & Dye penetration container	0.910
5**	Oil & Chemical soaked cotton waste	1.193
6	Water treatment Resin	0.00
7**	Mixture of Process & Utility Sludge	5740.24
8*	Used Oil	4.770
9*	Waste Oil	54.860
10	Asbestos	15.120

* Disposed through registered recycler & re-processor of WBPCB
** Disposed through Co-processing by OCL & through WBWML

MCPI HALDIA PRIVATE LIMITED

Annexure - VI

BEAT PLASTIC POLLUTION | WORLD ENVIRONMENT DAY 2023 | UN environment programme | Republic of Côte d'Ivoire | MCPI Private Limited

REPORT ON WORLD ENVIRONMENT DAY -2023

BEAT PLASTIC POLLUTION | WORLD ENVIRONMENT DAY 2023 | UN environment programme | Republic of Côte d'Ivoire | MCPI Private Limited

MCPI HALDIA PRIVATE LIMITED

Celebration of World Environment day 2023 at Shataku-1

Plantation by SH-1 Family members

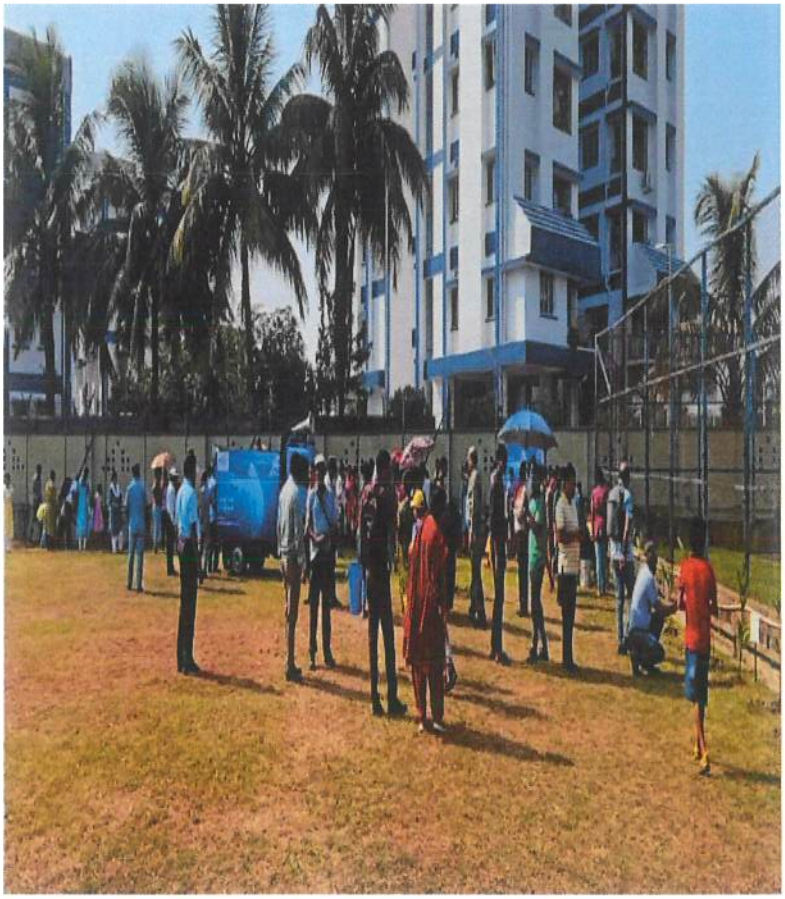
MCPI Private Limited

MCPI HALDIA PRIVATE LIMITED

Celebration of World Environment day 2023 at Shataku-1

Plantation by SH-1 Family members

MCPI Private Limited



MCPI HALDIA PRIVATE LIMITED

CELEBRATION OF WORLD ENVIRONMENT DAY -2023

Plantation at Plant Green Belt

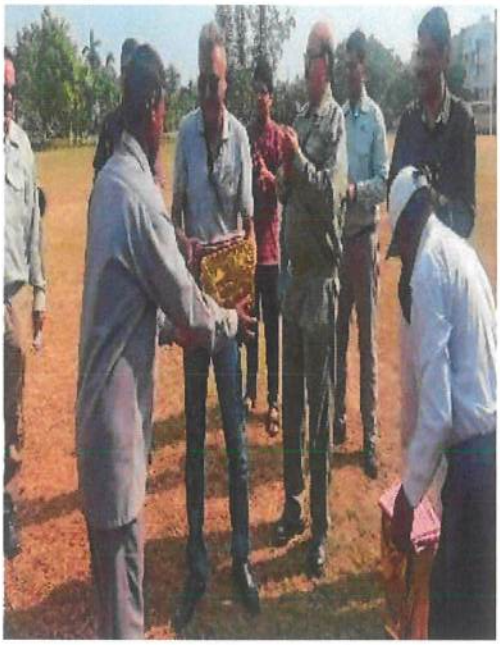
MCPI Private Limited

MCPI HALDIA PRIVATE LIMITED

Celebration of World Environment day 2023 at Shataku-1

Appreciation to Gardeners at SH-1 & 2 and Plant

MCPI Private Limited



Celebration of World Environment day 2023 at Shataku-1

Environment Quiz for SH-1 Kids & Family members

MCPI Private Limited

MCPI HALDIA PRIVATE LIMITED

Celebration of World Environment day 2023 at Shataku-2

Plantation by SH-2 Family members

MCPI Private Limited

Celebration of World Environment day 2023 at Shataku-2

Drawing Winners Prize distribution & Quiz for SH-2 Kids

MCPI Private Limited

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CELEBRATION OF WORLD ENVIRONMENT DAY -2023

Tableau & Sapling Distribution to surrounding community

MCPI Private Limited

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CELEBRATION OF WORLD ENVIRONMENT DAY -2023

Special Spot Quiz on Environment at different departments

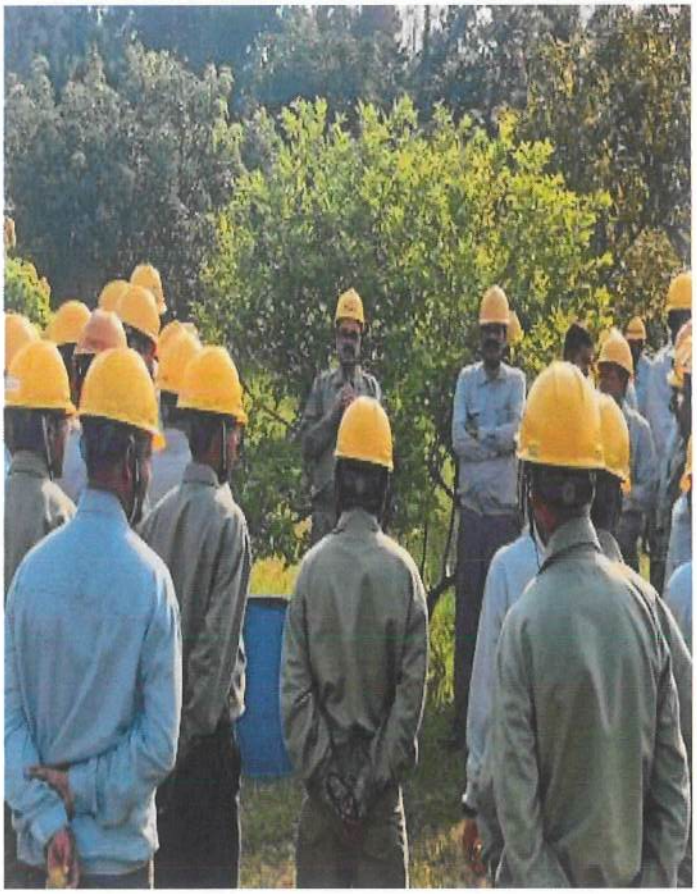
MCPI Private Limited

MCPI HALDIA PRIVATE LIMITED

CELEBRATION OF WORLD ENVIRONMENT DAY -2023

Plantation at Plant Green Belt

MCPI Private Limited



Gathering of MCPI employees for Tree plantation at Green Belt area Under the leadership of Mr. A.C.Mishra – Plant Head on 5th June'2023

MCPI Private Limited

THANK YOU

MCPI HALDIA PRIVATE LIMITED

Annexure – VII

MSK TESTING • INSPECTION

TEST REPORT

Name & Address of the Customer :
'MCPI PRIVATE LIMITED'
Haldia ,Purba Mednipur
Pin- 721635, West Bengal, India

Report No. : CRTGL/ED/2023-24/06/01051
Date : 14.07.2023
Sample No. : MSKGL/ED/2023-24/06/01051-55
Sample Description :Noise Monitoring

Ref No& Dated: 7200002252,,Dtd: 14.12.2021

ANALYSIS RESULT

Sl No.	Location	South Side of Plant	West Side of Plant	East Side of Plant	Near Main Gate	North Side of Plant
Date Of Sampling		19.06.2023 to 20.06.2023	19.06.2023 to 20.06.2023	19.06.2023 to 20.06.2023	20.06.2023 to 21.06.2023	20.06.2023 to 21.06.2023
1.	Leq dB(A) day	49.6	56.8	53.8	59.7	55.9
2.	Leq dB(A) night	47.2	54.8	50.1	55.3	53.6
3.	Leq dB(A) Day Max	52.4	60.1	57.4	62.4	57.9
4.	Leq dB (A) Day Min	47.1	51.8	49.1	56.3	52.8
5.	Leq dB (A) Night max	48.7	59.0	51.3	56.5	55.0
6.	Leq dB (A) Night min	45.9	50.2	44.4	53.6	52.3

Report Prepared By

for Mitra S. K. Private Limited
A.Seal
Authorised Signatory

- *The results relate only to the item(s) tested.*
- *This Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.*

MCPI HALDIA PRIVATE LIMITED

TEST REPORT

Name & Address of the Customer :
'MCPI PRIVATE LIMITED'
Haldia ,Purba Mednipur
Pin- 721635, West Bengal, India

Report No. : MSKGL/ED/2023-24/001377
Date : 12.10.2023
Sample No. : MSKGL/ED/2023-24/10/00020-24
Sample Description :Noise Monitoring

Ref No& Dated: 7200002252,,Dtd: 14.12.2021

ANALYSIS RESULT

Sl No.	Location	West Side of Plant	South Side of Plant	North Side of Plant	Near Main Gate	East Side of Plant
Date Of Sampling		28.09.2023 to 29.09.2023	28.09.2023 to 29.09.2023	28.09.2023 to 29.09.2023	29.09.2023 to 30.09.2023	29.09.2023 to 30.09.2023
1.	Leq dB(A) day	57.3	52.0	61.3	51.2	52.7
2.	Leq dB(A) night	53.2	49.5	57.6	47.8	50.7
3.	Leq dB(A) Day Max	61.6	55.4	64.2	53.3	55.4
4.	Leq dB (A) Day Min	49.2	48.4	54.1	46.4	50.1
5.	Leq dB (A) Night max	57.6	50.7	61.0	50.7	52.2
6.	Leq dB (A) Night min	47.3	46.6	52.6	44.0	48.8

Report Prepared By

for Mitra S. K. Private Limited

Authorised Signatory

- *The results relate only to the item(s) tested.*
- *This Test Report shall not be reproduced except in full, without the permission of Mitra S.K. Private Limited.*

MCPI HALDIA PRIVATE LIMITED

SAVE GREEN
SEE DREAM

Government of West Bengal
Directorate of Forests
Office of the Divisional Forest Officer
Purba Medinipur Forest Division
Chakkamina, Nimtala, Tamluk, Purba Medinipur
Phone No. 03228-263036, email-dfopmfd@yahoo.co.in

Memo No. 131 / 13- **Dated Tamluk the 01.02.2018**

From : Divisional Forest Officer,
Purba Medinipur Forest Division

To : Mr. Sujit Basu
Vice President – HSE & Quality
MCPI Private Limited.

Sub :- Tree plantation for MCPI Private Limited.
Ref :- Your office Memo No. DFO/12/17/682, Dated- 28.12.2017.

Sir,

In reference to the above mentioned subject, I am submitting herewith the list of plant species, for plantation in the area as stated in your letter.

1) *Ficus bengalensis*
2) *Ficus religiosa*
3) *Ficus recemosa*
4) *Bougenvilia spectabilis*
5) *Ashoka indica*
6) *Alstonia scholaris*
7) *Nerium indicum*
8) *Mangifera indica*
9) *Azadirachta indica*
10) *Carica papaya*
11) *Ilex rounda*
12) *Cassia surattensis*
13) *Cinnamomum camphora*
14) *Michelia chapensis*
15) *Acgle marmelos*
16) *Moringa pterydosperma*
17) *Cassia renigera*
18) *Ailanthus excels*
19) *Ricinus communis*
20) *Hobptelia integrifolia*
21) *Syzigiun cumini*
22) *Psidium guajava*

This is for your kind information and taking necessary action.

Divisional Forest Officer
Purba Medinipur Forest Division

E:\PLANTATION 2017-18\MCPI PVT LTD

MCPI
HALDIA

Annexure IX

Environmental Expenditure for the Year 2023-24

Annual Allocation / expenditure of funds for Environmental Safeguards (including capital expenditure) under various heads during **FY 2023 – 2024**

1. Environmental Monitoring Cost [Rate Contract for Environmental & Process Monitoring Job at MCPI plant]	**: Rs.29,00,000**
2. Environmental Awareness Programme [Celebration of World Environment Day & Environment Awareness programs to local School students]	**: Rs.12,00,000**
3. Greening Drive Activities [Green Belt Development & Upkeep-ment Cost Beautification (Horticultural) Work (inside plant)]	**: Rs.40,00,000**
4. Statutory Fees & Insurance Expenses [Environment Fees for Regulatory Agencies & Premiums for PLI Policies]	**: Rs.42,70,000**
5. Hazardous Wastes Disposal Expenses	**: Rs.2,70,00,000**
6. Operational & Maintenance Cost of Environment protection system:	
6.1 Yearly Operational cost of WWTP	**: Rs.24, 00,000**
6.2 In-House Laboratory Chemical cost for Env. Parameters analysis	**: Rs.1, 08,000**
6.3 Installation of Online Stack monitoring system & Maintenance	**: Rs.2, 45,000**
6.4 Other Expenses (Calibration, Spares & Consumables)	**: Rs.75, 000**
6.5 Water re cycling operation cost	**: Rs.1,33,000**
7. Training/Workshop/Seminar/Subscription	**: Rs.80, 000**
	Total Rs. 4,24,11,000

All above-mentioned measures are considered for during the financial year 2023 – 2024 for the abatement of pollution at MCPI plant. Power cost and Safety expenses with respect to PPE and Occupational Health Expenses are not included.

MCPI HALDIA PRIVATE LIMITED