



इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स

पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

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रिफाइनरीज़ प्रभाग

Refineries Division

Ref. No. PNC/HSE/EC Compliance

Dates: 25.01.2021

TO,
The Additional Director(S),
Ministry of Environment, Forest & Climate Change, Govt. of India,
Regional Office (NR), Bays No. 24-25, Sector 31-A, Dakshin Marg,
Chandigarh- 160047

Subject: Six Monthly Environmental Clearances (ECs) Compliance Report- Panipat Naphtha Cracker Complex

Dear Sir,

Enclosed please find herewith the Six Monthly Environmental Clearances (ECS) Compliance Report- Panipat Naphtha Cracker Complex for the period of July 2020 to Dec 2020 of the MOEFCC stipulations w.r.t. following EC Letters.

1. EC Letter No. J-11011/153/2004-IA II (I) dated 04.01.2005 for Naphtha cracker complex at Panipat Refinery by M/s Indian Oil Corporation Limited at Village Baljatan in district Panipat, Haryana – reg. environmental clearance
2. EC Letter No. J.11011/106/2012-IA-II (I) dated 23.05.2014 for Butene-1 Project at Panipat Refinery & Petrochem Complex of M/s Indian Oil Corporation Limited (IOCL) at village Balijathan Tehsil Matlauda – Environmental Clearance – Regarding
3. EC Letter. No. J-11011/268/2014-IA.II (I) dated 22.02.2017 for Recovery of Styrene and Synthetic Olefins Production from RFCC and DCU off gases (from Panipat Refinery) and its integration with Naphtha Cracker Unit and Mounded Bullet Storage for C4 Mix at Indian Oil Panipat Refinery & Petrochemical Complex at Panipat, Haryana by M/s Indian Oil Corporation Limited- Environmental Clearance - reg.
4. EC Letter No. J-110011/106/2012-IA-II(I) dated 16.08.2018 for Capacity expansion of Naphtha Cracker, Mono Ethylene Glycol, HDPE & Polypropylene units and setting up Catalyst Manufacturing Unit by M/s Indian Oil Panipat Refinery & Petrochemical Complex at Panipat Refinery & Petrochemical Complex, Panipat (Haryana) - Environmental Clearance - reg.

This is for your information

Thanking you

Yours faithfully,


(Utpal Deka)

General Manager (HSE)

For and on behalf of

Executive Director & Refinery Head
Panipat Refinery and Petrochemical Complex

Enclosures: as above

CC: **The Regional Officer, HSPCB, Panipat**
Chairman, HSPCB, Panchkula

PANIPAT NAPHTHA CRACKER PROJECT

Environmental Clearance No.J-11011/153/2004-IA II (I) dated 4.1.2005 from Ministry of Environment & Forests

Six-monthly compliance report - Dated 01.01.2021

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
Specific Conditions		
I)	The gaseous emissions (SO ₂ , NO _x and HC, Benzene) from the various process units should conform to the standards prescribed under Environment (Protection) Rules, 1986 or norms stipulated by the SPCB whichever is more stringent. At no time, the emission level should go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	Gaseous Emissions are well within limits as per standards prescribed
II)	Adequate ambient air quality monitoring stations (SPM, SO ₂ , NO _x and HC, Benzene) should be set up in the Naphtha Cracker 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 should be installed for measurement of SO ₂ and NO _x . Data on VOC should be monitored and submitted to the SPCB/Ministry.	Ambient air quality being monitored for compliance through ambient air quality monitoring stations installed according maximum impact zone. Continuous online stack monitoring analyzers are being used for measurement of SO ₂ and NO _x . VOC Monitoring being done quarterly and six monthly submissions to HSPCB/Ministry.
III)	Measures for fugitive control should be taken by installation of internal floating roof tanks for storage of liquid HCs and provision of double mechanical seals to all pumps handling high vapor pressure materials, sensors for detecting HC/toxic gas leakages at strategic locations, regular inspection of floating roof seals, maintenance of valves and other equipments and regular skimming of separators/ equalization basin.	Complied
IV)	All new standards/norms that are being proposed by CPCB for petrochemical plants shall be applicable for the proposed Naphtha Cracker and downstream polymer units. The company shall conform to the proposed process 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. Action on the above should be taken during the detailed design	Complied



SL. No.	Conditions stipulated in the EC letter	Status/Action plan
Specific Conditions		
	stage of the NCC. The project authorities shall take necessary measures to comply with the above proposed emission norms including monitoring facilities and intimate the same to the Ministry.	
V)	M/s IOCL shall adopt Leak Detection And Repair (LDAR) programme for quantification and control of fugitive emissions.	Complied
VI)	The company shall also ensure that the total SO ₂ emission from the NCC shall not exceed 138 kg/hr during the normal operations	Total SO ₂ emission during normal operation ,average is less than 30 kg/hr
VII)	To mitigate NO _x emission, the company shall install low NO _x burners.	Low NO _x burners are in operation to mitigate NO _x emission
VIII	The waste water effluent from the NCC should not exceed 750 M3/Hr. The waste water shall be segregated in different streams at the source. The treated effluent should comply with the standards stipulated by HSPCB/CPCB for discharge on land for irrigation. The treated effluent should be used for cooling service, greenbelt, dust suppression and firewater. As per the commitment given, there should be zero effluent discharge due to the proposed project. The company should ensure that there will be no discharge of treated effluent into Thirana drain.	Average waste water effluent from the NCC is 160 m ³ /hr. Treated effluent of stipulated quality as per HSPCB/CPCB standards, is recycled in DMRO and is reused for cooling service, greenbelt, dust suppression and firewater. Company is complying with the provision of no discharge of treated effluent into the Thirana drain.
IX)	The oily sludge generated from the ETP after oil recovery shall be taken to the existing refinery facilities for further treatment and disposal into the secured landfill. The spent catalyst shall be disposed off into the secured landfill facility. The design of the secured landfill site shall be as per the central pollution control board guidelines. The company shall firm up the plan for construction of hazardous waste facility within the NCC or send the hazardous waste to secured Landfill site being developed by the Haryana Environmental Management society. The final plan during detailed design stage of NCC for construction of hazardous waste management facility shall be submitted to the Ministry.	Having the Secured Landfill provision within the Indian Oil Panipat Complex at Refinery site. Further, as an alternative, the membership/registration with the HEMS-GEPIL, Haryana is being renewed as alternative for disposal of Hazardous Waste.

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
Specific Conditions		
X)	Green belt should be provided to mitigate the effects of fugitive emissions all around the plant in an area of 40 ha. In addition to 240 ha. of area already afforested in consultation with DFO as per CPCB guidelines. Green belt in the NW direction should be strengthened keeping in view the winds from SE and E direction. The trees should be planted in both sides of approach roads and truck parking area.	Green belt of 40 ha area has been provided all around the plant to mitigate the effects of fugitive emissions. Density of Green belt in the NW direction has also been increased. Further, plantation being done on both sides of approach roads and truck parking area.
XI)	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per Factories Act.	Complied.

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
General Conditions		
I)	The project authorities must strictly adhere to the stipulations made by Haryana State Pollution Control Board and State Government.	Noted
II)	No further expansion or modification of the plant should be carried out without prior approval of Ministry of Environment & Forests.	Shall be ensured
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 unit should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved.	shall be ensured
IV)	All the recommendations made in the EIA/EMP and risk assessment report should be implemented.	Complied
V)	The overall noise levels in and around the plant area should be kept well within the standards (85dBA) 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).	Acoustic hoods, silencers, enclosures etc. on all sources of noise generation have been provided to meet the required noise

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
		stipulations.
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 commissioning of the project.	Complied, CCE /PESO approval is available
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 waste (Management and Handling) Rules, 2003. Authorization from State Pollution Control Board must be obtained for conditions/ treatment/ storage/disposal of hazardous wastes.	Complied
VIII)	The Project Authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment & 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.	Being followed
IX)	The stipulated conditions will be monitored by the Regional office of this Ministry at Chandigarh/ Central Pollution Control Board/ State Pollution Control Board. A six monthly compliance status report and the monitored data should be submitted to them regularly.	complied
X)	The project proponent should 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 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 should 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 start of land development work.	Final approval of the project has been accorded by IOC's Board of Directors in their meeting on 22.12.2006

BUTENE-1 PROJECT AT PANIPAT REFINERY & PETROCHEMICAL COMPLEX

Environmental Clearance No. J-11011/106/2012-IA-II (I) dated 23.05.2014
Environment & Forests

Six-monthly compliance report - Dated 16.12.2020

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
	Specific Condition	
I)	All the specific conditions and general conditions specified in the earlier environmental clearance letters accorded vide Ministry's letter nos. J-11011/27/91-IA-II (I) dated 16 th July 1992, J-11011/60/2000-IA-II (I) dated 9 th April, 2001, J-11011/52/2000-IA-II (I) dated 30 th April, 2001, J-11011/9/2001-IA-II (I) dated 6 th December, 2001, J-11011/153/2004-IA-II (I) dated 4 th January, 2005 and J-11011/7/2004-IA-II (I) dated 9 th August, 2004 shall be complied with.	Already complied. All the conditions of these ECs as per reports sent to MoEFCC.
II)	M/s Indian Oil Corporation Limited shall comply with new standards/norms for Oil Refinery Industry and petrochemical industry notified under the Environment (Protection) Rules, 1986:	Noted
III)	Continuous on-line stack monitoring for SO ₂ , NO _x and CO of all the stacks shall be carried out. Low NO _x burners shall be installed.	No heater/ Furnace in the plant.
IV)	The Emission standards prescribed by the MoEF under Environment (Protection) Act for petrochemical industry shall be strictly followed. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored regularly.	This project does not have any furnace. However the total emission of PNC including this project is less than 30 Kg/hr as against 138 Kg/hr allowed.
V)	Leak Detection and Repair programme shall be prepared and implemented to control HC/VOC emissions. Focus shall be given to prevent fugitive emissions for which preventive maintenance of pumps, valves, pipelines are required. Proper maintenance of mechanical seals of pumps and valves shall be given. A preventive maintenance schedule for each unit shall be prepared and adhered to. Fugitive emissions of HC from product storage tank yards etc. must be regularly monitored. Sensors for detecting HC leakage shall be provided at strategic locations.	Complied Leak Detection and Repair programme is conducted by external agency quarterly. Sensors for detection of HC leak are provided at strategic locations.
VI)	Continuous monitoring system for VOCs at all important places/areas shall be ensured. When monitoring results indicate above the permissible limits, effective measures shall be taken immediately.	Complied as stated above.
VII)	SO ₂ emissions after implementation of Butene-1 shall not exceed 138kg/hr.	Complied SO ₂ emission is below 30kg/hr.
VIII)	Record of sulphur balance shall be maintained at the Refinery as	This project does not



SL. No.	Conditions stipulated in the EC letter	Status/Action plan
	part of the environmental data on regular basis. The basic component of sulphur balance include sulphur input through feed (sulphur content in crude oil), sulphur output from Refinery through products, byproduct (elemental sulphur) atmospheric emissions etc.	have sulphur plant or any raw material having 'Sulphur'. Also there is no furnace.
IX)	Ambient air quality monitoring stations, [PM 10, Pm2.5, SO2, NOx, H2S, mercaptan, non-methane-HC and Benzene] shall be set up in the complex in consultation with Haryana State Pollution Control Board, based on occurrence of maximum ground level concentration and down-wind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs.	Ambient air quality being monitored for compliance through ambient air quality monitoring stations installed according maximum impact zone
X)	Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry on 16 th November, 2009 and trend analysis w.r.t past monitoring results shall also be carried out. Adequate measures based on the trend analysis shall be taken to improve the ambient air quality in the project area.	Ambient air quality data is collected as per NAAQES standards.
XI)	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Besides, acoustic enclosure/silencer shall be installed wherever noise levels exceed the limit.	There is no DG set in Butene-1 plant.
XII)	Total fresh water requirement from Yamuna Canal shall not exceed 1813 m3/hr and prior permission shall be obtained from the concerned agency. No ground water shall be used.	The water requirement of 5 m3/hr of this plant is met from existing circuits. The overall water requirement of complete PNC is normally less than 1813 m3/hr from WJC canal. No ground water is being used.
XIII)	Industrial effluent shall be treated in the effluent treatment plant. Treated effluent shall be recycled/reused in the existing cooling tower. Water quality of treated effluent shall be monitored regularly.	There is no effluent generation in the BUTENE-1 Plant
XIV)	Oil catchers/oil traps shall be provided at all possible locations in rain/storm water drainage system inside the factory premises.	Butene-1 plant does not have any Oil Catcher and also not required.
XV)	The Company should strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. Hazardous waste should be disposed of as per Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008	Fully Complied We send Environment statement to HSCB every year.

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
	and amended time to time.	
XVI)	Proper oil spillage prevention management plan shall be prepared to avoid spillage/leakage of oil/petroleum products and ensure regular monitoring.	No oil spillage.
XVII)	The company shall strictly follow all the recommendation mentioned in the Charter on Corporate Responsibility for Environmental Protection (CREP).	Complied
XVIII)	To prevent fire and explosion at oil and gas facility, potential ignition sources shall be kept to a minimum and adequate separation distance between potential ignition sources and flammable materials shall be in place.	Complied Firefighting facilities in Butene-1 are provided at its strategic location.
XIX)	Additional 25000 trees shall be planted to increase the greenbelt coverage. Thick greenbelt with suitable plant species shall be developed around unit. Selection of plant species shall be as per the CPCB guidelines.	Since 2011, we have planted about 25000 trees in and around PNC.
XX)	All the recommendations mentioned in the rapid risk assessment report, disaster management plan and safety guidelines shall be implemented.	Complied
XXI)	All the issues raised and commitment made during the public hearing/consultation meeting held on 23 rd August, 2013 shall be satisfactorily implemented. Accordingly, provision of budget to be kept.	Complied
XXII)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied Being a small project in house manpower where utilized.
General Conditions		
I)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.	Complied All consents are valid up to 30.09.2021
II)	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alteration 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.	Noted
III)	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	Complied PESO approval maintained.
IV)	The overall noise level 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	Complied Continuous Noise monitoring is done.

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
	generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA(daytime) and 70 dBA (night time).	
V)	A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	Complied This is a small project. However IOCL maintain fully equipped environmental cell.
VI)	Adequate funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures and shall be used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Complied Reported in environment statements.
VII)	The Regional office of this Ministry/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Complied
VIII)	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila 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 clearance letter shall also be put on the web site of the company by the proponent.	Complied The communication to local Panchayat has been done on 31.07.2014.
IX)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10,PM2.5,SO2,NOx,HC (Methane & Non-Methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied Ambient air data is displayed at Main gate.
X)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal office of CPCB and the SPCB. The Regional Office of this Ministry/CPCB/SPCB shall monitor the stipulated conditions.	Complied
XI)	The environmental statement for each financial year ending 31 st 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	Complied Environment Statement is sent to HSPCB every year.

SL. No.	Conditions stipulated in the EC letter	Status/Action plan
	amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of MOEF by e-mail.	
XII)	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 and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspaper 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 The message has been circulated through AMAR UJALA & THE TRIBUNE on 05.08.2014.
XIII)	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied
8.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
9.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Complied
10.0	The above conditions will be enforced, inter-alia under the provision of the water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of water pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Complied



ERU/SRU Project at Panipat Refinery & Petrochemical Complex

Environmental Clearance No. J-11011/268/2014-IA.II (I) dated 22.02.2017 from Ministry of Environment & Forests

Six-monthly compliance report - Dated 16.12.2020

Specific conditions	Conditions stipulated in the EC letter	Status/Action Plan
S.No	Condition	
1.0	The Ministry vide G.S.R 608 (E) dated 21 st July 2010 and amended time to time has prescribed emission and effluent standards that shall be complied by the unit.	Noted
2.0	Compliance to all environmental conditions stipulated in the environmental clearance shall be satisfactorily implemented and compliance reports submitted to the Ministries regional office of MoEF&CC	Noted
3.0	All Pollution control and monitoring equipment shall be installed tested and interlocked with the process equipment SPCB shall grant Consent to operate after ensuring that all the maintenance Pollution control equipments, construction of storm water drain , rainwater harvesting structure , green belt, uploading of Compliance report on the website etc have been implemented.	Noted
4.0	SO ₂ emission after expansion from the plant shall not exceed 138kg/hr and further efforts shall be made for reducing of SO ₂ load through use of low sulphur fuel , sulphur recovery units shall be installed for control of H ₂ S emission.	Noted
5.0	Ambient Air quality data shall be collected as per NAAQS standards notified by the Ministry vide G.S.R No. 826 (E) Dated 16.September, 2009 .The levels of PM ₁₀ ,PM _{2.5} , SO ₂ ,NO _x ,VOC and CO shall be monitored in the Ambient Air and emission from the stacks and displayed at a convenient location near the main gate of the company and at important public places . The company shall upload the results of monitored data in its website and shall update the same periodically .It shall simultaneously be sent to the regional office of MOEF, The respective zonal of CPCB and the State Pollution control Board (MPCB).	Noted
6.0	in Plant control measures for checking Fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, handling	Will be complied
7.0	The gaseous emission from D G set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to The D G sets to mitigate the noise pollution.	Will be complied
8.0	Total fresh water requirement from the canal shall not exceed shall not exceed 1700m ³ /hr (annual average) and prior permission shall be obtained from the competent	Will be complied

Specific conditions	Conditions stipulated in the EC letter	Status/Action Plan
	authority be . No ground water shall be used without permission.	
9.0	The marginal waste water from SRU & ERU plant shall be sent to ETP/RO plant. Effluent stream shall be treated in the comprising primary, secondary and tertiary treatment facility ETP. As proposed RO plant shall be employed to treat 140m ³ /hr	Will be complied
10.	Automatic /online monitoring system (24x7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the company's website.	Complied
11.0	Adequate odour management plan and its mitigation measure be implemented on priority.	Noted
12.0	Regular VOC monitoring to be done at vulnerable points.	Being Done
13.0	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system	Not applicable
14.0	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme	Noted
15.0	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.	Will be complied
16.0	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Will be complied
17	The company shall strictly comply with the rules and guidelines under Hazardous and other wastes (Management and Trans-Boundary Movement) Rules,2016 as amended time to time All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989	This is being complied already and continues to do so in future
18	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.	This is being complied already and continues to do so in future
19.0	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	This is being complied already and continues to do so in future
20.0	At least 2.5% of the total project cost shall be earmarked towards Enterprise social commitment (ESC) based on local needs and action plan with financial and physical break up /details shall be prepared and submitted to the Ministry's Regional Office at Bhopal . Implementation of such program shall be ensure accordingly in a time bound manner.	Noted

Specific conditions	Conditions stipulated in the EC letter	Status/Action Plan
21.0	As proposed green belt over 33% shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area, 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	Complied

GENERAL CONDITIONS

Sr. No.	Conditions stipulated in the EC letter	Status/Action Plan
1.	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.	Complied
2.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to his Ministry for clearance a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environment protection measures required, if any.	Noted
3.	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.	Will be Complied
4.	The national Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 th November, 2009 shall be followed.	Complied
5.	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).	Complied
6.	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.	Will be ensured after project execution
7.	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.	This is being complied already and will continue to do so in future
8.	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.	Will be Complied
9.	The company shall undertaken all relevant measures for	Will be Complied

Sr. No.	Conditions stipulated in the EC letter	Status/Action Plan
	improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	
10.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Will be Complied
11.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied
12.	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 conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	Will be Complied
13.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any from whom suggestions/representations, if any were received while processing the proposal.	Complied
14.	The project proponent shall also submit six monthly reports on the status of compliance of the Stipulated Environment Clearance conditions including results of monitored data (both in hard copies as well as by email) to the respective Regional Office of MoEFCC, the respective Zonal Office of CPCB and SPCB. A copy of Environment Clearance and six monthly compliance status be posted on the website of the company.	This is being complied already and will continue to do so in future
15.	The Environment statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the concerned state Pollutions Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of company along with the status of compliance of Environmental Clearance conditions and shall be sent to the respective Regional Officers of MoEFCC&CC by email.	This is being complied already and will continue to do so in future
16.	The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in/ . This shall be advertised within seven days from the date of issue of the Clearance letter, at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied and informed
17.	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Will be Complied. Date of financial closure of all project is 31st March every year

Capacity expansion Project of Naphtha Cracker at Panipat Refinery & Petrochemical Complex

Environmental Clearance No. J-110011/106/2012-IA-II(I) dated 16.08.2018 from Ministry of Environment & Forests

Six-monthly compliance report - Dated 16.12.2020

GENERAL CONDITIONS

Sr. No.	Conditions stipulated in the EC letter	Status/Action Plan
1.	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.	Complied
2.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to his Ministry for clearance a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environment protection measures required, if any.	Not
3.	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.	Will be complied
4.	The national Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 th November, 2009 shall be followed.	Complied
5.	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).	Complied
6.	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.	Will be complied
7.	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.	This is being complied already and will continue to do so in future
8.	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.	Will be Complied
9.	The company shall undertaken all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities	Will be Complied

Sr. No.	Conditions stipulated in the EC letter	Status/Action Plan
	shall be undertaken by involving local villages and administration.	
10.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Will be Complied
11.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Complied
12.	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 conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	Will be Complied
13.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any from whom suggestions/representations, if any were received while processing the proposal.	Complied
14.	The project proponent shall also submit six monthly reports on the status of compliance of the Stipulated Environment Clearance conditions including results of monitored data (both in hard copies as well as by email) to the respective Regional Office of MoEFCC, the respective Zonal Office of CPCB and SPCB. A copy of Environment Clearance and six monthly compliance status be posted on the website of the company.	This is being complied already and will continue to do so in future
15.	The Environment statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the concerned state Pollutions Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of company along with the status of compliance of Environmental Clearance conditions and shall be sent to the respective Regional Officers of MoEFCC&CC by email.	This is being complied already and will continue to do so in future
16.	The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in/ . This shall be advertised within seven days from the date of issue of the Clearance letter, at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied and informed (Already published in two newspapers on 05.09.18)
17.	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Will be Complied. Date of financial closure of all project is 31 st March every year

TERMS & CONDITIONS

Sr. No.	Conditions stipulated in the EC letter	Status/Action Plan
1.	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	Complied
2.	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.	Will be complied
3.	Necessary authorization required under the Hazardous and other wastes (management and Trans-Boundary Movement) Rules,2016 and solid waste management Rules,2016 shall be obtained and the provisions contained in the Rules, shall be strictly adhered to.	Will be complied
4.	National emission Standard for Organic Chemicals Manufacturing industry issued by the Ministry vide G.S.R. 608 (E) dated 21 st July'2010 and amended from time to time be followed.	Will be complied
5.	To control source and the fugitive emissions, suitable pollutions control devices shall be installed with different stacks to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stacks of adequate height as per CPCB/SPCB guidelines.	Will be complied
6.	Total fresh water requirement shall not exceed 47955 cum/day to be met from western Yamuna Canal. Necessary permission in this regard shall be obtained from the concerned regulatory authority.	Will be complied
7.	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Will be complied
8.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Will be complied
9.	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 manufactures/cement industry.	Will be complied
10.	The company shall strictly comply with the rules and guidelines under manufacture, Storage and import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Continuous, Will be complied
11.	Regular VOC monitoring to be done at vulnerable points.	Will be complied
12.	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.	Not applicable
13.	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.	Noted
14.	Oil catchers/oil traps shall be provided at all possible locations in	Noted

Sr. No.	Conditions stipulated in the EC letter	Status/Action Plan
	rain/ storm water drainage system inside the factory premises.	
15.	<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 Waste water generation.</p>	Will be complied
16.	The green belt of 5-10 m width shall be developed in more than 33% of .the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	Complied
17.	At least 0.25% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Will be Complied
18.	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.	Complied
19.	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.	Will be ensured after project execution
20.	<p>Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the 'data to be transmitted to the CPCB and SPCB server.</p> <p>For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.</p>	<p>Will be ensured after project execution</p> <p>Will be ensured after project execution</p>
21.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	This is being complied already and continues to do so in future)

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

SI. No. 2135

FORM 10
 (See rule 19 (1))

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I.O.C.L. Naphta Cracker Panipat (H.R)
2	Sender's authorisation No.	PPT/T-2506
3	Manifest Document No.	2135
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE 4th - 8, Ganshi Pura, Sangay Centre, Transport Nagar, Delhi-110042 E-mail: mppind3333@gmail.com
5	Type of vehicle	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	07CKPPS3333F1ZX
7	Vehicle registration No.	(i) UP 85AT 9372 (ii) UP 17AT 0880
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories New Katni Jn., P Katni-483101
9	Receiver's authorisation No.	50092
10	Waste description	Spent Alumina
11	Total quantity No. of Containers	64.25 M.Tm ³ or MT Two TrucksNos.
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid
13	Special handling instructions and additional information	Jumbo Bags
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp : <i>R.K. Sharma</i> Signature <i>R.K. Sharma</i>		Month Day Year 10 15 2020
15	Transporter acknowledgment of receipt of Wastes	
Name and stamp : For Premier Refractories of India Pvt. Ltd. Signature		Month Day Year 10 15 2020
16	Receiver's certification for receipt of hazardous and other waste	
Name and stamp : <i>S</i> Signature Authorised Signatory		Month Day Year 10 15 2020

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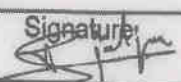


Sender copy to be sent to SPCB

**Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex**

Sl. No. 2136

**FORM 10
{See rule 19 (1)}**

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I. O. C. L. Naphtha Cracker Panipat (H.R)
2	Sender's authorisation No.	PPT/T-256
3	Manifest Document No.	2136
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE At- B, Ground Floor, Society Road, Transport Nagar, Delhi-110042 E-mail : mppquick3333@gmail.com
5	Type of vehicle	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	07CKPPS3333F1ZX
7	Vehicle registration No.	(i) UP 95T 8787 (ii) UP 95T 5066
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, P.O. Box No. 9, Katni-48 501 (M.P)
9	Receiver's authorisation No.	50092
10	Waste description	Spent Alumina
11	Total quantity No. of Containers	60.06 M.T m ³ or MT Two Trucks Nos.
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid
13	Special handling instructions and additional information	Jumbo Bags
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp : 		Month Day Year 10 27 2020
15	Transporter acknowledgment of receipt of Wastes	
Name and stamp : Premier Refractories of India Pvt. Ltd. 		Month Day Year 10 27 2020
16	Receiver's certification for receipt of hazardous and other waste	
Name and stamp :  Signatory		Month Day Year 10 27 2020

Sender copy to be sent to SPCB

**Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex**

Sl. No. **2137**

**FORM 10
(See rule 19 (1))**

MANIFEST FOR HAZARDOUS AND OTHER WASTE

Sender's name and mailing address (Including Phone No. and e-mail)	I.O.C.L Naphtha Cracker Panipat (H.R)		
Sender's authorisation No.	PPT/T - 2506		
Manifest Document No.	2137		
Transporter's name and address : (Including Phone No. and e-mail)	<p align="center">M.P. QUICK SERVICE <small>AW-8, Ground Floor, Sanjay Gandhi, Transport Nagar, Delhi-110042 E-mail: mpquick3333@gmail.com</small></p>		
Type of vehicle	(Truck/Tanker/Special Vehicle)		
Transporter's registration No.	07CKPPS3333F1ZX		
Vehicle registration No.	(i) UP 85 AT 9372	(ii) HR 38 AN 4566	
Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni Jn., P.O. Box No. 9, Katni-483501 (M.P)		
Receiver's authorisation No.	50092		
Waste description	Spent Alumina		
Total quantity No. of Containers	65.81 M.Tm ³ or MT Two TrucksNos.		
Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid		
Special handling instructions and additional information	Jumbo Bags		
Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
Name and stamp : Ajit Singh Talwara	Signature 	Month 11	Day 02
Year 2020			
Transporter acknowledgment of receipt of Wastes			
Name and stamp for Premier Refractories of India Pvt. Ltd.	Signature 	Month 11	Day 02
Year 2020			
Receiver's certification for receipt of hazardous and other waste			
Name and stamp : Authorised Signatory	Signature 	Month 11	Day 02
Year 2020			




Sender copy to be sent to SPCB

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

Sl. No. 2086

FORM 10
 {See rule 19 (1)}

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I. O. C. L Naphta Cracker Panipat (H.R)
2	Sender's authorisation No.	PPT-T / - 2506
3	Manifest Document No.	2086
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE AW-9, Ground Floor, Sanjay Gandhi Transport Nagar, Delhi - 110042 E-mail: quick3333@gmail.com
5	Type of vehicle	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	07CKPPS3333F1ZX
7	Vehicle registration No.	MP16H1940 MP16H1540 MP16H1740
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)
9	Receiver's authorisation No.	
10	Waste description	Spent Alumina
11	Total quantity No. of Containers	89.91 M.Tm ³ or MT Three Trucks Nos.
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid
13	Special handling instructions and additional information	Jumbo Begg
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp : Tikk SA		Signature  24/10/20
		Month Day Year [][] [2][4] [2][0][2][0]
15	Transporter acknowledgment of receipt of Wastes	
Name and stamp : For Premier Refractories of India Pvt. Ltd.		Signature  24/10/20
		Month Day Year [][] [2][4] [2][0][2][0]
16	Receiver's certification for receipt of hazardous and other waste	
Name and stamp :		Signature  Premier Refractories
		Month Day Year [][] [2][4] [2][0][2][0]

Sender copy to be sent to SPCB

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

Sl. No. 2087

FORM 10
 (See rule 19 (1))

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I.O.C.L Naphtha Cracker Panipat (H.R)
2	Sender's authorisation No.	PPT/T-2506
3	Manifest Document No.	2087
4	Transporter's name and address : (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)
5	Type of vehicle	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	07CKPPS3333F1ZX
7	Vehicle registration No.	(i) MP 16 H 6039 (ii) MP 16 H 6339
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)
9	Receiver's authorisation No.	3092
10	Waste description	Spent Alumina
11	Total quantity No. of Containers	59.77 M.Tm ³ or MT Two Trucks Nos.
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid
13	Special handling instructions and additional information	Jumbo Bags
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp : Signature		Month Day Year
R.K. Sharma <i>clay</i>		12 07 2020
15	Transporter acknowledgment of receipt of Wastes	
Name and stamp : Signature		Month Day Year
For Premier Refractories of India Pvt. Ltd.		12 07 2020
16	Receiver's certification for receipt of hazardous and other waste	
Name and stamp : Signature		Month Day Year
<i>[Signature]</i> Authorized Signatory		12 07 2020

Sender copy to be sent to SPCB

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

Sl. No. **2088**

FORM 10
 (See rule 19 (1))

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I.O.C.L Naphta Cracker Panipat (H.R)		
2	Sender's authorisation No.	PPT/T- 2506		
3	Manifest Document No.	2088		
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE AW-9, Ground Floor, Sanjay Gandhi Transport Nagar, Delhi - 110042 E-mail: mpquick3333@gmail.com		
5	Type of vehicle	(Truck/Tanker/Special Vehicle)		
6	Transporter's registration No.	.. 07CKPPS3333F1ZX		
7	Vehicle registration No. <u>MP 16 H 1940</u>	<u>MP 16 H 1740</u>		
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)		
9	Receiver's authorisation No.			
10	Waste description	Spent Alumina		
11	Total quantity No. of Containers	59.04 M.Tm ³ or MT Two TrucksNos.		
12	Physical form	✓ (Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid		
13	Special handling instructions and additional information	Jumbo Bags		
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	Name and stamp <u>R.K. Sharm</u>	Signature <u>Okey</u>	Month <u>12</u>	Day <u>08</u> Year <u>2020</u>
15	Transporter acknowledgment of receipt of Wastes			
	Name and stamp : For Premier Refractories of India Pvt. Ltd.	Signature	Month <u>12</u>	Day <u>08</u> Year <u>2020</u>
16	Receiver's certification for receipt of hazardous and other waste			
	Name and stamp : <u>B</u>	Signature <u>Authorised Signatory</u>	Month <u>12</u>	Day <u>08</u> Year <u>2020</u>

Sender copy to be sent to SPCB

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

Sl. No. 2089

FORM 10
 (See rule 19 (1))

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I.O.C., L Naphta Cracker Panipat (H.R)		
2	Sender's authorisation No.	PPT/T - 2506		
3	Manifest Document No.	2089		
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE AW-9, Ground Floor, Sanjay Gandhi Transport Nagar, Delhi - 110042 E-mail: mquick3333@gmail.com		
5	Type of vehicle	(Truck/Tanker/Special Vehicle)		
6	Transporter's registration No.	07CKPPS3333F1ZX		
7	Vehicle registration No.	UDRJ 05GB 4290	MP 16H 1598	
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)		
9	Receiver's authorisation No.			
10	Waste description	Spent Alumina		
11	Total quantity No. of Containers	69.96 M.Tm ³ or MT Two Trucks Nos.		
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid		
13	Special handling instructions and additional information	Jumbo Bags		
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	Name and stamp : Ajit Singh Jabriya	Signature 	Month 12	Day 15
			Year 2020	
15	Transporter acknowledgment of receipt of Wastes			
	Name and stamp : For Premier Refractories of India Pvt. Ltd.	Signature 	Month 12	Day 15
			Year 2020	
16	Receiver's certification for receipt of hazardous and other waste			
	Name and stamp : 	Signature 	Month 12	Day 15
			Year 2020	

Authorised Signatory

Sender copy to be sent to SPCB

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

Sl. No. 2090

FORM 10
 (See rule 19 (1))

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	I.O.C.L Naphta Cracker Panipat (H.R)
2	Sender's authorisation No.	PPT/T - 2506
3	Manifest Document No.	2090
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE AW-9, Ground Floor, Sanjay Gandhi Transport Nagar, Delhi-110042 E-mail: 3333@quirail.com
5	Type of vehicle	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	07CKPPS3333F1ZY
7	Vehicle registration No.	(U) MP 16 H 6034 (U) MP 16 H 6334
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)
9	Receiver's authorisation No.	50092
10	Waste description	Spent Alumina
11	Total quantity No. of Containers	60.77 M.Tm ³ or MT Two TrucksNos.
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid
13	Special handling instructions and additional information	Jumbo Bags
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp : R.K. Shan		Signature: <i>[Signature]</i>
		Month: 12 Day: 19 Year: 2020
15	Transporter acknowledgment of receipt of Wastes	
Name and stamp : For Premier Refractories of India Pvt. Ltd.		Signature: <i>[Signature]</i>
		Month: 12 Day: 19 Year: 2020
16	Receiver's certification for receipt of hazardous and other waste	
Name and stamp : <i>[Signature]</i>		Signature: <i>[Signature]</i>
		Month: 12 Day: 19 Year: 2020

Authorised Signatory

Sender copy to be sent to SPCB

Indian Oil Corporation Limited
Panipat Refinery & Petrochemical Complex

Sl. No. **2091**

FORM 10
 (See rule 19 (1))

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1	Sender's name and mailing address (Including Phone No. and e-mail)	1.0.C.L Naphta Cracker Panipat (H.R)
2	Sender's authorisation No.	PPT/T - 2506
3	Manifest Document No.	2091
4	Transporter's name and address : (Including Phone No. and e-mail)	M.P. QUICK SERVICE AW-9, Ground Floor, Sanjay Gandhi Transport Nagar, Delhi - 110042 Email: mp.quick3333@gmail.com
5	Type of vehicle	(Truck/Tanker/Special Vehicle)
6	Transporter's registration No.	07CKPPS3333F1ZX
7	Vehicle registration No.	MP 16 H 6039 MP 16 H 6339
8	Receiver's name and mailing Address (Including Phone No. and e-mail)	Premier Refractories of India Pvt. Ltd. New Katni, Jn., P.O. Box No. 9, Katni-483501 (M.P)
9	Receiver's authorisation No.	50092
10	Waste description	Spent Alumina
11	Total quantity No. of Containers	60.27 M.Tm ³ or MT Two TrucksNos.
12	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) Solid
13	Special handling instructions and additional information	Jumbo Bags
14	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp : Signature		Month Day Year
R.K. Sharma (Signature)		12 29 2020
15	Transporter acknowledgment of receipt of Wastes	
Name and stamp : Signature		Month Day Year
For Premier Refractories of India Pvt. Ltd.		12 29 2020
16	Receiver's certification for receipt of hazardous and other waste	
Name and stamp : Signature		Month Day Year
Authorized Signatory		12 29 2020

Sender copy to be sent to SPCB

TLV for Noise (OISD-GDN-166, First Edition, July, 1997)

Exposure Time (In hours)

8	90
4	95
2	100
1	105
1/2 hrs.	110

SOUND LEVEL METER MODEL NO. :- RT-5001

METER SR. NO.:- 111102404

MAKE:- REYTHON TECHNOLOGY

CALIBRATION ON:- .6.12.2019

NEXT DUE DATE OF CLIBRATION:-05.12.2020

Noise survey of Target units of PNCP in July-2020

S.NO	Plant/Unit	Area	Source	Sound Level(dB)	Date
1	SWING	31-KM-401-B	FD FAN	89.2	07.07.2020
2	SWING	31-PM-414-B	PUMP	88.4	07.07.2020
3	SWING	31-PM-103	PUMP	89.1	07.07.2020
4	SWING	31-PM-104	PUMP	85	07.07.2020
5	SWING	31-PM-102	PUMP	89	07.07.2020
6	SWING	31-PM-101	PUMP	89.9	07.07.2020
7	SWING	31-KM-221	COMPRESSOR	82.8	07.07.2020
8	SWING	31-PM-206	PUMP	88.8	07.07.2020
9	SWING	31-PM-205	PUMP	88.6	07.07.2020
10	SWING	31-PM-202-B	PUMP	90	07.07.2020
11	SWING	31-ME-314	WATER PELLETIZER	92	09.07.2020
12	SWING	31-PM-306-B	PUMP	92.1	09.07.2020
13	SWING	31-PM-401	PUMP	91.5	09.07.2020
14	SWING	31-PM-402	PUMP	90	09.07.2020
15	SWING	31-KM-318	COMPRESSOR	86.1	09.07.2020
16	SWING	31-KM-320	COMPRESSOR	90.5	09.07.2020
17	SWING	31-KM-301	COMPRESSOR	90.8	09.07.2020
18	SWING	31-KM-322	COMPRESSOR	89.5	09.07.2020
19	SWING	31-KM-324	COMPRESSOR	92.6	09.07.2020
20	SWING	31-KM-326	COMPRESSOR	94.8	10.07.2020
21	SWING	31-KM-327	COMPRESSOR	91.4	10.07.2020
1	BUTENE-1	32-PM-202-C	PUMP	84.2	20.07.2020
2	BUTENE-1	32-PM-401-B	PUMP	83.5	20.07.2020
3	BUTENE-1	32-PM-403-A	PUMP	85.7	20.07.2020
4	BUTENE-1	32-PM-402-B	PUMP	86.4	20.07.2020
5	BUTENE-1	32-PM-406-A	PUMP	86.1	20.07.2020

Noise survey of Target units of PNCP in August-2020					
S.NO	Plant/Unit	Area	Source	Sound Level(dB)	Date
1	POLYPROPYLENE	21-KM-2601	COMPRESSOR	84.1	11.08.2020
2	POLYPROPYLENE	21-KM-1501	COMPRESSOR	87.1	11.08.2020
3	POLYPROPYLENE	21-KM-1502-B	COMPRESSOR	88.1	11.08.2020
4	POLYPROPYLENE	21-KM-1502-A	COMPRESSOR	89.1	11.08.2020
5	POLYPROPYLENE	21-KM-1301	COMPRESSOR	89.9	11.08.2020
6	POLYPROPYLENE	21-KM-2804	COMPRESSOR	95.4	11.08.2020
7	POLYPROPYLENE	21-KM-1804	COMPRESSOR	98.1	12.08.2020
8	POLYPROPYLENE	21-KM-1801	COMPRESSOR	99.5	12.08.2020
9	POLYPROPYLENE	21-KM-2801	COMPRESSOR	93.6	12.08.2020
10	POLYPROPYLENE	21-P-2202	PUMP	89.3	12.08.2020
11	POLYPROPYLENE	21-P-2201	PUMP	88.1	12.08.2020
12	POLYPROPYLENE	21-PM-2604-A	PUMP	84.1	12.08.2020
13	POLYPROPYLENE	21-PM-2604-B	PUMP	86.6	12.08.2020
14	POLYPROPYLENE	21-P-2302-A	PUMP	87.1	17.08.2020
15	POLYPROPYLENE	21-P-2802-A	PUMP	88.1	17.08.2020
16	POLYPROPYLENE	21-PM-2301	PUMP	89	17.08.2020
17	POLYPROPYLENE	21-KM-2502-A	DRYER BLOWER	86.8	17.08.2020
18	POLYPROPYLENE	21-KM-2502-B	DRYER BLOWER	89.9	17.08.2020
19	POLYPROPYLENE	21-KM-2901-C	COMPRESSOR	101.8	17.08.2020
20	POLYPROPYLENE	21-KM-2901-B	COMPRESSOR	101.6	17.08.2020
21	POLYPROPYLENE	21-KM-1901-B	COMPRESSOR	93.7	17.08.2020

Noise survey of Target units of PNCP in September-2020					
S.NO	Plant/Unit	Area	Source	Sound Level(dB)	Date
1	CT-2	50-PM-101-G	CW PUMP	95.8	03.09.2020
2	CT-2	50-PM-101-F	CW PUMP	95.4	03.09.2020
3	CT-2	50-PM-101-E	CW PUMP	98.2	03.09.2020
4	CT-2	50-PM-101-D	CW PUMP	96.4	03.09.2020
5	CT-2	50-PM-101-C	CW PUMP	96.2	03.09.2020
6	CT-2	50-PM-101-A	CW PUMP	98.7	03.09.2020
7	CT-2	50-PM-101-H	CW PUMP	94.2	03.09.2020
1	CT-1	49-PM-101-A	CW PUMP	98.4	11.09.2020
2	CT-1	49-PM-101-B	CW PUMP	95.2	11.09.2020
3	CT-1	49-PM-101-C	CW PUMP	95.1	11.09.2020
4	CT-1	49-PM-101-D	CW PUMP	93	11.09.2020
5	CT-1	49-PM-101-F	CW PUMP	93.5	11.09.2020
6	CT-1	49-PM-101-H	CW PUMP	96.6	11.09.2020
7	CT-1	49-PM-101-I	CW PUMP	97.1	11.09.2020
1	CT-3	57-P-101-B	CW PUMP	97.2	27.09.2020
2	CT-3	57-P-101-C	CW PUMP	98.2	27.09.2020
3	CT-3	57-P-101-D	CW PUMP	99.1	27.09.2020
4	CT-3	57-P-102-B	CW PUMP	95.1	27.09.2020

Noise survey of Target units of PNCP in October-2020					
S.NO	Plant/Unit	Area	Source	Sound Level(dB)	Date
1	NCU/AU	ETHYLENE GENERATION COMPRESSOR	COMPRESSOR	91.1	05.10.2020
2	NCU/AU	UNDER PROPYLENE GENERATION COMPRESSOR	COMPRESSOR	89.4	05.10.2020
3	NCU/AU	11-PM-6002-B	PUMP	81.4	05.10.2020
4	NCU/AU	11-PM-2002-A	PUMP	90.7	05.10.2020
5	NCU/AU	11-P-2001-A	PUMP	94.5	05.10.2020
6	NCU/AU	11-PM-2601-A	PUMP	89.3	05.10.2020
7	NCU/AU	11-PM-2403-A	PUMP	86.1	05.10.2020
8	NCU/AU	11-PM-2403-B	PUMP	85.8	05.10.2020
9	NCU/AU	11-PM-2401-B	PUMP	81.8	05.10.2020
10	NCU/AU	11-P-1401-B	PUMP	89.8	05.10.2020
11	NCU/AU	11-P-1401-C	PUMP	85.8	07.10.2020
12	NCU/AU	11-K-2000	CHARGE COMPRESSOR	90.1	07.10.2020
13	NCU/AU	11-P-1501-A	PUMP	97.8	07.10.2020
14	NCU/AU	11-P-1501-C	PUMP	90.6	07.10.2020
15	NCU/AU	11-P-1501-D	PUMP	89.8	07.10.2020
16	NCU/AU	11-PM-1503-B	PUMP	85.3	07.10.2020
17	NCU/AU	11-PM-1502-B	PUMP	87	07.10.2020
18	NCU/AU	11-PM-1502-A	PUMP	84.3	07.10.2020
19	NCU/AU	11-P-7102-A	BWF PUMP	82.3	07.10.2020
20	NCU/AU	11-P-7101-A	BWF PUMP	89.3	07.10.2020
21	NCU/AU	11-PM-7301-B	PUMP	84.3	09.10.2020
22	NCU/AU	11-P-7020-B	PUMP	85.1	09.10.2020
23	NCU/AU	11-P-7201-A	PUMP	87.6	09.10.2020
24	NCU/AU	11-PM-7021-C	PUMP	84.8	09.10.2020
25	NCU/AU	11-P-5512-A	PUMP	81.8	09.10.2020
26	NCU/AU	11-P-5510-A	PUMP	81.7	09.10.2020
27	NCU/AU	11-P-5507-A	PUMP	83.8	13.10.2020
28	NCU/AU	11-P-5506-A	PUMP	85.7	13.10.2020
29	NCU/AU	11-P-5509-A	PUMP	86	13.10.2020
30	NCU/AU	11-P-5508-A	PUMP	87.1	13.10.2020
31	NCU/AU	11-P-5501-A	PUMP	89.9	13.10.2020
32	NCU/AU	11-P-5501-B	PUMP	91.1	13.10.2020
33	NCU/AU	11-P-5502-A	PUMP	91.8	13.10.2020
34	NCU/AU	11-PM-4803-A	PUMP	84.5	16.10.2020

35	NCU/AU	11-PM-4802-B	PUMP	85.2	16.10.2020
36	NCU/AU	11-PM-4601-A	PUMP	82.9	16.10.2020
37	NCU/AU	11-PM-5001-B	PUMP	80.8	16.10.2020
38	NCU/AU	11-PM-4501-B	PUMP	80.6	16.10.2020
39	NCU/AU	11-PM-4001-A	PUMP	83.1	16.10.2020
40	NCU/AU	11-PM-4001-B	PUMP	85.4	16.10.2020
41	NCU/AU	11-PM-4205-B	PUMP	86.1	16.10.2020
42	NCU/AU	11-PM-4204-A	PUMP	82.9	16.10.2020
43	NCU/AU	11-PM-4502-B	PUMP	82.6	16.10.2020
44	NCU/AU	11-PM-4201-A	PUMP	86.8	16.10.2020
45	NCU/AU	11-P-5302-B	PUMP	85.3	16.10.2020
BENZENE EXTRCTION UNIT (BEU)					
1	NCU/AU	16-PM-2412-B	PUMP	87.3	20.10.2020
2	NCU/AU	13-P-5709-B	PUMP	88.1	20.10.2020
3	NCU/AU	13-P-5709-A	PUMP	87.4	20.10.2020
4	NCU/AU	13-P-5706-B	PUMP	86.4	20.10.2020
5	NCU/AU	13-P-5702-B	PUMP	87.3	20.10.2020
6	NCU/AU	13-P-5704-B	PUMP	88.1	20.10.2020
7	NCU/AU	13-P-5701-B	PUMP	89.5	20.10.2020
8	NCU/AU	13-P-5701-A	PUMP	88.2	20.10.2020
9	NCU/AU	12-K-1231	COMPRESSOR	97.5	20.10.2020
10	NCU/AU	12-K-1201-A	COMPRESSOR	94.5	20.10.2020
BUTADINE EXTRACTION UNIT (BDEU)					
1	NCU/AU	12-P-1591-A	PUMP	85.6	27.10.2020
2	NCU/AU	12-P-1451-A	PUMP	82.5	27.10.2020
3	NCU/AU	12-P-1233-B	PUMP	89.7	27.10.2020
4	NCU/AU	12-P-1125-A	PUMP	88.4	27.10.2020
5	NCU/AU	12-P-1123-B	PUMP	89.3	27.10.2020
6	NCU/AU	12-P-1130-B	PUMP	91.1	27.10.2020
7	NCU/AU	12-P-1234-A	PUMP	89.5	27.10.2020
8	NCU/AU	12-P-1121-A	PUMP	88.9	27.10.2020
9	NCU/AU	12-P-1122-B	PUMP	91.5	27.10.2020
10	NCU/AU	15-K-1102-A	COMPRESSOR	82.1	27.10.2020
11	NCU/AU	15-K-1101-A	COMPRESSOR	79.1	27.10.2020

Noise survey of Target units of PNCP in MEG & IAPA, November-2020					
S.NO	Plant/Unit	Area	Source	Sound Level(dB)	Date
1	MEG	42-PM-621-A	PUMP	86.5	10.11.2020
2	MEG	42-KM-320	COMPRESSOR	89.2	10.11.2020
3	MEG	42-K-155PM1-B	COMPRESSOR	87.1	10.11.2020
4	MEG	42-KM-155	COMPRESSOR	90.6	10.11.2020
5	MEG	42-PM-116-A	PUMP	90.1	10.11.2020
6	MEG	42-PM-920-A	PUMP	88.1	10.11.2020
7	MEG	42-PM-930-B	PUMP	87	10.11.2020
8	MEG	UNDER COMP.SHED	COMPRESSOR	94.6	16.11.2020
9	MEG	42-PM-610-A	PUMP	85.4	16.11.2020
10	MEG	42-PM-611-B	PUMP	85.2	16.11.2020
11	MEG	42-PM-624-B	PUMP	87.7	16.11.2020
12	MEG	42-PM-620-B	PUMP	83.7	16.11.2020
13	MEG	42-PM-622-B	PUMP	83.2	16.11.2020
14	MEG	42-PM-630-A	PUMP	89.1	18.11.2020
15	MEG	42-PM-713-B	PUMP	84.9	18.11.2020
16	MEG	42-PM-710-A	PUMP	83.6	18.11.2020
17	MEG	42-PM-720-A	PUMP	79.5	18.11.2020
18	MEG	42-PM-721-B	PUMP	77.5	18.11.2020
19	MEG	42-PM-530-B	PUMP	84.2	18.11.2020
20	MEG	42-PM-311-B	PUMP	91.8	21.11.2020
21	MEG	42-PM-222-B	PUMP	87.5	21.11.2020
22	MEG	42-TT-2141-A	PUMP	88.5	21.11.2020
23	MEG	42-PM-220-A	PUMP	89.5	23.11.2020
24	MEG	42-PM-312-B	PUMP	90.2	23.11.2020
25	MEG	42-PM-540-B	PUMP	85.8	23.11.2020
26	MEG	42-PM-320-A	PUMP	85.4	24.11.2020
27	MEG	42-PM-510-A	PUMP	87.9	24.11.2020
28	MEG	42-PM-535-A	PUMP	82.1	24.11.2020
29	MEG	42-PM-550-B	PUMP	89.1	24.11.2020
30	MEG	42-PM-970-A	PUMP	84	24.11.2020
31	MEG	42-PM-910-A	PUMP	83.5	24.11.2020
1	IAPA	53-K-102	COMPRESSOR	91.6	26.11.2020
2	IAPA	53-K-101-A	COMPRESSOR	93.8	26.11.2020
3	IAPA	53-K-101-B	COMPRESSOR	94.9	26.11.2020
4	IAPA	53-K-101-C	COMPRESSOR	95.2	26.11.2020

Noise survey of Target units of PNCP in HDPE & CPP, December-2020					
S.NO	Plant/Unit	Area	Source	Sound Level(dB)	Date
1	HDPE	41-KM-5102-B	COMPRESSOR	93.6	02.12.2020
2	HDPE	41-PM-5107	PUMP	98.5	02.12.2020
3	HDPE	41-K-5401-A	COMPRESSOR	90.1	02.12.2020
4	HDPE	41-K-5401-B	COMPRESSOR	90	02.12.2020
5	HDPE	41-K-5401-D	COMPRESSOR	88.4	02.12.2020
6	HDPE	41-K-2402-B	COMPRESSOR	87.1	02.12.2020
7	HDPE	41-P-6201-B	PUMP	82.4	02.12.2020
8	HDPE	41-P-2201-B	PUMP	84.4	02.12.2020
9	HDPE	41-P-2101-B	PUMP	86.9	02.12.2020
10	HDPE	41-K-2203-B	COMPRESSOR	85.1	04.12.2020
11	HDPE	41-P-1104-A	PUMP	85	04.12.2020
12	HDPE	41-P-3101-B	PUMP	83.5	04.12.2020
13	HDPE	41-P-3201-A	PUMP	86.2	04.12.2020
14	HDPE	41-PM-3401-A	PUMP	82.4	04.12.2020
15	HDPE	41-P-3103-A	PUMP	83.2	04.12.2020
16	HDPE	41-P-3103-B	PUMP	84.1	04.12.2020
17	HDPE	41-PM-6202-A	PUMP	82.2	04.12.2020
18	HDPE	41-P-4101-A	PUMP	83.3	05.12.2020
19	HDPE	41-P-4102-B	PUMP	84.9	05.12.2020
20	HDPE	41-KM-3501-A	COMPRESSOR	84.1	05.12.2020
21	HDPE	41-KM-3502	COMPRESSOR	80.2	05.12.2020
22	HDPE	41-KM-6601-B	COMPRESSOR	88.5	05.12.2020
23	HDPE	41-P-6601-A	PUMP	85.1	05.12.2020
24	HDPE	41-P-1201-A	PUMP	86.5	05.12.2020
25	HDPE	41-PM-1204	PUMP	84.1	05.12.2020
26	HDPE	41-P-1201-B	PUMP	85.7	05.12.2020
27	HDPE	41-P-1202-A	PUMP	86.2	07.12.2020
28	HDPE	41-P-1202-B	PUMP	86.8	07.12.2020
29	HDPE	41-P-1301-A	PUMP	84.2	07.12.2020
30	HDPE	41-P-6103-C	PUMP	89.4	07.12.2020
31	HDPE	41-P-6103-B	PUMP	89.1	07.12.2020
32	HDPE	41-P-1302-B	PUMP	81.7	07.12.2020
33	HDPE	41-P-6102-A	PUMP	85.2	07.12.2020
34	HDPE	41-PM-6203-A	PUMP	80.1	07.12.2020

		STG(UNIT)			
1	CPP	52-PM-649	PUMP	81.7	22.12.2020
2	CPP	52-PM-659	PUMP	82.5	22.12.2020
3	CPP	52-PM-206	PUMP (STG-1)	96.1	22.12.2020
4	CPP	52-PM-201-A	PUMP (STG-1)	93.8	22.12.2020
5	CPP	STG-1	OUTER	101.5	22.12.2020
6	CPP	STG-2	OUTER	98.1	22.12.2020
7	CPP	52-2S-0101	PUMP(STG-2)	94.8	23.12.2020
8	CPP	52-3S-P-205	PUMP(STG-2)	92.2	23.12.2020
9	CPP	52-3C-P-206	PUMP(STG-2)	93.5	23.12.2020
10	CPP	52-3S-S1-0101	PUMP(STG-3)	89	23.12.2020
11	CPP	STG-3	OUTER	100	23.12.2020
12	CPP	52-3S-204	PUMP(STG-3)	92.5	23.12.2020
13	CPP	MAIN EJECTOR	STG-3	94.7	23.12.2020
14	CPP	52-2S-TP-350	PUMP(STG-2)	96.9	23.12.2020
15	CPP	MAIN EJECTOR	STG-2	98.2	23.12.2020
16	CPP	52-1S-TP-138	PUMP(STG-1)	97.6	23.12.2020
17	CPP	MAIN EJECTOR	STG-1	98.4	23.12.2020
18	CPP	STG-1	TURBINE COMPARTMENT	102	24.12.2020
19	CPP	STG-1	GEAR BOX	114.5	24.12.2020
20	CPP	STG-1	STEM TURBINE GENERATOR	108.7	24.12.2020
21	CPP	STG-2	STEM TURBINE GENERATOR	106	24.12.2020
22	CPP	STG-2	GEAR BOX	112.1	24.12.2020
23	CPP	STG-2	TURBINE COMPARTMENT	96.9	24.12.2020
24	CPP	STG-3	STEM TURBINE GENERATOR	101	24.12.2020
25	CPP	STG-3	GEAR BOX	108	24.12.2020
26	CPP	STG-3	TURBINE COMPARTMENT	94.9	24.12.2020
		BFP UNIT(CPP)			
27	CPP	52-X-JBN-2058	PUMP	92.5	28.12.2020
28	CPP	52-X-JBN-2073	PUMP	89.5	28.12.2020
29	CPP	52-X-JBN-2085	PUMP	89.7	28.12.2020
30	CPP	52-X-JBN-2092	PUMP	88.7	28.12.2020
31	CPP	52-PM-505	PUMP	87.3	28.12.2020
32	CPP	52-1B-JBN-2104	FD FAN	92.4	28.12.2020
33	CPP	52-2B-KM-401	COMPRESSOR	91.6	28.12.2020
34	CPP	52-2B-JBN-2104	FD FAN	92	28.12.2020
35	CPP	52-5H-PM-401	PUMP	89.4	28.12.2020
36	CPP	52-PM-511	PUMP	90.5	28.12.2020
37	CPP	52-PM-510	PUMP	90.1	28.12.2020

		GTGUNIT(CPP)			
38	CPP	GTG-1	GENERATOR	84.4	30.12.2020
39	CPP	GTG-3	GENERATOR	85.1	30.12.2020
40	CPP	GTG-5	GENERATOR	84	30.12.2020

HARYANA TEST HOUSE & Consultancy Services



50-C, Sector-25, Part-II, HUDA, Panipat-132 104 (HARYANA)

Ph: (O)0180-3290403, (M) 94160-17160, Tele-Fax: 0180-2671112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net

Test Results of Waste Water Sample

Dt: 04.08.2020

Unit: Naphtha Cracker

Month: July 2020

Date of Sampling: 07.07.2020

Test Results

S. NO.	PARAMETERS	Job Order No. URL No.		HTH/CR/206/0703P TC761420100056714F		PROTOCOL USED
		UNIT	LIMIT	ETP OUTLET		
1	pH	-	6.5 to 8.5	7.15		IS 3025 (P-11) : 1996
2	Chemical Oxygen Demand (COD)	mg/l	250 max.	107.0		
3	BOD for 3 days at 20°C	mg/l	50 max.	28.0		
4	Total Suspended Solids	mg/l	100 max.	12.0		
5	Phenol as C ₆ H ₅ OH	mg/l	5.0 max.	< 0.01		
6	Sulphide as H ₂ S	mg/l	2.0 max.	< 1.0		IS 3025 (P-25) : 1986
7	Cyanide as CN	mg/l	2.0 max.	< 0.02		IS 3025 (P-27) : 1986
8	Hexavalent Chromium as Cr ^{VI}	mg/l	0.1 max.	< 0.05		IS 3025 (P-52) : 2002
9	Total Chromium as Cr	mg/l	2.0 max.	< 0.2		IS 3025 (P-2) : 2004
10	Fluoride as F	mg/l	15 max.	0.50		APHA (SPADNS)

Jul 20 - Dec 20

T. S. Srivastava

Sr. Chemist / Mgr (Lab.)


 04.08.2020
 Authorized Signatory

HARYANA TEST HOUSE & Consultancy Services

50-C, Sector-25, Part-II, HUDA, Panipat-132 104 (HARYANA)

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Test Results of Ambient Air Monitoring

Dt: 05.08.2020

Unit: Naphtha Cracker


Month: July 2020 (URL No. TC781120100005989F)

Location: Quality Control Lab.

Test Results

Parameters	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	NH ₃ (µg/m ³)	Pb (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	Benzene (µg/m ³)	Ni (ng/m ³)	As (ng/m ³)	Benzo(a) Pyrene (ng/m ³)
Standard Limit	100 max.	60 max.	80 max.	80 max.	400 max.	1 max.	100 max.	2 max.	5 max.	20 max.	6 max.	1 max.
Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Date of Sampling												
06.07.2020	86.13	55.42	18.19	38.72	52.87	< 0.02	24.69	< 1.14	1.12	< 1.0	< 0.5	< 0.2
07.07.2020	88.57	55.83	18.85	39.29	57.33	< 0.02	27.05	< 1.14	1.18	< 1.0	< 0.5	< 0.2
09.07.2020	81.72	55.83	18.85	37.88	55.54	< 0.02	27.05	< 1.14	1.30	< 1.0	< 0.5	< 0.2
13.07.2020	86.56	54.58	17.53	37.03	58.22	< 0.02	28.62	< 1.14	1.31	< 1.0	< 0.5	< 0.2
17.07.2020	84.48	52.06	18.85	37.59	59.12	< 0.02	25.47	< 1.14	1.21	< 1.0	< 0.5	< 0.2
21.07.2020	94.57	58.75	22.16	36.75	60.47	< 0.02	23.91	< 1.14	1.23	< 1.0	< 0.5	< 0.2
24.07.2020	90.34	54.95	16.80	37.28	55.49	< 0.02	23.91	< 1.14	1.42	< 1.0	< 0.5	< 0.2
25.07.2020	83.23	60.83	22.16	35.92	61.38	< 0.02	29.41	< 1.14	1.39	< 1.0	< 0.5	< 0.2
27.07.2020	84.33	50.42	20.17	34.80	59.12	< 0.02	27.05	< 1.14	1.28	< 1.0	< 0.5	< 0.2
30.07.2020	86.28	54.58	22.16	35.64	60.47	< 0.02	23.91	< 1.14	1.42	< 1.0	< 0.5	< 0.2
Minimum	81.7	50.4	16.9	34.8	52.9	< 0.02	23.9	0.00	1.12	< 1.0	< 0.5	< 0.2
Maximum	94.57	58.75	22.16	39.29	61.38	< 0.02	29.41	0.00	1.42	< 1.0	< 0.5	< 0.2
Average	86.82	54.33	19.58	37.09	58.00	< 0.02	26.11	0.00	1.28	< 1.0	< 0.5	< 0.2

Remarks: Protocol used IS: 5182


Sr. Chemist / Mgr (Lab.)



HARYANA TEST HOUSE & Consultancy Services

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Test Results of Waste Water Sample

Dt: 09.09.2020

Unit: Naphtha Cracker

Month: AUG 2020

Date of Sampling: 20.08.2020

Test Results

S.NO.	PARAMETERS	Job Order No. URL No.		HTR/C/2806/0925 117812/ANR/11614F	PROTOCOL USED
		LIMIT	LIMIT		
1	pH	-	5.5 to 8.5	8.24	IS 3025 (P-11) - 1996
2	Chemical Oxygen Demand (COD)	mg/l	250 max	70.0	IS 3025 (P-48) - 2008
3	BOD for 5 days at 27°C	mg/l	80 max	32.0	IS 3025 (P-44) - 1995
4	Total Suspended Solids	mg/l	100 max	20.0	IS 3025 (P-13) - 1993
5	Phenol as C ₆ H ₅ OH	mg/l	10 max	< 0.01	IS 3025 (P-43) - 1993
6	Sulphide as H ₂ S	mg/l	10 max	< 1.0	IS 3025 (P-29) - 1996
7	Cyanide as CN	mg/l	10 max	< 0.02	IS 3025 (P-27) - 1996
8	Hexavalent Chromium as Cr ^{VI}	mg/l	0.1 max	< 0.05	IS 3025 (P-52) - 2005
9	Total Chromium as Cr	mg/l	10 max	< 0.2	IS 3025 (P-2) - 2004
10	Fluoride as F	mg/l	15 max	0.05	APHA (8142)02

TOD

Sr. Chemist / Mgr (Lab)

Handwritten Signature
09.09.2020
Authorized Signatory

HARYANA TEST HOUSE & Consultancy Services

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Test Results of Ambient Air Monitoring
 Unit: Naphtha Cracker
 Month: Aug 2020 (URL No. TC781120100010240F)
 Location: Quality Control Lab.

Dt: 09.09.2020

Test Results

Parameters	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	NH ₃ (µg/m ³)	Pb (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	Benzene (µg/m ³)	Ni (ng/m ³)	As (ng/m ³)	Benzo(a) Pyrene (ng/m ³)
Standard Limit	150 max.	60 max.	80 max.	80 max.	400 max.	1 max.	100 max.	2 max.	5 max.	20 max.	6 max.	1 max.
Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Date of Sampling												
04.08.2020	87.58	42.65	36.46	54.48	62.82	< 0.02	22.77	< 1.14	1.28	< 2.0	< 1.0	< 0.2
07.08.2020	77.79	55.42	35.11	31.94	61.89	< 0.02	21.97	< 1.14	1.14	< 2.0	< 1.0	< 0.2
10.08.2020	91.94	55.42	20.74	39.79	62.82	< 0.02	22.37	< 1.14	1.24	< 2.0	< 1.0	< 0.2
13.08.2020	93.90	49.09	22.07	32.80	68.41	< 0.02	23.68	< 1.14	1.27	< 2.0	< 1.0	< 0.2
18.08.2020	96.63	69.42	25.16	36.96	59.13	< 0.02	29.01	< 1.14	1.28	< 2.0	< 1.0	< 0.2
21.08.2020	82.04	52.27	20.67	35.40	55.93	< 0.02	22.03	< 1.14	1.23	< 2.0	< 1.0	< 0.2
24.08.2020	85.83	54.58	24.50	37.73	68.13	< 0.02	23.58	< 1.14	1.08	< 2.0	< 1.0	< 0.2
28.08.2020	76.62	44.17	20.57	37.15	55.48	< 0.02	20.49	< 1.14	1.20	< 2.0	< 1.0	< 0.2
Minimum	76.8	42.7	20.6	31.9	55.5	< 0.02	20.5	0.00	1.08	< 2.0	< 1.0	< 0.2
Maximum	96.63	69.42	36.46	54.48	68.41	< 0.02	29.01	0.00	1.28	< 2.0	< 1.0	< 0.2
Average	87.85	51.13	25.85	38.21	60.70	< 0.02	23.23	0.00	1.22	< 2.0	< 1.0	< 0.2

Reference Protocol used is: 5102

(Signature)
 Sr. Officer / Mgr. (Lab.)

(Signature)
 09.09.2020
 Authorized Signatory

Haryana Test House

& Consultancy Services



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Test Results of Waste Water Sample
 Unit: Naphtha Cracker
 Month: Sept 2020
 Date of Sampling: 25.09.2020

Dt: 03.10.2020

Test Results

S.NO.	PARAMETERS	Job Order No. / URL No.		HTH/20/525063	PROTOCOL USED
		UNIT	LIMIT		
				ETP OUTLET	
1	pH	-	6.5 to 8.5	7.42	IS 3025 (P-11) : 1996
2	Chemical Oxygen Demand (COD)	mg/l	250 max.	90.0	IS 3025 (P-50) : 2006
3	BOD for 3 days at 27°C	mg/l	50 max.	12.0	IS 3025 (P-44) : 1993
4	Total Suspended Solids	mg/l	100 max.	18.0	IS 3025 (P-17) : 1993
5	Phenol as C ₆ H ₅ OH	mg/l	5.0 max.	< 0.01	IS 3025 (P-43) : 1992
6	Sulphide as H ₂ S	mg/l	2.0 max.	< 1.0	IS 3025 (P-26) : 1996
7	Cyanide as CN	mg/l	2.0 max.	< 0.02	IS 3025 (P-27) : 1996
8	Hexavalent Chromium as Cr ⁶⁺	mg/l	0.1 max.	< 0.05	IS 3025 (P-57) : 2003
9	Total Chromium as Cr	mg/l	2.0 max.	< 0.1	IS 3025 (P-52) : 2003
10	Fluoride as F	mg/l	15 max.	0.8	APHA (SPADNS)

(Signature)
 03/10/20

Sr. Chemist / Mgr (Lab)



Authorised Signatory

Haryana Test House

& Consultancy Services

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Test Results of Ambient Air Monitoring

Dt: 03.10.2020

Unit: Naphtha Cracker

Month: Sept. 2020 (URL No. TC781120100011802F)

Location: Quality Control Lab.

Test Results

Parameters	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)	NH ₃ ($\mu\text{g}/\text{m}^3$)	Pb ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	Benzene ($\mu\text{g}/\text{m}^3$)	Ni (ng/m^3)	As (ng/m^3)	Benzo(a) Pyrene (ng/m^3)
Standard Limit	100 max.	60 max.	80 max.	80 max.	400 max.	1 max.	100 max.	2 max.	5 max.	20 max.	6 max.	1 max.
Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Date of Sampling												
01.09.2020	83.49	49.58	20.57	37.44	83.74	< 0.02	28.67	< 1.14	1.18	< 2.0	< 1.0	< 0.02
04.09.2020	85.80	46.20	17.86	35.29	59.47	< 0.02	23.50	< 1.14	1.22	< 2.0	< 1.0	< 0.02
07.09.2020	85.73	49.17	22.53	34.62	55.48	< 0.02	25.56	< 1.14	1.35	< 2.0	< 1.0	< 0.02
11.09.2020	81.99	48.75	18.09	35.52	55.48	< 0.02	21.57	< 1.14	1.38	< 2.0	< 1.0	< 0.02
14.09.2020	79.58	48.75	20.74	34.53	60.05	< 0.02	22.37	< 1.14	1.14	< 2.0	< 1.0	< 0.02
18.09.2020	85.82	46.67	20.57	36.27	55.24	< 0.02	21.75	< 1.14	1.08	< 2.0	< 1.0	< 0.02
21.09.2020	85.13	44.58	17.96	35.68	53.94	< 0.02	21.75	< 1.14	1.16	< 2.0	< 1.0	< 0.02
25.09.2020	118.28	64.05	22.53	36.86	55.24	< 0.02	22.34	< 1.14	1.22	< 2.0	< 1.0	< 0.02
28.09.2020	125.14	68.27	19.24	35.92	59.67	< 0.02	25.37	< 1.14	1.22	< 2.0	< 1.0	< 0.02
Minimum	79.6	44.58	17.86	34.53	53.94	< 0.02	21.57	< 1.14	1.08	< 2.0	< 1.0	< 0.02
Maximum	125.14	68.27	22.53	37.44	83.74	< 0.02	28.67	< 1.14	1.38	< 2.0	< 1.0	< 0.02
Average	92.44	51.78	20.01	35.82	57.59	< 0.02	23.43	< 1.14	1.22	< 2.0	< 1.0	< 0.02

Remarks: Protocol used IS: 5182

[Signature]
03/10/20

Sr. Chemist / Mgr (Lab.)



Authorized Signatory

Haryana Test House & Consultancy Services



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Test Results of Waste Water Sample
Unit: Naphtha Cracker
Month: Oct. 2020
Date of Sampling: 09.10.2020

Dt: 02.11.2020

Test Results

S.NO.	PARAMETERS	Job Order No. / URL No.		HTH/CH/201009012 TG78112/100014289F	PROTOCOL USED
		UNIT	LIMIT		
1	pH	-	6.5 to 8.5	7.75	IS 3025 (P-11): 1996
2	Chemical Oxygen Demand (COD)	mg/l	250 max.	72.0	IS 3025 (P-58): 2005
3	BOD for 5 days at 27°C	mg/l	50 max.	20.2	IS 3025 (P-44): 1993
4	Total Suspended Solids	mg/l	100 max.	38.0	IS 3025 (P-17): 1993
5	Phenol as C ₆ H ₅ OH	mg/l	5.0 max.	< 0.01	IS 3025 (P-43): 1993
6	Sulphide as H ₂ S	mg/l	2.0 max.	< 1.0	IS 3025 (P-29): 1996
7	Cyanide as CN	mg/l	2.0 max.	< 0.02	IS 3025 (P-27): 1996
8	Hexavalent Chromium as Cr ⁶⁺	mg/l	0.1 max.	< 0.05	IS 3025 (P-23): 2003
9	Total Chromium as Cr	mg/l	1.0 max.	< 0.2	IS 3025 (P-52): 2003
10	Fluoride as F	mg/l	15 max.	1.2	APHA (EPAC08)



Authorized Signatory

T. D. D.
Sr. Chemist / Mgr (Lab.)

Haryana Test House & Consultancy Services

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Test Results of Ambient Air Monitoring

Dt: 02.11.2020

Unit: Naphtha Cracker

Month: Oct. 2020 (URL No. TC781120100013884F)

Location: Quality Control Lab.

Test Results

Parameters	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)	NH ₃ ($\mu\text{g}/\text{m}^3$)	Pb ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	Benzene ($\mu\text{g}/\text{m}^3$)	Ni (ng/m^3)	As (ng/m^3)	Benzo(a) Pyrene (ng/m^3)
Standard Limit	100 max.	60 max.	80 max.	90 max.	400 max.	1 max.	100 max.	2 max.	5 max.	20 max.	6 max.	1 max.
Duration	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Date of Sampling												
02.10.2020	115.72	62.08	22.52	38.61	58.88	< 0.02	25.36	< 1.14	1.30	< 2.0	< 1.0	< 0.2
05.10.2020	125.96	72.66	23.09	38.20	58.21	< 0.02	23.41	< 1.14	1.28	< 2.0	< 1.0	< 0.2
08.10.2020	135.15	67.08	23.65	37.79	61.35	< 0.02	22.96	< 1.14	1.28	< 2.0	< 1.0	< 0.2
13.10.2020	121.74	65.42	24.82	36.20	49.40	< 0.02	25.75	< 1.14	1.42	< 2.0	< 1.0	< 0.2
16.10.2020	158.53	68.75	21.89	35.95	50.71	< 0.02	24.96	< 1.14	1.28	< 2.0	< 1.0	< 0.2
19.10.2020	136.91	75.25	23.39	35.95	51.15	< 0.02	25.36	< 1.14	1.36	< 2.0	< 1.0	< 0.2
23.10.2020	161.70	84.59	25.63	37.39	54.12	< 0.02	25.57	< 1.14	1.34	< 2.0	< 1.0	< 0.2
Minimum	115.72	62.08	21.89	35.95	49.40	< 0.02	22.96	< 1.14	1.28	< 2.0	< 1.0	< 0.2
Maximum	161.70	84.59	25.63	38.61	61.35	< 0.02	25.75	< 1.14	1.42	< 2.0	< 1.0	< 0.2
Average	136.67	70.62	23.54	37.44	54.55	< 0.02	24.77	< 1.14	1.32	< 2.0	< 1.0	< 0.2

Remarks: Protocol used IS: 5162

DTP
Sr. Chemist / Mgr (Lab.)



Test Report

Issued to: M/s Indian Oil Corporation Limited
(Refinery Division)
Panipat Naptha Cracker
Distt. Panipat, Haryana, INDIA

URL No.: TC 636620000001564
Test Report Date: 05/12/2020

Sample Particulars:

Sample Quantity & Packaging : 1.0 Liter, Pet Bottle
Test Started on : 27/11/2020
Test Completed : 02/12/2020
Method of Sampling : SOP/B/D-3
Date of Sampling : 26/11/2020
Sampling Conducted By : Mr. Animesh Jha
Place of Sampling : W-6: ETP Outlet-PNC

Test Report

Sr. No.	Parameter	Unit	Result	Permissible Limits	Protocol
			W-6		
1	pH	...	7.36	6.5-8.5	IS:3025 (P-11)
2	Total Suspended Solids (TSS)	mg/L	27.4	100 Max	IS:3025 (P-17)
3	Chemical Oxygen Demand (COD)	mg/L	128	250 Max	IS:3025 (P-58)
4	Bio-Chemical Oxygen Demand (3 days at 27°C) (BOD)	mg/L	19	50 Max	IS:3025 (P-44)
5	Phenols(C ₆ H ₅ OH)	mg/L	0.7	5.0 Max	IS:3025 (P-43)
6	Sulphide (S)	mg/L	1.6	2.0 Max	IS:3025 (P-29)
7	Fluoride	mg/L	2.3	15 Max	IS:3025 (P-60)
8	Chromium Hexavalent (Cr ⁶⁺)	mg/L	0.3	0.1Max	IS:3025 (P-52)



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Test Report

Issued to: M/s Indian Oil Corporation Limited
(Refinery Division)
Panipat Naptha Cracker
Distt. Panipat, Haryana, INDIA

Test Report No: 202011260110

Test Report Date: 05/12/2020

Sample Particulars:

Sample Quantity & Packaging : 1.0 Liter, Pet Bottle
Test Started on : 27/11/2020
Test Completed : 02/12/2020
Method of Sampling : SOP/B/D-3
Date of Sampling : 26/11/2020
Sampling Conducted By : Mr. Animesh Jha
Place of Sampling : W-6: ETP Outlet-PNC

Test Report

Sr. No.	Parameter	Unit	Result	Permissible Limits	Protocol
			W-6		
1	Cyanide (CN)	mg/L	BDL (LOQ-0.2)	0.20	APHA-23 rd Ed.
2	Total Chromium	mg/L	BDL(LOQ-2.0)	2.0	IS:3025 (P-52)


(AUTHORISED SIGNATORY)
(RAVINDER MITTAL)

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CORPORATE OFFICE & CENTRAL LABORATORIES :-

Plot No. 118, Church Road, Behind Kausik Vatika, Bhagat Singh Colony, Ballabgarh, Faridabad - 121004, Haryana, India

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labsnitya@gmail.com

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Test Report

Issued to: **M/s Indian Oil Corporation Limited**
(Refinery Division)
Panipat Naptha Cracker
Distt. Panipat, Haryana, INDIA

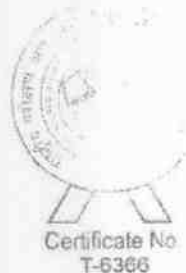
URL No.: TC 636620000001651
Test Report Date: 12/01/2021

Sample Particulars:

Sample Quantity & Packaging : 1.0 Liter, Pet Bottle
Test Started on : 02/01/2021
Test Completed : 11/01/2021
Method of Sampling : SOP/B/D-3
Date of Sampling : 31/12/2020
Sampling Conducted By : Mr. Veerpal Singh
Place of Sampling : W-7: ETP Outlet-PNC

Test Report

Sr. No.	Parameter	Unit	Result	Permissible Limits	Protocol
			W-7		
1	pH	...	7.24	6.5-8.5	IS:3025 (P-11)
2	Total Suspended Solids (TSS)	mg/L	23.8	100 Max	IS:3025 (P-17)
3	Chemical Oxygen Demand (COD)	mg/L	140	250 Max	IS:3025 (P-58)
4	Bio-Chemical Oxygen Demand (3 days at 27°C) (BOD)	mg/L	22	50 Max	IS:3025 (P-44)
5	Phenols (C ₆ H ₅ OH)	mg/L	0.5	5.0 Max	IS:3025 (P-43)
6	Sulphide (S)	mg/L	0.9	2.0 Max	IS:3025 (P-29)
7	Fluoride	mg/L	2.6	15 Max	IS:3025 (P-60)
8	Chromium Hexavalent (Cr ⁶⁺)	mg/L	0.2	0.1 Max	IS:3025 (P-52)



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Test Report

Issued to: M/s Indian Oil Corporation Limited

(Refinery Division)

Panipat Naptha Cracker

Distt. Panipat, Haryana, INDIA

Test Report No: 202012310116

Test Report Date: 12/01/2021

Sample Particulars:

Sample Quantity & Packaging : 1.0 Liter, Pet Bottle
 Test Started on : 02/01/2021
 Test Completed : 11/01/2021
 Method of Sampling : SOP/B/D-3
 Date of Sampling : 31/12/2020
 Sampling Conducted By : Mr. Veerpal Singh
 Place of Sampling : W-7: ETP Outlet-PNC

Test Report

Sr. No.	Parameter	Unit	Result	Permissible Limits	Protocol
			W-7		
1	Cyanide (CN)	mg/L	BDL (LOQ-0.2)	0.20	APHA-23 rd Ed.
2	Total Chromium	mg/L	BDL(LOQ-2.0)	2.0	IS:3025 (P-52)


(AUTHORISED SIGNATORY)
(RAVINDER MITTAL)

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LDAR BENZENE MONITORING REPORT FOR IOCL, PANIPAT

LDAR Benzene Monitoring Report for IOCL Naphtha Cracker Panipat

Name of client M/s Indian Oli Corporation Limited
P.O. Panipat Refinery
Panipat-132 140
HARYANA

Name of Contractor NETEL (INDIA) LIMITED
Environment Management Services
W-408, Rabale MIDC,
TTC Industrial Area, Navi Mumbai - 400 701

Nature of job LDAR Monitoring Report for IOCL, Panipat

Report Period Month of October,2020.

For NETEL (INDIA) LIMITED


JAYANT MESHAM
SR.MANAGER - EMS OPRATION







LEAK DETECTION AND REPAIR (LDAR) PROGRAM

BENZENE REPORT : OCTOBER,2020.

PLANTWISE SUMMERY

Sr.No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	Total Leak (kg/day)
1	NCU	12/10/2020	290	1 to 8	0.035
Total in Kg/day					0.035
Total in MT/Annum					0.013

Verified by

Surekha Jamdar
Dy. Technical Manager

Checked by

Shraddha Kere
Technical Manager



LDAR Monitoring Report for IOCL, Panipat Naptha Cracker

Name of client M/s Indian Oli Corporation Limited
P.O. Panipat Refinery
Panipat-132 140
HARYANA

Name of Contractor NETEL (INDIA) LIMITED
Environment Management Services
W-408, Pipe line Road, Rabale MIDC,
TTC Industrial Area, Navi Mumbai - 400 701

Nature of job LDAR Monitoring Report for IOCL, Panipat Naptha Cracker

Report Period October,2020

For NETEL (INDIA) LIMITED

A handwritten signature in black ink, appearing to read 'Jayant Meshram'.

JAYANT MESHARAM
SR.MANAGER - EMS OPRATION





LEAK DETECTION AND REPAIR (LDAR) PROGRAM

VOC REPORT : OCTOBER,2020.

PLANTWISE SUMMERY

Sr.No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	Total Leak (kg/day)
1	NCU	12/10/2020	845	1 to 23	1.658
2	BUTADINE	12/10/2020	221	24 to 29	0.056
4	HDPE	12/10/2020	580	30 to 45	1.611
3	MEG UNIT	12/10/2020	245	45 to 52	0.894
7	SWING UNIT	13/10/2020	569	52 to 67	4.972
6	BUTEN-1	13/10/2020	195	67 to 73	0.048
5	PP 1&2 UNIT	13/10/2020	475	73 to 86	0.070
8	OFF SITE	13/10/2020	137	86 to 90	0.064
9	LOADING GANTRY	13/10/2020	171	90 to 95	0.044
10	ETP	13/10/2020	113	95 to 98	0.020
Total in Kg/day			3551		9.437
Total in MT/Annum					3.445

Verified by

Surekha Jamdar
Dy. Technical Manager



Checked by

Shradha Kere
Technical Manager