

# **EDS ANNEXURE**

**For**

## **Panipat Refinery Capacity Expansion from Existing 15 MMTPA to 25 MMTPA within the existing Refinery Complex**

**At**

**IOCL Panipat Refinery & Petrochemical Complex, Panipat**

**Village: Baholi**

**Taluk: Panipat**

**District: Panipat**

**State: Haryana**

**[Project termed under Schedule 4(a) Category 'A' – Petroleum Refining  
Industries as per EIA Notification 2006 and its Amendments]**

**Submitted by:**



**INDIAN OIL CORPORATION LIMITED, PANIPAT REFINERY**

**EIA CONSULTANT:**



**M/s. Hubert Enviro Care Systems (p) Limited**

**July 2021**

<b>Annexure no.</b>	<b>Description</b>	<b>Page No.</b>
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E2	Public Hearing MoM letter to MoEF&CC with Attendance sheet.	4
E3	Action take report with supporting documents with all the EC's	11
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E5	Land documents	221



इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स

पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट: [www.iocl.com](http://www.iocl.com); ई-मेल: [prpc\\_hse@indianoil.in](mailto:prpc_hse@indianoil.in)

दूरभाष : 0180-252 4001/0180-2578833



रिफ़ाइनरीज़ प्रभाग  
Refineries Division

Ref No: HSE/PRPC/4

Date: 15.06.2021

To  
Monitoring Cell,  
Environment Clearance Division,  
Indira Paryawaran Bhawan,  
Jor Bagh Road,  
New Delhi -110003

Subject: Change in registered e-mail ID of Applicant in "PARIVESH" portal for Panipat Refinery & Petrochemical Complex, IOCL

Sir/Madam,

Panipat Refinery & Petrochemical Complex (PRPC) of Indian Oil Corporation Limited (IOCL) is registered at <http://parivesh.nic.in/loginnew.aspx> as an "Applicant" in matters related to Environment Clearance for new/expansion/modernization projects.

Presently e-mail id of Shri. A B Phand, SM (H, S&E) [phandab@indianoil.in](mailto:phandab@indianoil.in) is registered on the portal. The concerned person has been transferred to a new location in recent transfers and postings.

In view of this, the name of registered user/e-mail may kindly be changed to [prpc\\_hse@indianoil.in](mailto:prpc_hse@indianoil.in).

Submitted for your kind consideration and implementation.

Thanking You,

Yours faithfully,

*Ashish Bhushan*  
15/6/2021

(Ashish Bhushan)

General Manager (HSE)

For and on behalf of

Executive Director & Refinery Head

Panipat Refinery and Petrochemical Complex

आशीष भूषण

Ashish Bhushan

सहायक प्रबंधक (स्वास्थ्य, सुरक्षा एवं पर्यावरण)

General Manager (Health, Safety & Environment)

पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स (आई.ओ.सी.एल.)

Panipat Refinery & Petrochemical Complex (IOCL)

पानीपत, पानीपत-132140

I/36774/2021

**ANNEXURE-E2**

**HARYANA STATE POLLUTION CONTROL BOARD**  
**C-11, SECTOR-6, PANCHKULA**  
**Ph. 0172-2577870-73 Fax No. 2581201**  
**Email:hspcbcoordination@gmail.com**  
**Website: hspcb.gov.in**

**No. HSPCB/Coord. Cell/2021/**  
**Dated:- 28/04/2021**

To

The Secretary,  
Minister of Environment, Forest & Climate Change,  
Govt. of India, Paryavaran Bhawan, Jorbag Road,  
New Delhi-110003.

**Subject:-Proceeding of Public hearing for project requiring clearance under Environmental Impact Assessment Notification, 14 September, 2006 (as amended) of M/s Panipat Refinery & Petro Chemical Complex, Vill. Baholi, Post Office Panipat Refinery -132140 (Hry) for Proposed Panipat Refinery Capacity expansion from 15 MMTPA to 25 MMTPA on 06.04.2021 at 12.30 PM.**

Kindly refer to the subject noted above.

Please find enclosed herewith the proceeding of Public hearing conducted on 06.04.2021 under provisions of EIA notification, 2006 (amended to date) for proposed project for proposed Panipat Refinery Capacity expansion from 15 MMTPA to 25 MMTPA, State Haryana State by M/s Panipat Refinery & Petro Chemical Complex, Vill. Baholi, Post Office Panipat Refinery -132140 (Hry) in original forwarded by Regional Officer, Panipat Haryana State Pollution Control Board vide letter no. 259 dated 20.04.2021 alongwith CD, album of photographs & attendance sheet and other relevant documents for information and further necessary action, please.

**DA/As above**

Digitally signed by SANJIV KUMAR  
Date: Wed Apr 28 12:19:17 IST 2021  
Reason: Approved

**Sr. Env. Engineer (HQ)**  
**For Member**

**Secretary**

**Copy to:**

A copy of the above alongwith copy of proceedings with enclosure is forwarded to following for information & further necessary action please:-

- I. The Regional Officer, HSPCB, Panipat.



Public Hearing 06.04.2021

Panipat Refinery Expansion 18-05-2021 MMTPA

क्र.सं.	नाम	पिता का नाम	पता	हस्ताक्षर
1.	रामशक्ल	सोनू	—	ज.व.क.
2.	हुकमी	बालू राम	बाल पबाना	Rahman.
3.	सोनू	जगदीश	बला	Spr
4.	रोहीत	बिब्रम	सालवन	2000
5.	ASHISH	सुरेश	— " —	Ashish
6.	लक्की	रामेन्द्र	— " —	lucky
7.	अनिल	जमप्रकाश	बला	Anil
8.	महेन्द्र	पूरी	सालवन	महेन्द्र
9.	विशाल	मुन्तराम	-UP-रामपुर	विशाल
10.	छोटू	रामचंद्र	— " —	छोटू
11.	अनिल	श्री राम लाल	पानीपत	अनिल
12.	मिनामी लाल	ओम प्रकाश	ददलाना	मिनामी
13.	कृष्ण	रोशन लाल	— " —	कृष्ण
14.	मनेरुलाल	जोराली	ददलाना	मनेरुलाल
15.	देवा	अरेश	ददलाना	देवा
16.	बाबु	चंदन	— " —	बाबु
17.	बरेन	बुसन	ददलाना	बरेन
18.	विश्वजीत	शुभराज	ददलाना	विश्वजीत
19.	शामर	अरेश	— " —	शामर
20.	संजय	धुधुम	ददलाना	संजय
21.	कुरेश	अलवार	— " —	कुरेश
22.	संजय दास	सुरांत दास	ददलाना	संजय दास
23.	अमरज	अनुमीन	ददलाना	अमरज
24.	थोपिन	मंगल	— " —	थोपिन
25.	नेकी मरूम	भैरव मरूम	— " —	नेकी मरूम

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Panipat Refinery Expansion P.25

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क्र.सं.	नाम	पिता का नाम	पता	हस्ताक्षर
26.	लखन	जगन मिर्जा	गर्जर कालीनी	
27.	विश्वमल	विरन मल	— " —	
28.	विश्वनाथ	शिवशरण	— " —	
29.	विश्वनाथ सरदार	जोगिन्द्र सरदार	— " —	रुद्राक्ष
30.	S.K. Chauhan	Mr. R.B. Chauhan	Rajapur	
31.	Sunil Kumar	Sunil Kumar	Rajapur	
32.	<del>Sunil</del>	<del>Sunil</del>	<del>Rajapur</del>	
33.	जगीरा	ताराचंद	खोराखेडी	
34.	मनोज कुमार	देवता दीन	दहलाना	मनोज कुमार
35.	संजय	राधेश्याम	खोराखेडी	संजय
36.	चंद्रभान	मंगोराम	राजपुर	
37.	प्रवीन कुमार	ओम प्रकाश	दहलाना	
38.	अबदुल फहीम	अबदुल हमीद	कुताना	अबदुल फहीम
39.	राजकमल	सुंदर लाल	— " —	राजकमल
40.	प्रीतम	तुलसी राम	बोश	प्रीतम
41.	मदीन अहमद	भूरे	गर्जर कालीनी	24/04/21
42.	अबदुल हकीम	अबदुल हमीद	— " —	अबदुल हकीम



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क्र.सं.	गाँव	पिता का नाम	पता	हस्ताक्षर
43.	बसी बसी	रियाजुद्दीन	गुर्जर मल्लीनी	असह
44.	अब्दुल सलीम	अब्दुल हमीद	- - -	H H H H
45.	सुसमिन्द्र	महेन्द्र सिंह	डूरा बोहली	सह
46.	पसिन्दर सिंह	कन्हारा सिंह सरपंच	- - -	सिद्धि
47.	बोय सिंह	गुरोतार सिंह	- - -	बी.क.सिंह
48.	संतोक सिंह	काबल सिंह	- - -	Santok Singh
49.	हर्षिन्द	बोय सिंह	- - -	Harshinder
50.	महाबीर सिंह	फज्जाब सिंह	पादा	ME/06/11
51.	मीरज	ज्योरे लाल	ददलाना	Narayan
52.	अनिल	बनेसिंह	फज्जाना	अनिल
53.	अंकिता	मदन लाल	- - -	अंकिता
54.	रोहताश	जिले सिंह	शेरा	Rohitash
55.	सोन	नके सिंह	शेरा	सोन
56.	नरैन्द्र	मक कदम सिंह	फज्जाना	Narinder
57.	फहीम	संगीर अहमद	कुलुषा	FAYEEM
58.	जिज्ञान	द रिफाकत	- - -	जिज्ञान

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क्रमांक	नाम	पिता का नाम	पता	हस्ताक्षर
59.	दीपक	राजपाल	दुदलाना	Deepak
60.	तेजवीर सिंह मीर सिंह	सुभासिंह	बोहली	Tejvir Singh
61.	रामफल	चंदाराम	रामपुर जयन	Ram Phal
62.	शिवकुमार	दे रमेश कुमार	कावडी	Shiv Kumar
63.	लक्ष्मी	सतपाल सिंह	बोहली	Laxmi
64.	अवदेश	रामभरोसे	खोरा खोरी	अवदेश कुमार
65.	दलवीर सिंह	बलभार सिंह	बोहली डेरा	दलवीर सिंह
66.	लखविंद्र सिंह	बलभार सिंह	बोहली डेरा	लखविंद्र सिंह
67.	Purnodhara	Sh. Gopichand	Dadlana	P
68.	रामपाल मेरी		Dadlana	Ram Pal
69.	Rajpal/Son	Ishtwar Chaud	Kutana	Rajpal
70.	Moon Lal	Ram Singh	Kutana	Moon Lal
71.	Jai Kaur	Tajbir Singh	Kutana	Jai Kaur
72.	Amrinder Singh	Asa Singh	nearby Kutana	Amrinder Singh
73.	Neeraj	Narinder Singh	Dadlana	Neeraj
74.	Ramvir	Ram Singh	Kutana	Ramvir
75.	Rajpal	Balwant	Kutana	Rajpal
76. 71	Harbans Singh	Harn Chand	Dadlana	Harbans Singh
77. 72	Sunder	Krishan	"	Sunder



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क्र.सं.	नाम	पिता/पति/पति	पता	हस्ताक्षर
78	महमूनीर	दीपचंद	बोहली	महमूनीर
79	रणवीर सिंह		गढ़ गढ़ान	रणवीर सिंह
80	नुर-उ-रही	नमन व. सिंह	५५ भागा	नुर-उ-रही
81	नमन व. सिंह	नमन व. सिंह	"	नमन व. सिंह
82	अशपाल नाथ	श्री दिलवर सिंह	"	अशपाल नाथ
83	गुडनारायण सिंह	गोपाल व. नारायण	बोहली	गुडनारायण सिंह
84	विजय शर्मा	रमेश शर्मा	Baholi	विजय शर्मा
85	Lakhwinder Singh	Sh. Karnail S.	Baholi	Lakhwinder Singh
86	Blawan Singh	Ram Singh		
87	Rajesh Kumar	Blawan		
88	Jai Kumar			
89	Ram Dwar	Purem Dard		
90	Ram Pal	1. Blawan		
91	Chand Singh	Jagan Singh		
92	Sarande Pt.	88 B. 29 km New School	Baholi	Sarande Pt.
93	Jasbir Singh	Manoj Chandel	Baholi	Jasbir Singh
94	Manoj Singh	Manoj Singh	Baholi	Manoj Singh
95	Rajesh	Manoj Singh	Siddhar	Rajesh
96	Manoj Singh	Baholi	Baholi	Manoj Singh
97	सतवीर सिंह	देवी राम	सिठाना	Satvir Singh
98	रामेन्द्र सिंह	बुद्धा सिंह	बोहली - "	रामेन्द्र सिंह
99	राज कुमार	रमेश कुमार	बोहली	राज कुमार
100	Azard Singh	Sohan Singh	VPO Raikela	Azard Singh
101	प्रीतम सिंह	पुन्या सिंह	सिठाना	प्रीतम सिंह
102	वीरेश शर्मा	मिश्र नराम	बोहली	वीरेश शर्मा
103	Rajender	Rajeev Singh	बोहली	Rajender
104	महेश सिंह	महेश कुमार सिंह	- "	महेश सिंह
105	चंद्रवीर सिंह	मिश्र ग. वि. सिंह	बोहली	चंद्रवीर सिंह



क्र. सं.

106

जसवीर सिंह

नारायण सिंह

शेरा बोहली

107

गुरवीर सिंह

सुरजीत सिंह

—, —

108

बलभर सिंह

रतन सिंह

बोहली

109

जोगा सिंह

Ex Sarpanch

कुलाना

110

जान चंद

Panch

कुलाना

111

नारायण सिंह

जुल्फी राम

शेरा बोहली

Re

Jig/Jank

जान चंद

✗



इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स

पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery &amp; Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट: [www.iocl.com](http://www.iocl.com); ई-मेल: [prpc\\_hse@indianoil.in](mailto:prpc_hse@indianoil.in)

दूरभाष : 0180-252 4001/0180-2578833

रिफ़ाइनरीज़ प्रभाग  
Refineries Division

IOCL/PR/HSE/EC/P-25

07.05.2021

To,  
Integrated Regional Office,  
Ministry of Environment Forest and Climate Change  
Bays No. 24-25, Dakshin Marg  
Sector 31-A, Chandigarh

Attention : Dr. Vimal Kumar Hatwal, Joint Director/Scientist 'D'

Subject: Action Taken Report of Observations during Inspection visit on 13.04.2021 for Certification of EC Compliances

Reference: 1. Your letter no. 5-2/2018 (ENV)/ 322 dated 29.04.2021  
2. J-11011/177/2016-IA-II (I) dated 26.03.2018  
3. Our Letter no. IOCL/PR/HSE/EC/P-25 dated 06.03.2021

Sir,

This is in context to your letter referenced above.

The 'Action Taken Report' with compliances against each observation is enclosed along with the supporting documents for your kind perusal.

Thanking You,

Yours faithfully,

(Ashish Bhushan)

General Manager (HSE)

For and on behalf of

Executive Director &amp; Refinery Head,

PRPC

Enclosures:

As above

आशीष भुषन  
Ashish Bhushan  
जनरल मैनेजर (स्वास्थ्य, सुरक्षा एवं पर्यावरण)  
General Manager (Health, Safety & Environment)  
पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स (आई.ओ.सी.एल.)  
Panipat Refinery & Petrochemical Complex (IOCL)  
पानीपत, पानीपत-132140

Sr. No.	Point raised	Reply
1.	PP has not submitted the cumulative data SO <sub>2</sub> emissions [Sp. Cond. No. (v)- EC 2018]	<p>Cumulative average data for FY20-21 of SO<sub>2</sub> emissions is as follows:</p> <ul style="list-style-type: none"> <li>• From PR post BS-VI project: 890 kg/hr</li> <li>• PX-PTA: 164 kg/hr</li> <li>• Total: 1054 kg/hr.</li> </ul> <p>SO<sub>2</sub> emission from the Refinery (post BS-VI Up gradation project) is within the stipulated limit of 1100 kg/hr.</p> <p>SO<sub>2</sub> emissions from the un-revamped PX-PTA petrochemical project is well within the stipulated 275 Kg/hr.</p> <p><i>(PX-PTA expansion project is under implementation. Post commissioning, SO<sub>2</sub> will be maintained below 375 Kg/hr.)</i></p> <p>Presently cumulative SO<sub>2</sub> emission from Panipat Refinery &amp; PX-PTA Complex is below 1375 kg/hr.</p> <p>Monthly report sent to HSPCB, is enclosed ( <i>Annexure-1</i>)</p>
2.	PP has not submitted necessary permission of fresh water from the concerned regulatory authority. [Sp. Cond. No. (viii)- EC 2018]	<p>Agreement with concerned regulatory authority for Panipat Refinery inclusive of BS-VI facilities with validity from 01.04.2020 to 31.03.2022 is enclosed (<i>Annexure-2</i>).</p>
3.	However, PP has not submitted the valid copies of the approval form Chief Controller of Explosive and Fire Department to IRO Chandigarh [Sp. Cond. No. (x)- EC 2018]	<p>Required certificates enclosed. (<i>Annexure-3</i>)</p> <p><u>Licenses under Gas cylinder rules:</u></p> <ul style="list-style-type: none"> <li>• G-NC-HN-06-728 (G26114)- CHLORINE gas in cylinders in CT-II at PNC</li> <li>• G/NC/HN/06/730 (G26116)- CHLORINE gas in cylinders in CT-III at PNC</li> <li>• G/NC/HN/06/1099 (G36172)- CARBON MONOOXIDE in cylinder at PNC</li> <li>• G/NC/HN/06/1090(G35401)- CHLORINE GAS IN CYLINDERS AT PR</li> <li>• G/NC/HN/06/1091(G35402)- CHLORINE GAS IN CYLINDERS AT PREP</li> <li>• G/NC/HN/06/656 (G18981)- AMMONIA gas in cylinders at PR</li> <li>• G/NC/HN/06/ 7(G21134)- CHLORINE gas in cylinders at PR</li> </ul> <p><u>Hydrocarbon Storage Licenses under Petroleum rules:</u></p> <ul style="list-style-type: none"> <li>• P/HQ/HN/15/861 (P180609)-Class B installation at TPS PR</li> <li>• P/HQ/HQ/HN/15/2085 (P135610)-Class A, B, C installation at PR</li> <li>• P/HQ/HQ/HN/15/534 (P3090)- Class A, B, C installation at PR</li> </ul>

Sr. No.	Point raised	Reply
		<p><u>Licenses under SMPV rules:</u></p> <ul style="list-style-type: none"> <li>• S/HO/HN/03/69 (S4221)- 776 CubM H2 Gas</li> <li>• S/HO/HN/03/70 (S4223)- 6358.00 CubM (2840MT) LPG</li> <li>• S/HO/HN/03/71 (S4226) -4768.75 CubM (2130MT) LPG</li> <li>• S/HO/HN/03/81 (S4246)- Propylene Horton Sphere &amp; Loading Gantry</li> <li>• S/HO/HN/03/192 (S24863)-compressed gas (Nitrogen) in pressure vessel or vessels</li> <li>• S/HO/HN/03/211 (S31340)- storage of compressed gas (LPG) in 4 nos pressure vessel</li> </ul> <p><u>Refinery license: P-5(2)158/Refinery</u></p> <p><u>Factory licence: PPT/T-2506</u></p>
4.	Secured land fill site was partially filled by leachate generated by the dumped waste. [Sp. Cond. No. (xi)- EC 2018]	The leachate observed during the visit has been evacuated through the leachate collection system and treated in ETP. Leachate removal is being done on continuous basis, as per generation.
5.	PP has not submitted species-wise plantation details and expenditure done in last 3 years [Sp. Cond. No. (xv)- EC 2018]	Tree plantation and greenbelt details are enclosed including expenditure incurred and details of species of trees planted. ( <i>Annexure-4</i> )
6.	PP has not provided the details regarding the funds to implement the Enterprise Social Commitment/ CSR [Sp. Cond. No. (xvi)- EC 2018]	<p>CSR expenditures details:</p> <ul style="list-style-type: none"> <li>• FY 2017-18 : Rs. 461.02 Lacs</li> <li>• FY 2018-19 : Rs. 746.34 Lacs</li> <li>• FY 2019-20 : Rs.531.00 Lacs</li> <li>• FY 2020-21 : Rs.132.05 Lacs</li> </ul> <p>Social upliftment and community development has been properly taken care as per IOCL's Corporate Social Responsibility Policy through following CSR activities.</p> <ul style="list-style-type: none"> <li>– Promoting Sanitation</li> <li>– Environment Sustainability/ Renewable Energy Sources</li> <li>– Rural Development/ Promoting Preventive Healthcare/ Promotion of Sports</li> <li>– Promoting Education</li> <li>– Enhancement of Vocational Skills</li> <li>– Empowering Women</li> <li>– Welfare of Underprivileged</li> </ul> <p>Last Six Monthly EC compliance report of Jul to Dec'20 submitted in Jan'21 to MoEFCC</p>

Sr. No.	Point raised	Reply																									
		detailing the CSR expenditure is enclosed. (Annexure-5).																									
7.	Details of the mock drills conducted for possible fire hazards/emergency are not submitted by the PP [Sp. Cond. No. (xviii)- EC 2018]	Mock drill is conducted on periodical basis, details enclosed. (Annexure-6) Unit level drills (level 1 scenario)- Monthly Escalated to Onsite-disaster drill (level 2 scenario)- Quarterly Escalated to Offsite-disaster drill (level 3 scenario)- Annually																									
8.	Volatile organic compound detectors have not been installed to check the fugitive emissions [Sp. Cond. No. (iv)- EC 2004]	Fugitive emission monitoring for Hydrocarbon and Benzene for product storage tanks and crude oil storage tanks is done through MoEFCC approved agency on quarterly basis and report of the same is being sent on six monthly basis. LDAR report submitted vide EC compliance report of Jun-Dec'20 submitted in Jan'21 is enclosed. (Annexure-7 i)  Hydrocarbon detectors have been provided at strategic locations, list enclosed. (Annexure-7 ii)																									
9.	PP has not submitted details regarding the petroleum coke [Sp. Cond. No. (x)- EC 2004]	Generation and dispatch details, which is also forwarded to HSPCB, for last quarter is as follows: <table><tr><th>Period</th><th>Opening Stock</th><th>Production</th><th>Dispatch</th><th>Closing Stock</th></tr><tr><td colspan="5">(All fig. MT)</td></tr><tr><td>Jan'21</td><td>97279.5</td><td>68359.1</td><td>80995.8</td><td>84642.8</td></tr><tr><td>Feb'21</td><td>65398.9</td><td>39159.8</td><td>63346.4</td><td>41212.3</td></tr><tr><td>Mar'21</td><td>27096.1</td><td>60812.0</td><td>60676.6</td><td>27231.5</td></tr></table>	Period	Opening Stock	Production	Dispatch	Closing Stock	(All fig. MT)					Jan'21	97279.5	68359.1	80995.8	84642.8	Feb'21	65398.9	39159.8	63346.4	41212.3	Mar'21	27096.1	60812.0	60676.6	27231.5
Period	Opening Stock	Production	Dispatch	Closing Stock																							
(All fig. MT)																											
Jan'21	97279.5	68359.1	80995.8	84642.8																							
Feb'21	65398.9	39159.8	63346.4	41212.3																							
Mar'21	27096.1	60812.0	60676.6	27231.5																							
10.	Noise level at some places found marginally higher than the prescribed limits for an industry [Gen Cond. No. (v)- EC 2018]	The noise levels normally exceed the stipulated norms in case of problem in any equipment. The equipment is taken down for maintenance in case of any such excursion. Additionally, all personnel working in such areas use ear-muffs.																									
11.	PP has not provided the details regarding the funds to implementation of EMP [GC No. (xi)- EC 2018]	Details enclosed. (Annexure-8)																									
12.	PP has not submitted the copy of the advertisement published in the newspaper for EC 2018 [GC No. (xv)- EC 2018]	The advertisement had been submitted vide email dated 09.04.2018, copy of advertisement enclosed for convenience. (Annexure-9)																									



Sr. No.	Point raised	Reply
13.	Item-wise & year-wise EMP details were not provided by the PP [GC No. (14)- EC 2001]	Details of Year-wise EMP expenditure enclosed. ( <i>Annexure-10</i> )
14.	On-site, off-site emergency plan, DMP report have not been submitted by PP [GC No. (vi)- EC 2003]	On-site Disaster Management Plan based on this Risk Analysis accredited by PNGRB approved Third Party Inspection agency, is enclosed. ( <i>Annexure-11</i> )

\*\*\*\*\*



रिफ़ाइनरीज़ प्रभाग  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.iocl.com; ई-मेल : panipatrefinery@indianoil.in

दूरभाष : 0180-2524001; फ़ैक्स : 0180-2578833



EH672278529IN

## ANNEXURE-1 of ATR

Ref No: PR/HSE/3

Date 19.04.2021

To

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the month of Mar'2021 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of Mar'2021. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- (i) The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- (ii) Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- (iii) The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- (iv) The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

*(Signature)*  
19/4/2021

(Ashish Bhushan)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head

Panipat Refinery & Petrochemical Complex

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)

आशीष भुशान  
Ashish Bhushan  
जनरल मैनेजर (स्वास्थ्य, सुरक्षा एवं पर्यावरण)  
General Manager (Health, Safety & Environment)  
पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स (आई.ओ.सी.एल.)  
Panipat Refinery & Petrochemical Complex (IOCL)  
पानीपत, पानीपत-132140

पंजीकृत कार्यालय: प्लॉट-9, जल्लो बाजार जंग मार्ग, बांद्रा (पूर्व), मुम्बई-400051, महाराष्ट्र (भारत)  
Regd. Office : G-9, All Yevar Jang Marg, Bandra (East), Mumbai-400051, Maharashtra (India)  
CIN - L 23201 MH 1959 GCL 011388

#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of March'2021 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	336
PREP Units	336
CPP	213
Sub Total	885
Px-PTA	132
Grand Total	1017



विकाइनरीज प्रभाग  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.ioil.com; ई-मेल : panipatrefinery@indianoil.in

दूरभाष : 0180-2524001; फैक्स : 0180-2578833



Ref No: PR/HSE/3

Date 31.03.2021

To

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the month of Feb'2021 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of Feb'2021. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- (i) The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- (ii) Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- (iii) The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- (iv) The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

*(Signature)*  
31/3/21

(Ashish Bhushan)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head

Panipat Refinery & Petrochemical Complex

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)

पंजीकृत कार्यालय: प्लॉ-9, आशी जयजंग मार्ग, बान्द्रा (पूर्व), मुम्बई-400051, महाराष्ट्र (भारत)  
Regd. Office : G-9, Ashi Yawar Jung Marg, Bandra (East), Mumbai-400051, Maharashtra (India)  
CIN - L23201 MH 1989 GCL 011388





#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of February'2021 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	232
PREP Units	378
CPP	265
<b>Sub Total</b>	<b>875</b>
Px-PTA	171
<b>Grand Total</b>	<b>1046</b>





रिफाइनरीज़ प्रभाग  
Refineries Division

0/L

इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स

पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.iocl.com; ई-मेल : panipatrefinery@indianoil.in

दूरभाष : 0180-2524001; फैक्स : 0180-2578833



Ref No: PR/HSE/3

Date 02.03.2021

To



EH672264269IN

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the months from Nov'2020 to Jan'2021 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the months from Nov'2020 to Jan'2021. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- (i) The Ambient Air Quality Monitoring report - monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- (ii) Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- (iii) The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- (iv) The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You



Yours faithfully,

*(Signature)*  
02/3/21

(Ashish Bhushan)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head

Panipat Refinery & Petrochemical Complex

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)

# ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the months from November'2020 to January'2021 is given below:

November'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	258
PREP Units	409
CPP	195
Sub Total	862
Px-PTA	134
Grand Total	996
December'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	280
PREP Units	380
CPP	233
Sub Total	893
Px-PTA	128
Grand Total	1021
January'2021	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	248
PREP Units	358
CPP	253
Sub Total	859
Px-PTA	192
Grand Total	1051





रिफ़ाइनरीज़ प्रभाग  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
पानीपत रिफ़ाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140  
Indian Oil Corporation Limited  
Panipat Refinery & Petrochemical Complex  
Panipat, Haryana - 132140  
वेबसाइट : www.iocl.com, ई-मेल : panipatrefinery@indianoil.in  
दूरभाष : 0180-2524001, फ़ैक्स : 0180-2578333



Ref No: PR/HSE/3

Date 28.11.2020

To

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**



EH672263952IN

**Sub:** Environment Monitoring Reports for the month of October'2020 of Panipat Refinery

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of October'2020. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

*(Signature)*  
28/11/2020  
(Utpal Deka)

General Manager (HS&E)

For and on behalf of  
Executive Director & Refinery Head  
Panipat Refinery & Petrochemical Complex



EH672263881IN

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)

पंजीकृत कार्यालय: पी-9, काली बाजार जंग मार्ग, बान्ना (पूर्व), मुम्बई-400061, महाराष्ट्र (भारत)  
Regd. Office : G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai-400051, Maharashtra (India)  
CIN - L 23201 MH 1969 QCA 011304

# ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of October'2020 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	256
PREP Units	399
CPP	233
Sub Total	888
Px-PTA	148
Grand Total	1036



रिफाइनरीज प्रभाग  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex  
Panipat, Haryana - 132140

वेबसाइट : www.ioil.com; ई-मेल : panipatrefinery@indianoil.in  
दूरभाष : 0180-2524001; फैक्स : 0180-2578833



Ref No: PR/HSE/3

Date 27.10.2020

To



The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the month of September'2020 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of September'2020. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- (i) The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- (ii) Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- (iii) The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- (iv) The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

  
(Utpal Deka)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head  
Panipat Refinery & Petrochemical Complex



EH672264238IN

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)

पंजीकृत कार्यालय: जी-9, अली यादव जंग मार्ग, बान्दा (पूर्व), मुम्बई-400051, महाराष्ट्र (भारत)  
Regd. Office: G-9, Ali Yashwanth Jung Marg, Banda (East), Mumbai-400051, Maharashtra (India)  
CIN - L23201 MH 1959 GOI 011388



#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of September'2020 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	237
PREP Units	365
CPP	204
Sub Total	806
Px-PTA	127
Grand Total	933





रिफाइनरीज़ प्रभाग  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.iocl.com ई-मेल : panipatrefinery@indianoil.in

सुरक्षा : 0180-2524001; फैक्स : 0180-2578823



Ref No: PR/HSE/3



Date 30.09.2020

To

EH672264140IN

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the month of August 2020 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of August 2020. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

9/6



Yours faithfully,

*(Signature)*  
(Utpal Deka)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head

Panipat Refinery & Petrochemical Complex

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)

#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of August'2020 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	242
PREP Units	281
CPP	262
Sub Total	785
Px-PTA	237
Grand Total	1022



रिफाइनरीज़ प्रभाग  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.iocl.com; ई-मेल : panipatrefinery@indianoil.in

दूरभाष : 0180-2524001; फैक्स : 0180-2578833

इंडियन ऑयल

Ref No: PR/HSE/3

Date 18.09.2020

To



EH672264122IN

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the month of July'2020 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of July'2020. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- (i) The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- (ii) Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- (iii) The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- (iv) The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

  
(Utpal Deka)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head

Panipat Refinery & Petrochemical Complex

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)



EH672264136IN



#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of July'2020 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	314
PREP Units	415
CPP	256
Sub Total	985
Px-PTA	216
Grand Total	1201



विशुद्धता प्रमाण  
Refineries Division

इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited  
Panipat Refinery & Petrochemical Complex  
Panipat, Haryana - 132140  
वेबसाइट : www.ioil.com; ई-मेल : panipatrefinery@indianoil.in  
दूरभाष : 0180-2524001; फैक्स : 0180-2579833



Ref No: PR/HSE/3

Date 16.09.2020

To



EH672264105IN

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the month of June'2020 of Panipat Refinery**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the month of June'2020. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- (i) The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- (ii) Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- (iii) The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- (iv) The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

(Utpal Deka)

General Manager (HSE)

For and on behalf of  
Executive Director & Refinery Head  
Panipat Refinery & Petrochemical Complex

Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)



EH672264119IN

#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month of Jun'2020 is given below:

Units	SO <sub>2</sub> (Kg/hr.)
PR Units	308
PREP Units	371
CPP	254
Sub Total	933
Px-PTA	180
Grand Total	1113





इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स  
पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.iocl.com ई-मेल : panipatrefinery@indianoil.in

दूरभाष : 0180-2524001; फैक्स : 0180-2578833



रिफाइनरीज प्रभाग

Refineries Division

Ref No: PR/HSE/3



FH661017071IN

Date 16.07.2020

To

The Member Secretary,  
Haryana State Pollution Control Board,  
C-11, Sector-6  
**PANCHKULA - 134109**

**Sub: Environment Monitoring Reports for the months from Jan'2020 to May'2020  
(Panipat Refinery)**

Dear Sir,

Enclosed please find herewith the following environment monitoring reports for the months from Jan'2020 to May'2020. Kindly note that these sampling and analysis are carried out by MoEF&CC approved agency.

- The Ambient Air Quality Monitoring report – monitoring done through MoEF&CC approved laboratory (attached as Annexure-I).
- Monthly analysis report of the Treated Effluent done by MoEF&CC approved laboratory (attached as Annexure-II).
- The Stack Monitoring report - monitoring done by MoEF&CC approved laboratory (attached as Annexure-III).
- The average SO<sub>2</sub> emission from stacks of running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units (attached as Annexure-IV).

This is for your information & records please.

Thanking You

Yours faithfully,

*(Signature)*  
16/7/2020

(Ashish Bhushan)

Dy. General Manager

(Health, Safety & Environment)

**Cc: The Regional Officer  
Haryana State Pollution Control Board,  
S.C.O. 55, Sector-25,  
HUDA, Panipat (Haryana)**



EH661017068IN

#### ANNEXURE-IV

The average SO<sub>2</sub> emission from the running units of Panipat Refinery, Panipat Refinery Expansion units & PX-PTA units for the month from Jan'2020 to Jun'2020 is given below:

PR Complex Jan'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	275
PREP Units	496
CPP	204
Sub Total	975
Px-PTA	160
Grand Total	1135

PR Complex Feb'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	300
PREP Units	524
CPP	218
Sub Total	1042
Px-PTA	165
Grand Total	1207

PR Complex Mar'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	275
PREP Units	517
CPP	204
Sub Total	996
Px-PTA	155
Grand Total	1151

PR Complex Apr'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	281
PREP Units	382
CPP	164
Sub Total	827
Px-PTA	136
Grand Total	963

PR Complex May'2020	
Units	SO <sub>2</sub> (Kg/hr.)
PR Units	255
PREP Units	632
CPP	192
Sub Total	1079
Px-PTA	161
Grand Total	1240





## AGREEMENT FOR WATER SUPPLY AND MAINTENANCE OF REFINERY CHANNEL FOR PANIPAT REFINERY

This agreement made on the 1<sup>st</sup> April 2020 between the Governor of Haryana acting through Executive Engineer, Panipat Water Services Division, Panipat (here in after called the 'Government' which expression shall unless excluded by or, repugnant to the subject or context include his successor in office and assigns of the part and the Indian Oil Corporation Ltd., registered under the Companies Act, 1956, (having its registered office at G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai- 400050 and its Refineries Head Quarters at Scope Complex, Core-2, 7, Industrial Area, Lodhi Road, New Delhi - 110003 and Panipat Refinery & Petrochemical Complex being one of its Refineries located at PO-Panipat Refinery, Panipat, Haryana (here in after referred to as the "Consumer" of the other part) Whereas the Consumer has made an application to the Government:-

- (I) For the regular supply of water from the PD Branch (Parallel Delhi Branch / Munak Head Works of Western Jamuna Canal system located at village Munak, Distt. Karnal for filling the reservoirs of Consumer at its Panipat Refinery situated at PO: Panipat Refinery, Distt. Panipat, Haryana.
- (II) For the maintenance of the said channel along with following facilities / works from Munak Head to inlet of reservoir by the Government at the Consumer's cost:-
  - i Brick / concrete lined channel of 30 cusec capacity.
  - ii 1 Number Head Regulator at Munak Head works with gates and gearing.
  - iii 1 Number District Road bridge RD 6700 on Panipat Assandh Road.
  - iv 1 Number drainage crossing over Munak Escape.
  - v. Regulation device at tail end.
  - vi. Flow measuring facility at the head and tail of the Refinery Channel.
  - vii 25 feet common bank and independent inspection bank (12 feet wide) on the sides of Refinery Channel.
  - viii Boundary stones and distance marks.
  - ix 1 Head Regulator at PD Branch at RD 17000/L with gates and gearing along with Siphon beneath CLC as alternate source of Canal Raw Water supply from RD 17000/L of PD Branch.

and NOW WHEREAS the Government has agreed to supply Canal Raw Water and maintenance of Refinery Channel and the facilities connected there to subject to the provisions of the Haryana Canal and Drainage Act, 1947 (Act 29 of 1974), and the rules made there under and on the terms and condition hereinafter contained,

 01/04/2020


— 2 —

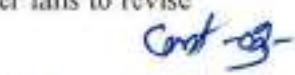
Now it is hereby agreed and declared as follows:

1. That the Government shall ensure round the clock supply of water @ 30 cusec or as indented by Consumer at its Panipat Refinery / Head regulator at RD 17000-L, except as referred to under clause 6, and the same shall be measured at Munak Head works / PD Br. (Parallel Delhi Branch) and at Panipat Refinery end jointly. The measurement shall, however be governed by the data recorded at Munak Head Works.
2. That the said Panipat Refinery channel of Consumer shall be maintained by the Government by regular cleaning / de silting of the channel up to the reservoirs inlet, of course, with coordination of the Consumer in order to supply the water effectively. Other facilities like inspection bank, common bank, bridges, regulation devices etc. shall also be maintained and kept in proper condition by the Government by preparing annual estimate for routine maintenance on advance deposit work basis which will also include engaging services of canal patrols as per Irrigation department norms for the job. In addition, the special estimate for de- silting of channel strengthening banks, repair to lining / pucca structure shall be operated at the cost of Consumer as and when required and the cost of such maintenance shall be borne by the Consumer. An amount of Rs.5.00 Lakh rupees (already deposited with Government at the time of initial agreement) will remain deposited by the Consumer in advance towards cost of such maintenance etc. and subsequent charges shall be paid by the Consumer on submission of bills by the Government along with Department Charges @10% presently and will further liable to be paid as & when departmental charges are amended time to time by the Government.

As the reservoirs of Consumer's Panipat Refinery have a capacity of retention of water for a period of five days, the maintenance of the channel, whereas required to be carried out, shall be completed within 3/4 days including de-silting, cleaning and all other required operations and water supply in the channel to be restored on 5<sup>th</sup> day. However, in case of supply of water is not possible on 5<sup>th</sup> day in exceptional circumstances, the Government shall arrange supply of water from Head regulator of / a suitable point from Delhi parallel branch near the Panipat Refinery by pumping at the cost to be borne by the Consumer. To ensure the supply of water, the Government shall install their own pumps, delivery lines etc. well in position before the closure of the channel so that the supply of water can be made as and when the need arises.

3. That on receipt of written application from the Consumer, the Sub Divisional Officer, Panipat Water Services Sub Division, Binjhol shall take such effective steps as may be deemed necessary for filling the reservoirs of the Consumer at their Panipat Refinery plant site.
4. That the Consumer shall intimate to the Government their programme of daily requirement of water in the following manner:-
  - i. Consumer will place the indent as per their requirement of Raw Water for atleast 24 hours except emergent condition to Executive Engineer, Panipat W/S Division, Panipat at Canal Colony, Binjhol, Panipat through e-mail/ hard copy and to Sub Divisional Officer, Panipat W/S Sub Division, Panipat through whatsapp/ mobile message/ e-mail along with hard copy & copy to Munak Head and the Government shall take action immediately for arranging water supply. If the Consumer fails to revise


  
01/04/2020  
Executive Engineer

Cust - 23  
  
P. V. Ramakrishna



the indent due to any reason, then the monthly water bill will be prepared according to the last indent placed by the Consumer.

- ii Concerned official of Government at Baholi and Munak will interact on mobile/ telephone for confirming the daily requirement of the water as well as any change in the requirement subject to limitation of 30 cusecs.
5. a) That the charges for the supply of water shall be at the rate of the items "water supplied in bulk" (item no.1) specified in Haryana Canal and Drainage Act 1974 (act 29 of 1974) as amended from time to time and the rules framed there under. The supply of water will be Governed by the provisions contained in the said rules included the pond provision contained therein and the rates can be enhanced by the Government at any time, without issuing any notice to the Consumer in this behalf, which shall be payable by the Consumer.  
b) That the Consumer shall make an advance payment as security of Rs.118.00 Lakh (equivalent to one month bill by taking average of last 01 year bill with revised rate) before the start of supply of water and the security amount will further be liable to be changed on the same pattern as & when the rate of water charges is amended by the Government. The amount of Rs.52.00 Lakh has already been deposited by the Consumer at the time of initial agreement and thus balance amount should be paid.  
c) The subsequent supplies of water shall be made only after the Consumer has paid the amount of bills presented in respect of water already supplied. The bills shall be submitted monthly by the Government inclusive surcharges on the pending amount.
6. That the Government will not be liable to pay any damage or compensation for any failure in supplying water in the circumstances mentioned in section 27 of Haryana Canal and Drainage Act, 1974 (Act 29 of 1974) or the rules framed there under. In case of any unforeseen exigencies, beyond the control of Government the water shall be supplied by pumping from Delhi Parallel branch of Western Jamuna Canal in the manner stated in clause 2 above.
7. This agreement will be effective from 01.04.2020 to 31.03.2022.
8. That this agreement remains in force initially for a period of two years commencing from the date of execution of agreement initially where after it shall be mutually renewable on every two years basis. However the Government reserves its right to review this agreement from time to time and insert necessary changes therein consonance with the existing rules on the subject, however, if such changes are not acceptable to the Consumer, Consumer may terminate this agreement on giving one month notice and in this situation, the supply of water shall be closed as & when this agreement is terminated. Even otherwise, either party may terminate the agreement on giving a six month notice in writing to the other party and even earlier provided it is mutually agreed.
9. That in the case, if any difference or dispute, in any way connected with or arising out of this agreement concerning the rights, duties or liabilities of either party there under, or regarding whether it should be terminated or has been rightly terminated, and the rights and obligations of the parties as a results of such termination, shall be referred to the Superintending Engineer, YWS Circle, Karnal for decision and in case either parties are not satisfied with the decision of Superintending Engineer, YWS Circle, Karnal, then the

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matter shall be referred to Chief Engineer/YWS(N), Panchkula for final decision with respect to department. However, if the Consumer is still not satisfied with the decision of Chief Engineer/YWS(N), Panchkula, then the Consumer may opt for Dispute Redressal System (DRS) under Arbitration and Consignation Act-1996 as amended from time to time within three months from the date of decision of Chief Engineer/YWS(N), Panchkula for further action and the decision of Dispute Redressal System will be binding on the Consumer.

IN WITNESS WHERE OF, the parties here to have signed on the dates first above mentioned in the presence of witnesses.

Witness:

1.

Signature: [Signature]  
Name: Saraj Pankadh  
Date: 01/04/20  
Designation: S.D.O.

2.

Signature: [Signature]  
Name: Jitender  
Date:   
Designation: Junior Engg.

Witness:

1.

Signature: [Signature]  
Name: R. MOORE  
Date:   
Designation: CHIEF POWER UTILITY MANAGER

2.

Signature: [Signature]  
Name: SARAJ RAM  
Date:   
Designation: SPUM

For and behalf of Govt. of Haryana

Signature: [Signature]  
Name: Executive Engineer,  
Date: 01/04/2020  
Designation: Panipat W/S Division,  
PWD (I & WR), Panipat  
Panipat Water Service Division  
E-mail: xen-panipat.rr@hry.gov.in

Signature: [Signature]  
Name: P V Ramakrishna  
Date:   
Designation: DCM (PEU)  
For and on behalf of Indian Oil  
Corporation Ltd.  
E-mail: ramakrishna@indianoil.in

(Authorized Representative)  
P. V. Ramakrishna  
34 महाप्रबंधक (विद्युत उपयोगिता)  
Dy. General Manager (Power & Utility)  
पनोली (भाई जी.सी.एल)-132140  
Panipat Refinery (I.O.C.L)-132140



## See Form F / FORM F

Rules 50,51 and 54 / (See Rules 50, 51 and 54)

## Licence to store compressed gas in cylinders

License Number : **G / NC / HN / 06/728 (G26114)**Annual fee / Rs / Fee Rs. **2000** / - per year

**INDIAN OIL CORPORATION LTD, Indian Oil Corporation Limited, Engineering Servic, Panipat, City: Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, Pin: 132140** as described below and under the line number **G / NC / HN / 06/728 ( G26114)** Dated **23/02/2010** the licensed premises are shown in Indian explosives Act, 1884 (4 of 1884) and the provisions of the regulations made thereunder and subject to the other conditions of the license, only filled with compressed gas A valid license is given for keeping cylinders only. /

License is hereby granted to **INDIAN OIL CORPORATION LTD, Indian Oil Corporation Limited, Engineering Servic, Panipat, City: Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, Pin: 132140** valid only for the possession of cylinders filled with compressed gas in the charged premises described below and shown in the plan No **G / NC / HN / 06/728 (G26114)** dated **23/02/2010** subject to the provisions of the Explosives Act, 1884 (4 of 1884) and the Rules made thereunder and to the further conditions of this licence.

This license will continue in force till 30 September 2030. / The License shall remain in force till the **30<sup>th</sup> September 2030**.

February 23, 2010

For Jt. Chief Controller of Explosives  
FaridabadKritte Joint Chief Explosive Controller  
Faridabad

## Description and location of the permitted premises / DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

Permitted premises for holding filled gas in cylinders as per the following details, whose layout limits and other specifications are shown in the attached approved Line No. **G / NC / HN / 06/728** dated **February 23, 2010** and wherein a There is a storage shed. / The acknowledged premises, the layout boundaries and other particulars of which are shown in the attached approved plan no. **G / NC / HN / 06/728** dated **February 23, 2010** are located at **PANIPAT** and consists of a storage shed for possession of the gas contained in cylinders as described here under:

	Type of Gas	Quantity / Quantity
a)	Toxic / Toxic	<b>CHLORINE - 36 Nos.</b>
b)	Non-Toxic and Non-Flammable / Non-Toxic and Non Flammable	<b>--NIL--</b>
c)	Non-Toxic and Flammable / Non-Toxic and Flammable	<b>--NIL--</b>
d)	Dissolved Acetylene Gas / Dissolved Acetylene Gas	<b>--NIL--</b>
e)	Other than LPG non-toxic and flammable liquefied gas / Non-Toxic & Flammable liquefiable gas other than LPG	<b>--NIL--</b>
f)	LPG / Liquefied Petroleum Gas	<b>--NIL--</b>

And plot number PlotNo: **NCU Cooling Water System CT II** Village Name Village: **PANIPAT** Or Municipal Police Station: **BAHOLI PANIPAT** District : **PANIPAT**, State: **Haryana**.

/ and is located at PlotNo: **NCU Cooling Water System CT II** Village / Town: **PANIPAT** Police Station: **BAHOLI PANIPAT** District: **PANIPAT**, State: **Haryana**.

## Space for endorsement of renewal / SPACE FOR ENDORSEMENT OF RENEWALS

	Date of Renewal / Date of Renewal	Expiry Date / Date of Expiry	Signature and stamp of the licensing authority
This license shall be renewed for ten years without any exemption in fees, in the event of non-violation of the provisions of the Explosives Act, 1884 or	<b>31/08/2020</b>	<b>30/09/2030</b>	<b>License Renewed Online</b>

the Gas Cylinder Rules, 2016 made thereunder or the terms of this license. be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884 or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence			
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If the licensed premises are not found to conform to the particulars and conditions attached to it and any of the terms and conditions under which the license is granted are violated, the license may be revoked and the holder of the license from imprisonment, whose The term can be up to two years, or with fine, which can be up to three thousand rupees, or both will be punishable. / This license is liable to be canceled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this license is granted and the holder of this license is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

**ADDITIONAL CONDITIONS FOR FILLING AND OR STORAGE OF TOXIC GASES CONTAINERS / CYLINDERS UNDER GAS CYLINDER RULES, 2004, subject to the Gas Cylinder Rules, 2004 for filling and storage of toxic gas containers / cylinders.**

1. An impressive alarm system will be arranged with operational switches on the premises. In an emergency, an alarm can be heard in the control room when the switch is operated on the premises. / An efficient alarm system with operating switch in the premises shall be provided. In case of emergency, the alarm can be heard in the control room by operating the switch in the premises.
2. A disaster management plan will be prepared for emergencies of toxic gas leaks. The plan will determine the responsibility of the officer concerned, who will be trained in various aspects of operating toxic gas equipment in the event of leakage. / A Disaster Management Plan for operation in case of emergency of leakage of toxic gas shall be prepared. The plan shall fix responsibility on the concerned officers who shall be trained in the different aspects of handling toxic gas equipments in case of leakage.
3. Hydrant points of one or more sufficient pressure shall be provided on or near the premises for use in emergencies. / One or more hydrant point (s) with adequate pressure shall be provided in or near the premises for use in emergency.
4. At least two self-contained breathing apparatus and two canister-type gas masks will be placed on the campus in a readily accessible location. / At least two numbers self contained breathing apparatus and two Canister type Gas Masks shall be kept in the premises in an readily accessible location.
5. Portable equipment will be provided to detect toxic gas leaks in or near the premises. / Portable devices for detection of toxic gas leakage shall be made available in or near the premises.
6. A ventilator-cock shall be provided at the appropriate location to determine the wind direction so workers can be moved in the direction of the wind in the event of toxic gas leaks. / A weathercock shall be provided at a suitable location for determining wind direction so that in case of leakage of toxic gas, the workers can move against wind direction.
7. The licensee should have an emergency kit consisting of equipment including various tools and tools, such as valve n hoods for cylinders and toners, clamps for cylinder valve leakage, and chain and yoke assemblies for leakage of toner valves. / Emergency kit consisting of various appliances and tools including valve hood assembly for cylinders and tonners, clamp for cylinder valve leaks and chain and yoke assembly for tonner valve leaks shall be available with the licensee.



8. In case of closure / lock-up of the plant, no toxic gas cylinders shall be placed in the premises.
9. Adequate facilities will be provided for neutralization of toxic gas in case of leakage. / Adequate facilities for neutralization of toxic gas shall be provided in case of leakage.  
Appropriate cylinder loading (unloading) and handling (handling) will be arranged at the toxic gas
10. complex. / Proper cylinder loading / unloading and handling arrangements shall be made in the toxic gas premises.

**for Jt. Chief Controller of Explosives  
North Circle  
Krite Joint Chief Explosive Controller  
Faridabad**



**See Form F / FORM F**  
**Rules 50,51 and 54 / (See Rules 50, 51 and 54)**  
**Licence to store compressed gas in cylinders**

License Number : **G / NC / HN / 06/730 (G26116)**

Annual fee I Rs / Fee Rs. **2000** / - per year

**INDIAN OIL CORPORATION LTD, PANIPAT Refinery**, Panipat, City: PANIPAT, District: PANIPAT, State: Haryana, Pin: 132140 described below and as- number **G / NC / HN / 06/730 (G26116)** Dated **23/02/2010** in In the permitted premises shown, subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and other conditions of this license, a valid license is permitted only to keep cylinders filled with compressed gas. She goes. /

License is hereby granted to **INDIAN OIL CORPORATION LTD, PANIPAT Refinery, Panipat, City: PANIPAT, District: PANIPAT, State: Haryana, Pin: 132140** valid only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan No **G / NC / HN / 06/730 (G26116)** dated **23/02/2010** subject to the provisions of the Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

This license will continue in force till 30 September 2030. / The License shall remain in force till the **30<sup>th</sup> September 2030**.

**February 23, 2010**

For Jt. Chief Controller of Explosives  
Faridabad  
Kritte Joint Chief Explosive Controller  
Faridabad

**Description and location of the permitted premises / DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

Permitted premises for holding filled gas in cylinders as per the following details, whose layout limits and other specifications are shown in the attached approved Line No. **G / NC / HN / 06/730** dated **February 23, 2010** and wherein a There is a storage shed. / The acknowledged premises, the layout boundaries and other particulars of which are shown in the attached approved plan no. **G / NC / HN / 06/730** dated **February 23, 2010** are located at **BAHOLI, PANIPAT** and consists of a storage shed for possession of the gas contained in cylinders as described here under:

	Type of Gas	Quantity / Quantity
a)	Toxic / Toxic	<b>CHLORINE - 24 Nos.</b>
b)	Non-Toxic and Non-Flammable / Non-Toxic and Non Flammable	<b>--NIL--</b>
c)	Non-Toxic and Flammable / Non-Toxic and Flammable	<b>--NIL--</b>
d)	Dissolved Acetylene Gas / Dissolved Acetylene Gas	<b>--NIL--</b>
e)	Other than LPG non-toxic and flammable liquefied gas / Non-Toxic & Flammable liquefiable gas other than LPG	<b>--NIL--</b>
f)	LPG / Liquefied Petroleum Gas	<b>--NIL--</b>

And plot number PlotNo: **CPPCooling Water System CT III** Village Name Village: **BAHOLI, PANIPAT** Or Municipal Police Station: **BAHOLI PANIPAT** District : **PANIPAT**, State: **Haryana**.

/ and is located at PlotNo: **CPPCooling Water System CT III** Village / Town: **BAHOLI, PANIPAT** Police Station: **BAHOLI PANIPAT** District: **PANIPAT**, State: **Haryana**.

**Space for endorsement of renewal / SPACE FOR ENDORSEMENT OF RENEWALS**

	Date of Renewal / Date of Renewal	Expiry Date / Date of Expiry	Signature and stamp of the licensing authority
This license shall be renewed for ten years without any exemption in fees, in the event of non-violation of the provisions of the Explosives Act, 1884 or the Gas Cylinder Rules,	<b>31/08/2020</b>	<b>30/09/2030</b>	<b>License Renewed Online</b>

2016 made thereunder or the terms of this license. be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884 or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence			
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If the licensed premises are not found to conform to the particulars and conditions attached to it and any of the terms and conditions under which the license is granted are violated, the license may be revoked and the holder of the license from imprisonment, whose The term can be up to two years, or with fine, which can be up to three thousand rupees, or both will be punishable. / This license is liable to be canceled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this license is granted and the holder of this license is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

**ADDITIONAL CONDITIONS FOR FILLING AND OR STORAGE OF TOXIC GASES CONTAINERS / CYLINDERS UNDER GAS CYLINDER RULES, 2004, subject to the Gas Cylinder Rules, 2004 for filling and storage of toxic gas containers / cylinders.**

1. An impressive alarm system will be arranged with operational switches on the premises. In an emergency, an alarm can be heard in the control room when the switch is operated on the premises. / An efficient alarm system with operating switch in the premises shall be provided. In case of emergency, the alarm can be heard in the control room by operating the switch in the premises.
2. A disaster management plan will be prepared for emergencies of toxic gas leaks. The plan will determine the responsibility of the officer concerned, who will be trained in various aspects of operating toxic gas equipment in the event of leakage. / A Disaster Management Plan for operation in case of emergency of leakage of toxic gas shall be prepared . The plan shall fix responsibility on the concerned officers who shall be trained in the different aspects of handling toxic gas equipments in case of leakage.
3. Hydrant points of one or more sufficient pressure shall be provided on or near the premises for use in emergencies. / One or more hydrant point (s) with adequate pressure shall be provided in or near the premises for use in emergency.
4. At least two self-contained breathing apparatus and two canister-type gas masks will be placed on the campus in a readily accessible location ./At least two numbers self contained breathing apparatus and two Canister type Gas Masks shall be kept in the premises in an readily accessible location.
5. Portable equipment will be provided to detect toxic gas leaks in or near the premises. / Portable devices for detection of toxic gas leakage shall be made available in or near the premises.
6. A ventilator-cock shall be provided at the appropriate location to determine the wind direction so workers can be moved in the direction of the wind in the event of toxic gas leaks. / A weathercock shall be provided at a suitable location for determining wind direction so that in case of leakage of toxic gas, the workers can move against wind direction.
7. The licensee should have an emergency kit consisting of equipment including various tools and tools, such as valve n hoods for cylinders and toners, clamps for cylinder valve leakage, and chain and yoke assemblies for leakage of toner valves . /Emergency kit consisting of various appliances and tools including valve hood assembly for cylinders and tonners, clamp for cylinder valve leaks and chain and yoke assembly for tonner valve leaks shall be available with the licensee.



8. In case of closure / lock-up of the plant, no toxic gas cylinders shall be placed in the premises.
9. Adequate facilities will be provided for neutralization of toxic gas in case of leakage. / Adequate facilities for neutralization of toxic gas shall be provided in case of leakage.  
Appropriate cylinder loading (unloading) and handling (handling) will be arranged at the toxic gas
10. complex. / Proper cylinder loading / unloading and handling arrangements shall be made in the toxic gas premises.

**for Jt. Chief Controller of Explosives  
North Circle  
Krite Joint Chief Explosive Controller  
Faridabad**



**GOVERNMENT OF INDIA**  
**O/o Jt. Chief Controller of Explosives**  
**PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION (PESO)**  
**(Formerly Department of Explosives)**  
**NORTH CIRCLE**

Tel : (0129)-2410734, 2410732  
 Fax : (0129)-2410733  
 Email : jtccefaridabad@explosives.gov.in

Hall No. 502 & 507, Level 5, Block B  
 Old CGO Complex, NH-4  
 Faridabad -121001

No : **G/NC/HN/06/1099 (G36172)**

Date : **28 Jan 2015**

To,  
 Indian Oil Corporation Ltd,  
 Village Baljattan, Panipat Naphta Cracker Complex,  
 Panipat Refinery & Petro Chemical Complex,  
 PANIPAT - 132140,  
 District : PANIPAT  
 State : Haryana

**Sub :** Storage of **58 Nos - CARBON MONOXIDE** in cylinders at Plot No. : **nil Panipat Refinery & Petrochemical Complex, Village : Baljattan- District : PANIPAT State : Haryana - Licence No. G/NC/HN/06/1099 (G36172) granted in Form F of Gas Cylinder Rules 2004 - Inspection & Endorsement of licence regarding.**

Sir,

Please refer to the Jt. Chief Controller of Explosives, 's Memo No. G/NC/HN/06/1099 (G36172) dated **12/8/2014** and inspection of the above premises by the undersigned /an officer of this office on //.

The subject licence is returned herewith duly endorsed. The receipt of the licence may please be acknowledged.

Please note that your application for further renewal should reach the Jt. Chief Controller of Explosives, North Circle, Faridabad on or before 30<sup>th</sup> September, 2023 along with all the documents as required under Rule 55(5) of Gas Cylinder Rules, 2004. Application for renewal of licence received after 30<sup>th</sup> September, 2023 but not later than 30<sup>th</sup> September, 2024 be considered only with penalty fee vide rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> September, 2024.

**Note :-**

Yours faithfully,

<http://10.0.1.11/explosives/C/CSSCGC/endappr.asp>

1/28/2015

  
(DR SANJAY KUMAR SINGH)

Controller of Explosives  
for Jt. Chief Controller of Explosives, North Circle  
North Circle, Faridabad

Save





भारत सरकार

Government of India

संयुक्त मुख्य विस्फोटक नियंत्रक का कार्यालय

Joint Chief Controller of Explosives

पेट्रोलेियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

Petroleum &amp; Explosives Safety Organisation (PESO)

पूर्व नाम: विस्फोटक विभाग

Formerly: Department of Explosives

फ़ोन (Tel) : 2410734, 2410732

हॉल संख्या 502 एवं 507, स्तर-5, ब्लॉक II | Hall No. 502 &amp; 507, Level 5, Block II

फैक्स (Fax) : (1291)- 2410733

पूराना सी.जी.ओ. बिल्डिंग्स, एन एच 4 | Old CGO Complex, NH-4

ई-मेल (Email) : jcc@faridabad.in/explosives.gov.in

फरीदाबाद - 121001 | Faridabad - 121001

संख्या (No): G/NC/HN/06/1099 (G36172)

दिनांक (Date): 12/8/2014

सेवा में (To)

Indian Oil Corporation Ltd.

Village Baljattan, Panipat Naphta Cracker Complex, Panipat Refinery &amp; Petro Chemical Complex, PANIPAT - 132140.

District PANIPAT State Haryana

विषय - गैस सिलिण्डर नियम, 2004 के अधीन, प्लॉट संख्या नॉ गल्ली का नाम Panipat Refinery &amp; Petrochemical Complex.

गांव या नगर Baljattan जिला PANIPAT राज्य Haryana स्थित, सिलिण्डरों में CARBON MONOXIDE के अण्डरकरण के लिए अनुमति संबंध में।

Subject - Storage of CARBON MONOXIDE in Cylinders at Plot No. nll Panipat Refinery &amp; Petrochemical

Complex, Village : Baljattan - District : PANIPAT State : Haryana under Gas Cylinders Rules, 2004 - Grant licence regarding

संदर्भ (Ref).

कृपया अपने पत्र क्रमांक N दिनांक 18 जुलै 2014 का अवलोकन करें।

Please refer your letter number N dated 18/6/2014.

गैस सिलिण्डर नियम, 2004 के अधीन, सिलिण्डरों में 58 Nos. of CARBON MONOXIDE: a गैस अण्डरकरण के लिए प्रत्येक 'घ' में स्वीकृत दिनांक 30 सितम्बर 2023 तक वैध अनुमति संख्या G/NC/HN/06/1099 दिनांक 12 अगस्त 2014 इस पत्र के साथ भेजी जा रही है।

Licence Number: G/NC/HN/06/1099 dated 12 August 2014 granted in Form 'F' under Gas Cylinder Rules, 2004 Valid upto 30.9.2023 for storage of 58 Nos. of CARBON MONOXIDE in cylinders at subject premises is forwarded here with.

कृपया नोट करें कि गैस सिलिण्डर नियम, 2004 के नियम 55(5) के अनुसार, अनुमति के पुनः नवीकरण हेतु आवेदन इस कार्यालय को इस अनुमति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2023) को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2023 के पश्चात परंतु दिनांक 30 सितम्बर 2024 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलिण्डर नियम, 2004 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा दिनांक 30 सितम्बर 2024 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में वह अनुमति स्वतः निरस्त हो जाएगी।

Please note that application for renewal of the licence should be submitted so as to reach this office before the licence expires (i.e. on or before 30<sup>th</sup> September, 2023) as required under Rule 55(5) of Gas Cylinder Rules, 2004. Application for renewal of licence received after 30<sup>th</sup> September, 2023 but not later than 30<sup>th</sup> September, 2024 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> September, 2024.

कृपया कवली दें।

Please acknowledge the receipt

भवदीय (Yours faithfully)

(डा. संजय कुमार सिंह | DR SANJAY KUMAR SINGH)

विस्फोटक नियंत्रक | Controller of Explosives

कुल संयुक्त मुख्य विस्फोटक नियंत्रक, उत्तरांचल | Jt. Chief Controller of Explosives, North Circle

उत्तरांचल, फरीदाबाद | North Circle, Faridabad

Inspected &amp; endorsed

रूप 'च'  
नियम 50, 51 और  
FORM 'F'  
(See rules 50, 51 and 54)



**सिलेंडरों में संपीड़ित गैस के भंडारण के लिए अनुज्ञप्ति**  
Licence to store compressed gas in cylinders

अनुज्ञप्ति सं. (Licence No.) :- G/NC/HN/06/1099 (G36172)

फीस रुपए (Fees/year Rs.) 500/- प्रति वर्ष

Indian Oil Corporation Ltd, Village Baljattan, Panipat Naphta Cracker Complex Panipat Refinery & Petro Chemical Complex PANIPAT-132140, को नीचे वर्णित और रेखांक संख्या G/NC/HN/06/1099 दिनांक 12 अगस्त 2014 में दर्शित किए गए अनुज्ञप्त परिसर में, भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों के उपबंधों तथा इस अनुज्ञप्ति की अन्य शर्तों के अधीन रहते हुए, केवल संपीड़ित गैस से भरे सिलेंडरों को रखने के लिए ही विधिवत अनुज्ञप्ति दी जाती है।

Licence is hereby granted to Indian Oil Corporation Ltd, Village Baljattan, Panipat Naphta Cracker Complex Panipat Refinery & Petro Chemical Complex PANIPAT-132140, valid only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan no. G/NC/HN/06/1099 dated 12 August, 2014 subject to the provisions of the Indian Explosives Act 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

यह अनुज्ञप्ति 30 सितम्बर 2023 तक प्रवृत्त रहेगी।  
The Licence shall remain in force upto 30 September 2023.

12 अगस्त 2014  
12 August, 2014

संयुक्त मुख्य विस्फोटक नियंत्रक | Jt. Chief Controller of Explosives  
उत्तरांचल, फरीदाबाद | North Circle, Faridabad

**अनुज्ञप्त परिसर का विवरण और अवस्थिति**  
DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

निम्नलिखित विवरण के अनुसार सिलेंडरों में भरी गैस रखने के लिए अनुज्ञप्त परिसर, जिसकी अभिव्यास सीमाओं और अन्य विशेषताओं को संलग्न अनुमोदित रेखांक सं. G/NC/HN/06/1099 दिनांक 12 अगस्त 2014 में दिखाया गया है, Baljattan में अवस्थित है और जिसमें एक भण्डारण शेड है।

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. G/NC/HN/06/1099 dated 12 August, 2014 are situated at Baljattan and consists of a storage shed for possession of the gas contained in cylinders as described here under:

गैस का प्रकार (Type of Gas)	मात्रा (Quantity)
(क) विषैली (toxic)	58 Nos-CARBON MONOXIDE,
(ख) अम्लीय और अत्यधिकशीत (Acidic and highly inflammable)	—
(ग) अम्लीय और अत्यधिकशीत (Acidic and highly inflammable)	—
(घ) विषैला अम्लीय गैस (Toxic and highly inflammable)	—
(ङ) कार्बन मोनोऑक्साइड गैस (Carbon monoxide gas)	—
(च) अम्लीय और अत्यधिकशीत गैस (Acidic and highly inflammable)	—
(छ) अम्लीय और अत्यधिकशीत गैस (Acidic and highly inflammable)	—

और प्लॉट संख्या नं 87 की नाम Panipat Refinery & Petrochemical Complex गांव या नगर Baljattan पुलिस थाना panipat जिला PANIPAT में स्थित है।

and is situated at Plot No 87 Name of Street Panipat Refinery & Petrochemical Complex Village/Town Baljattan Police Station panipat District PANIPAT.

नवीकरण के पृष्ठान्न के लिए स्थान  
SPACE FOR ENDORSEMENT OF RENEWALS

इस अनुमति को, विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए गैस सिलिण्डर नियम, 2004 के उपबंधों या इस अनुमति की शर्तों का उल्लंघन न होने की दशा में, पीस में कोई छूट दिए बिना दस वर्ष तक नवीकृत किया जाएगा।

The licence shall be renewable without any concession in fee for ten years in the absence of contravention of the Indian Explosives Act, 1884 or Gas Cylinder Rules, 2004, framed thereunder or of any of the conditions of this licence.

नवीकरण की  
तारीख

Date of  
Renewal

अनुमति की समाप्ति  
की तारीख

Date of  
Expiry

अनुज्ञापन प्राधिकारी के हस्ताक्षर और उसकी  
स्टाम्प

Signature and stamp of the licensing authority.

यदि अनुमति परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरूप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुमति दी गई है, उनमें से किसी का उल्लंघन होता है तो यह अनुमति रद्द की जा सकती है और अनुमति का धारक कारावास से, जिसकी अधिकतम अवधि दो वर्ष तक की हो सकती है, या जुर्माने से, जो तीन हजार रुपये तक का हो सकेगा, या दोनों से भी दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years, or with fine which may extend to three thousand rupees, or with both.





भारत सरकार  
Government of India  
संयुक्त मुख्य विस्फोटक नियंत्रक, उत्तरांचल  
Jt. Chief Controller of Explosives North Circle  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेशी)  
Petroleum & Explosives Safety Organisation (PESO)  
पूर्व नाम- विस्फोटक विभाग  
Formerly Department of Explosives

फोन (Tel) : 2410734, 2410732  
फैक्स (Fax) : (129)- 2410733  
ई-मेल (Email) : jice@faridabad@explosives.gov.in

हॉल संख्या 502 एवं 507, लेवल-5, ब्लॉक II | Hall No. 502 & 507, Level 5, Block II  
पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4 | Old CGO Complex, NH-4  
फरीदाबाद - 121001 | Faridabad - 121001

संख्या (No): G/NC/HN/06/1090 (G35401)

दिनांक (Date): 2/12/2014

सेवा में (To),

20012016

M/S INDIAN OIL CORPORATION LTD,  
TECHNICAL SERVICES DEPARTMENT PROCESS SECTION, PANIPAT REFINERY - 132140,  
District PANIPAT State Haryana

विषय :- गैस सिलिंडर नियम, 2004 के अधीन, प्लॉट संख्या. MUTATION NO.1617, 45/503, 1897 गली बर लाज, गांव या नगर BAHOLI  
जिला PANIPAT राज्य Haryana निम्न, सिलेण्डरों में CHLORINE के भण्डारण के लिए अनुमति संबंध में।

Subject :- Storage of CHLORINE in Cylinders at Plot No. MUTATION NO.1617, 45/503, 1897, Village BAHOLI - District PANIPAT  
State Haryana under Gas Cylinders Rules, 2004 - Grant licence regarding

महोदय (Sir),

कृपया अपने पत्र क्रमांक N दिनांक 26 फरवरी 2014 का अवलोकन करें।  
Please refer your letter number N dated 26/2/2014

गैस सिलेण्डर नियम, 2004 के अधीन, सिलेण्डरों में 9 Nos. of CHLORINE गैस भण्डारण के लिए प्रथम च में स्वीकृत दिनांक 30 सितम्बर 2024 तक वैध अनुमति  
संख्या G/NC/HN/06/1090 दिनांक 2 दिसम्बर 2014 इस पत्र के साथ भेजी जा रही है।  
Licence Number: G/NC/HN/06/1090 dated 2 December, 2014 granted in Form 'F' under Gas Cylinder Rules, 2004 Valid upto 30/9/2024 for storage of 9 Nos. of  
CHLORINE cylinders at subject premises is forwarded here with

प्रस्ताव नोट करें कि गैस सिलेण्डर नियम, 2004 के नियम 55(5) के अनुसार, अनुमति के पुनः नवीकरण हेतु आवेदन इस कार्यालय को इस अनुमति की वैधता समाप्त  
होने के पूर्व (दिनांक 30 सितम्बर 2024 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2024 के पश्चात परंतु दिनांक 30 सितम्बर 2025 से पूर्व प्राप्त नवीनीकरण  
आवेदन, गैस सिलेण्डर नियम, 2004 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा। दिनांक 30 सितम्बर 2025 तक कोई नवीनीकरण आवेदन  
प्राप्त नहीं होने की स्थिति में यह अनुमति स्वतः निरस्त हो जाएगी।

Please note that application for renewal of the licence should be submitted so as to reach this office before the licence expires (i.e. on or before 30<sup>th</sup> September, 2024)  
as required under Rule 55(5) of Gas Cylinder Rules, 2004. Application for renewal of licence received after 30<sup>th</sup> September, 2024 but not later than 30<sup>th</sup> September,  
2025 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup>  
September, 2025.

फीस के भुगतान की बकिया राशि रुपर 12100/- आपके खाते में जमा है। इस पत्र का संदर्भ देते हुए नवीनीकरण के लिए इस राशि का उपयोग किया जा सकता है।  
कृपया पावती दें।  
Balance of fee paid of Rs.12100/- is standing in your credit which may please be utilised in your renewals by quoting this reference. Please acknowledge the receipt.

भवदीय, (Yours faithfully),

(डॉ. संजय कुमार सिंह | DR SANJAY KUMAR SINGH)

विस्फोटक नियंत्रक | Controller of Explosives

पूर्व संयुक्त मुख्य विस्फोटक नियंत्रक, उत्तरांचल | Jt. Chief Controller of Explosives, North Circle  
उत्तरांचल, फरीदाबाद | North Circle, Faridabad



भारत सरकार

Government of India

संयुक्त मुख्य विस्फोटक नियंत्रक, उत्तरांचल  
O/o Jt. Chief Controller of Explosives North Circle  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)  
Petroleum & Explosives Safety Organisation (PESO)  
पूर्व नाम विस्फोटक विभाग  
Formerly Department of Explosives

फोन (Tel): 2410734, 2410732  
फैक्स (Fax): (129)- 2410733  
ई-मेल (Email): jtcce@rickshad@explosives.gov.in

हॉल संख्या 502 एवं 507, लेवल-3, ब्लॉक II | Hall No. 502 & 507, Level 3, Block B  
पुराना सी.जी.ओ. कॉम्प्लेक्स, एन एच 4 | Old CGO Complex, NH-4  
फरीदाबाद - 121001 | Faridabad - 121001

संख्या (No): G/NC/HN/06/1091 (G35402)

दिनांक (Date): 2/12/2014

सेवा में (To)

M/S INDIAN OIL CORPORATION LTD,  
TECHNICAL SERVICES DEPARTMENT PROCESS SECTION, PANIPAT REFINERY, State :Haryana

20012015

विषय - गैस सिलिंडर नियम, 2004 के अधीन, प्लॉट संख्या MUTATION NO. 1617, 457/503, 1897 गाँव का नाम , गाँव या नगर BAHOLI

जिला PANIPAT राज्य Haryana स्थित, सिलिंडरों में CHLORINE के भण्डारण के लिए अनुमति संबंध में।

Subject :- Storage of CHLORINE in Cylinders at Plot No. MUTATION NO. 1617, 457/503, 1897 , Village : BAHOLI - , District : PANIPAT

अहोदय (Sir), State : Haryana under Gas Cylinders Rules, 2004 - Grant licence regarding

कृपया अपने पत्र क्रमांक N दिनांक 26 फरवरी 2014 का अवलोकन करें।  
Please refer your letter number N dated 26/2/2014.

गैस सिलिंडर विभाग, 2004 के अधीन, सिलिंडरों में 6 Nos. of CHLORINE गैस भण्डारण के लिए प्रसंग 'घ' में स्वीकृत दिनांक 30 सितम्बर 2021 तक वैध अनुमति संख्या G/NC/HN/06/1091 दिनांक 2 दिसम्बर 2014 इस पत्र के साथ भेजी जा रही है।  
Licence Number: G/NC/HN/06/1091 dated 2 December, 2014 granted in Form 'F' under Gas Cylinder Rules, 2004 Valid upto 30.9.2021 for storage of 6 Nos. of CHLORINE cylinders at subject premises is forwarded here with.

कृपया नोट करें कि गैस सिलिंडर नियम, 2004 के नियम 55(5) के अनुसार, अनुमति के पुनः नवीकरण हेतु आवेदन इस कार्यालय को इस अनुमति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2021 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2021 के पश्चात परंतु दिनांक 30 सितम्बर 2022 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलिंडर नियम, 2004 के नियम 55(7) के अनुसार विन्यय शुल्क के साथ ही विचारार्थीन होगा। दिनांक 30 सितम्बर 2022 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुमति स्वतः निरस्त हो जाएगी।

Please note that application for renewal of the licence should be submitted so as to reach this office before the licence expires (i.e. on or before 30<sup>th</sup> September, 2021) as required under Rule 55(5) of Gas Cylinder Rules, 2004. Application for renewal of licence received after 30<sup>th</sup> September, 2021 but not later than 30<sup>th</sup> September, 2022 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> September, 2022.

बीस के मुगलान की बरखा राशि रुए 100/- आपके खाते में जमा है। इस पत्र का संदर्भ देते हुए नवीनीकरण के लिए इस राशि का उपयोग किया जा सकता है। कृपया पावती दें।

Balance of fee paid of Rs.100/- is standing in your credit which may please be utilised in your renewals by quoting this reference. Please acknowledge the receipt.

भवदीय, (Yours faithfully),

(डा.संजय कुमार सिंह | DR.SANJAY KUMAR SINGH)

विस्फोटक नियंत्रक | Controller of Explosives

श्री संयुक्त मुख्य विस्फोटक नियंत्रक, उत्तरांचल | for Jt. Chief Controller of Explosives, North Circle  
उत्तरांचल, फरीदाबाद | North Circle, Faridabad



भारत सरकार / Government of India

वाणिज्य और उद्योग मंत्रालय / Ministry of Commerce &amp; Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन / Petroleum &amp; Explosives Safety Organisation (PESO)

हाल संख्या 502 एवं 507, लेवल-5, ब्लॉक II, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4

फरीदाबाद - 121001

Hall No. 502 &amp; 507, Level 5, Block B, Old CGO Complex, NH-4, Faridabad - 121001

ईमेल/E-mail : jtccefaridabad@explosives.gov.in

दूरभाष/Phone/Fax No : 0129 - 2410734, 2410732

सं/No : G/NC/HN/06/656(G18981)

दि/Dated : 18/09/2017

सेवा में/To,

SENIOR TECHNICAL SERVICES MANAGER,  
INDIAN OIL CORPORATION LTD,PANIPAT REFINERY,,  
PANIPAT-132140,HARYANA  
City: Panipat,  
Taluka: Panipat,  
District: PANIPAT  
State: Haryana  
Pin : 132140

विषय/Sub Plot No: -, IOC Panipat Refinery, Village/Town: PANIPAT, District: PANIPAT, State: Haryana, Pin : 132140 - में सिलेंडरों में AMMONIA गैस का भंडारण. गैस सिलेंडर नियम, 2016 के अंतर्गत नवीकरण के बारे में/Storage of AMMONIA gas in cylinders at Plot No: -, IOC Panipat Refinery, Village/Town: PANIPAT, District: PANIPAT, State: Haryana, Pin : 132140 - under Gas Cylinders Rules, 2016 - Renewal regarding.

Sir(s),

कृपया आपके दि. 28/08/2017 के आवेदन सं. OIN122753 का संदर्भ ग्रहण करें/Please refer to your application No.OIN122753 dated 28/08/2017 .

30<sup>th</sup> September 2022 तक विधिमाम्य अनुज्ञप्ति संख्या G/NC/HN/06/656 इसके साथ नवीकरण कर अप्रेषित की जा रही है/ Licence Number: G/NC/HN/06/656 is renewed and valid upto 30<sup>th</sup> September 2022 is forwarded herewith.

कृपया नोट करें कि गैस सिलेंडर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन, इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2022 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2022 के पश्चात परंतु दिनांक 30 सितम्बर 2023 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलेंडर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचारणीय होगा। दिनांक 30 सितम्बर 2023 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुज्ञप्ति स्वतः निरस्त हो जाएगी। /Please note that application for renewal of the licence should be submitted so as to reach this office before the licence expires (i.e. on or before 30<sup>th</sup> September, 2022) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30<sup>th</sup> September, 2022 but not later than 30<sup>th</sup> September, 2023 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> September, 2023.

कृपया इस पत्र की प्राप्ति की पावती दें। /Please acknowledge the receipt of the same.

भवदीय/Yours faithfully,

((डा.बी.सिंग)

(Dr. B. Singh))

Controller of Explosives  
कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
For Jt. Chief Controller of Explosives  
फरीदाबाद/Faridabad





FORM F

(See Rules 50, 51 and 54)

## Licence to store compressed gas in cylinders

Licence No. : G/NC/HN/06/656(G18981)

Fee Rs. 2000/- per year

Licence is hereby granted to **SENIOR TECHNICAL SERVICES MANAGER, INDIAN OIL CORPORATION LTD, PANIPAT REFINERY, PANIPAT-132140, HARYANA, City: Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, Pin: 132140** valid only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan No G/NC/HN/06/656(G18981) dated 27/11/2006 subject to the provisions of the Explosives Act, 1884(4 of 1884) and the Rules made thereunder and to the further conditions of this licence.

The Licence shall remain in force till the 30<sup>th</sup> September 2022.

November 27, 2006

For Jt. Chief Controller of Explosives  
Faridabad

## DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. G/NC/HN/06/656 dated November 27, 2006 are situated at **PANIPAT** and consists of a storage shed for possession of the gas contained in cylinders as described here under:

Type of Gas	Quantity
a) Toxic	AMMONIA - 100 Nos.
b) Non-Toxic and Non Flammable	--NIL--
c) Non-Toxic and Flammable	--NIL--
d) Dissolved Acetylene Gas	--NIL--
e) Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f) Liquefied Petroleum Gas	--NIL--

and is situated at Plot No : - Village/Town : **PANIPAT** Police Station : **Matlauda** District : **PANIPAT**, State: **Haryana**.

## SPACE FOR ENDORSEMENT OF RENEWALS

	Date of Renewal	Date of Expiry	Signature and stamp of the licensing authority
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884 or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence	18/09/2017	30/09/2022	Dr. B. Singh CE For Jt. Chief Controller of Explosives Faridabad

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

License No : G/NC/HN/06/656 (G18981)

**ADDITIONAL CONDITIONS FOR FILLING AND OR STORAGE OF TOXIC GASES CONTAINERS/CYLINDERS UNDER GAS CYLINDER RULES, 2016.**

1. An efficient alarm system with operating switch in the premises shall be provided. In case of emergency, the alarm can be heard in the control room by operating the switch in the premises.
2. A Disaster Management Plan for operation in case of emergency of leakage of toxic gas shall be prepared. The plan shall fix responsibility on the concerned officers who shall be trained in the different aspects of handling toxic gas equipments in case of leakage.
3. One or more hydrant point(s) with adequate pressure shall be provided in or near the premises for use in emergency.
4. At least two numbers self contained breathing apparatus and two Canister type Gas Masks shall be kept in the premises in a readily accessible location.
5. Portable devices for detection of toxic gas leakage shall be made available in or near the premises.
6. A weathercock shall be provided at a suitable location for determining wind direction so that in case of leakage of toxic gas, the workers can move against wind direction.
7. Emergency kit consisting of various appliances and tools including valve hood assembly for cylinders and tonners, clamp for cylinder valve leaks and chain and yoke assembly for tonner valve leaks shall be available with the licensee.
8. In case of closure/cock-up of the filling plant, no cylinder containing toxic gas shall be retained in the premises.
9. Adequate facilities for neutralization of toxic gas shall be provided in case of leakage.
10. Proper cylinder loading/unloading and handling arrangements shall be made in the toxic gas premises.

for Jt. Chief Controller of Explosives  
North Circle

PANIPAT REFINERY



भारत सरकार /Government of India  
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)  
हॉल संख्या 502 एवं 507, लेवल-5, ब्लॉक II, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4  
फरीदाबाद - 121001  
Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4, Faridabad - 121001

ईमेल/E-mail : jtccefaridabad@explosives.gov.in

दूरभाष/Phone/Fax No : 0129 - 2410734, 2410732

दि/Date : 27/09/2017

13 OCT 2017

सं/No : G/NC/HN/06/657(G21134)

सेवा में/To,

SR TECHNICAL SERVICES MANAGER,  
INDIAN OIL CORPORATION, PANIPAT REFINERY,,  
BAHOLI, PANIPAT, HARYANA-132140  
City: Panipat,  
Taluka: Panipat,  
District: PANIPAT  
State: Haryana  
Pin : 132140

विषय/Sub : Plot No: -, Panipat Refinery, Village/Town: BAHOLI PANIPAT, District: PANIPAT, State: Haryana, Pin : 132140 - में सिलेंडरों में CHLORINE गैस का भंडारण- गैस सिलेंडर नियम, 2016 के अंतर्गत नवीकरण के बारे में/Storage of CHLORINE gas in cylinders at Plot No: -, Panipat Refinery, Village/Town: BAHOLI PANIPAT, District: PANIPAT, State: Haryana, Pin : 132140 - under Gas Cylinders Rules, 2016 - Renewal regarding.

Sir(s),

कृपया आपके दि. 25/08/2017 के आवेदन सं. OIN122755 का संदर्भ ग्रहण करें/Please refer to your application No.OIN122755 dated 25/08/2017.

30<sup>th</sup> September 2022 तक विधिमाम्य अनुज्ञप्ति संख्या G/NC/HN/06/657 इसके साथ नवीकरण कर अद्योपित की जा रही है।/ Licence Number: G/NC/HN/06/657 is renewed and valid upto 30<sup>th</sup> September 2022 is forwarded herewith.

कृपया नोट करें कि गैस सिलेंडर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन, इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2022 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2022 के पश्चात परंतु दिनांक 30 सितम्बर 2023 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलेंडर नियम, 2016 के नियम 55(7) के अनुसार विन्यस्त शुल्क के साथ ही विचारणीय होगा। दिनांक 30 सितम्बर 2023 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुज्ञप्ति स्वतः निरस्त हो जाएगी। /Please note that application for renewal of the licence should be submitted so as to reach this office before the licence expires (i.e. on or before 30<sup>th</sup> September, 2022) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30<sup>th</sup> September, 2022 but not later than 30<sup>th</sup> September, 2023 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> September, 2023.

कृपया इस पत्र की प्राप्ति की पावती दें। /Please acknowledge the receipt of the same.

भवदीय/Yours faithfully,

((डा.बी.सिंग))  
(Dr. B. Singh)

Controller of Explosives  
कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
For Jt. Chief Controller of Explosives  
फरीदाबाद/Faridabad







FORM F

(See Rules 50, 51 and 54)

## Licence to store compressed gas in cylinders

Licence No. : G/NC/HN/06/657(G21134)

Fee Rs. 2000/- per year

Licence is hereby granted to SR TECHNICAL SERVICES MANAGER, INDIAN OIL CORPORATION, PANIPAT REFINERY, BAHOLI, PANIPAT, HARYANA-132140, City: Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, Pin: 132140 valid only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan No G/NC/HN/06/657 (G21134) dated 27/11/2006 subject to the provisions of the Explosives Act, 1884(4 of 1884) and the Rules made thereunder and to the further conditions of this licence.

The Licence shall remain in force till the 30<sup>th</sup> September 2022.

November 27, 2006

For Jt. Chief Controller of Explosives  
Faridabad

## DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. G/NC/HN/06/657 dated November 27, 2006 are situated at BAHOLI PANIPAT and consists of a storage shed for possession of the gas contained in cylinders as described here under:

	Type of Gas	Quantity
a)	Toxic	CHLORINE - 15 Nos.
b)	Non-Toxic and Non Flammable	--NIL--
c)	Non-Toxic and Flammable	--NIL--
d)	Dissolved Acetylene Gas	--NIL--
e)	Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f)	Liquefied Petroleum Gas	--NIL--

and is situated at Plot No : - Village/Town : BAHOLI PANIPAT Police Station : Baholi District : PANIPAT, State: Haryana.

## SPACE FOR ENDORSEMENT OF RENEWALS

	Date of Renewal	Date of Expiry	Signature and stamp of the licensing authority
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884 or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence	27/09/2017	30/09/2022	 Dr. B. Singh CE For Jt. Chief Controller of Explosives Faridabad

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.



License No : G/NC/HN/06/657 (G21134)

**ADDITIONAL CONDITIONS FOR FILLING AND OR STORAGE OF TOXIC GASES  
CONTAINERS/CYLINDERS UNDER GAS CYLINDER RULES, 2016.**

1. An efficient alarm system with operating switch in the premises shall be provided. In case of emergency, the alarm can be heard in the control room by operating the switch in the premises.
2. A Disaster Management Plan for operation in case of emergency of leakage of toxic gas shall be prepared. The plan shall fix responsibility on the concerned officers who shall be trained in the different aspects of handling toxic gas equipments in case of leakage.
3. One or more hydrant point(s) with adequate pressure shall be provided in or near the premises for use in emergency.
4. At least two numbers self contained breathing apparatus and two Canister type Gas Masks shall be kept in the premises in a readily accessible location.
5. Portable devices for detection of toxic gas leakage shall be made available in or near the premises.
6. A weathercock shall be provided at a suitable location for determining wind direction so that in case of leakage of toxic gas, the workers can move against wind direction.
7. Emergency kit consisting of various appliances and tools including valve hood assembly for cylinders and tonners, clamp for cylinder valve leaks and chain and yoke assembly for tonner valve leaks shall be available with the licensee.
8. In case of closure/cook-up of the filling plant, no cylinder containing toxic gas shall be retained in the premises.
9. Adequate facilities for neutralization of toxic gas shall be provided in case of leakage.
10. Proper cylinder loading/unloading and handling arrangements shall be made in the toxic gas premises.

for Jt. Chief Controller of Explosives  
North Circle



भारत सरकार

Government of India

वणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)

Petroleum & Explosives Safety Organisation (PESO)

हॉल संख्या 502 एवं 507, लेवल-5, ब्लॉक II, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4

फरीदाबाद- 121001

Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,

Faridabad - 121001

E-mail : [jtccofaridabad@explosives.gov.in](mailto:jtccofaridabad@explosives.gov.in)

Phone/Fax No : 9129 - 2110734, 2410732

संख्या /No. : P/HQ/HN/15/861 (P180609)

दिनांक /Dated : 19/12/2019

सेवा में /To,

M/S SR. ENGINEERING SERVICE MANAGER,  
Indian Oil Corporation Limited, Panipat Refinery, E,  
Panipat, Haryana-132140,  
Panipat,  
Taluka: Panipat,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

24 DEC 2019

विषय /Sub Plot No. At power plant (TPS), PANIPAT REFINERY, Baholi, District: PANIPAT, State: Haryana, PIN: 132140 में स्थित विद्युत्तमन पेट्रोलियम वर्ग B अधिष्ठापन में अनुमति सं P/HQ/HN/15/861 (P180609) के नवीकरण के सन्दर्भ में।  
Existing Petroleum Class B installation at Plot No. At power plant (TPS), PANIPAT REFINERY, Baholi, District: PANIPAT, State: Haryana, PIN: 132140 - Licence No. P/HQ/HN/15/861 (P180609) - Renewal regarding

महोदय /Sir  
(S)

कृपया आपके पत्र क्रमांक OIN392690 दिनांक 23/11/2019 का अवलोकन करें।

Please refer to your letter No. OIN392690, dated 23/11/2019

अनुमति संख्या P/HQ/HN/15/861 (P180609) दिनांक 06/02/1997 को दिनांक 31/12/2024 तक नवीनीकृत कर इस पत्र के साथ अवधि का जोड़ी है।

Licence No. P/HQ/HN/15/861 (P180609) dated 06/02/1997 is forwarded herewith duly renewed upto 31/12/2024

कृपया पेट्रोलियम नियम 2002 के अधीन बजट राशियाँ 148 में दी गई प्रक्रिया का कड़ाई से पालन करें। अनुमति के नवीकरण हेतु सम्बन्धित दस्तावेजों को अनुमति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व Jt. Chief Controller of Explosives, North Circle, Faridabad कार्यालय को प्रेषित करें।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence to Jt. Chief Controller of Explosives, North Circle, Faridabad, so as to reach his office on or before the date on which Licence expires.

कृपया पावती दें।

Please acknowledge the receipt.

अवधि /Yours faithfully,

((अर.एन.मीन))

(R.N. Meena)

संयुक्त मुख्य विस्फोटक नियन्त्रक  
Jt. Chief Controller of Explosives  
फरीदाबाद/Faridabad

(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट <http://peso.gov.in> देखें।)

(For more information regarding status, fees and other details please visit our website: <http://peso.gov.in>)

प्रत्येक XV  
(प्रथम अनुसूची का अनुच्छेद 6 देखिए)  
FORM XV  
(see Article 6 of the First Schedule)

अधिष्ठापनों में पेट्रोलियम के आयात और भंडारण के लिए अनुमति  
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

अनुमति सं. (Licence No.) : P/HQ/HN/15/861(P180609)

फीस रुपये (Fee Rs.) 50000/- per year

M/S SR. ENGINEERING SERVICE MANAGER,, Indian Oil Corporation Limited, Panipat Refinery,E, Panipat, Haryana-132140, Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, PIN: 132140 को केवल इसमें यथा विनिर्दिष्ट वर्ग और मात्राओं में पेट्रोलियम 1912.00 KL आयात करने के लिए और उसका भीषे वर्णित और अनुमोदित नक्शा संख्या P/HQ/HN/15/861(P180609) तारीख 05/05/2017 जो कि इससे उपाबद्ध है, में दिखाए गए स्थान पर अण्डारकरण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुमति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुमति अनुदत्त की जाती है।

Licence is hereby granted to M/S SR. ENGINEERING SERVICE MANAGER,, Indian Oil Corporation Limited, Panipat Refinery,E, Panipat, Haryana-132140, Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, PIN: 132140 valid only for the importation and storage of 1912.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No P/HQ/HN/15/861(P180609) dated 05/05/2017 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुमति 31st day of December 2024 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the 31st day of December 2024.

पेट्रोलियम का विवरण /Description of Petroleum

अनुमति मात्रा (किलोलीटरों में) /Quantity licenced in KL

वर्ग A प्रपुंज पेट्रोलियम /Petroleum Class A in bulk	NIL
वर्ग A प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
वर्ग B प्रपुंज पेट्रोलियम /Petroleum Class B in bulk	1912.00 KL
वर्ग B प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
वर्ग C प्रपुंज पेट्रोलियम /Petroleum Class C in bulk	NIL
वर्ग C प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class C, otherwise than in bulk	NIL

कुल क्षमता /Total Capacity

1912.00 KL

February 6, 1997

Chief Controller of Explosives

अनुमति परिसरों का विवरण और अवस्थान  
DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुमति परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टता संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: At power plant (TPS), PANIPAT REFINERY, Baholi, District: PANIPAT, State: Haryana, PIN: 132140 स्थान पर अवस्थित है तथा उसमें निम्नलिखित Three A/G tanks for HSD at TPS as shown in the approved plans attached to licence, सम्मिलित हैं।

The licensed premises, the layout, boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: At power plant (TPS), PANIPAT REFINERY, Baholi, District: PANIPAT, State: Haryana, PIN: 132140 and consists of Three A/G tanks for HSD at TPS as shown in the approved plans attached to licence, together with connected facilities.

अनुमति संख्या-(Licence No.) PHQ/HN/15/861 (P180609)

**नवीकरण के पंखावन के लिए स्थान**  
**SPACE FOR ENDORSEMENT OF RENEWALS**

पेट्रोलियम अधिनियम, १९३४ के उपबन्धों का इनके अधीन बनाए गए नियमों या इस अनुमति की शर्तों का उल्लंघन न होने की दशा में यह अनुमति फिर से बिना किसी छूट के दस वर्ष तक नवीकृत की जा सकती है।  
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence

नवीकरण की तारीख  
Date of Renewal

समाप्ति की तारीख  
Date of Expiry of license

अनुमति प्राधिकारी के हस्ताक्षर और स्टाम्प  
Signature and office stamp of the licensing authority

1)	04/07/2007	31/12/2007	Sd/-
2)	21/01/2008	31/12/2010	Sd/-
3)	01/12/2010	31/12/2013	Sd/- A.K.Srivastava
4)	07/01/2014	31/12/2016	Sd/-  For Jt. Chief Controller of Explosives Faridabad
5)	07/11/2016	31/12/2019	Sd/- R.P.Singh Jt. Chief Controller of Explosives Faridabad 
6)	19/12/2019	31/12/2024	R.N.Meena Jt. Chief Controller of Explosives Faridabad 

**संयुक्त मुख्य विस्फोटक नियंत्रक**  
**Jt. Chief Controller of Explosives**  
उत्तरी अंचल, फरीदाबाद  
**North Circle, Faridabad**

यदि अनुमति धारक इसमें उपाबद्ध विवरण और शर्तों के अनुरूप नहीं पाए जाते हैं और जिन नियमों और शर्तों के अधीन यह अनुमति मंजूर की गई है, उनमें से किसी का उल्लंघन होने की दशा में यह अनुमति रद्द की जा सकती है और अनुमतिधारी व्यक्ति अपराध के लिए साधारण कारावास से, जो एक साल तक हो सकता है, या जुर्माने से, जो एक हजार रुपये तक हो सकता है, या दोनों से, और धारक परमातमकी अपराध के लिए साधारण कारावास से जो तीन साल तक हो सकता है, या जुर्माने से, जो पांच हजार रुपये तक हो सकता है, या दोनों से, दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description given on the approved plan attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable for the first offence with simple imprisonment which may be extend to one month, or with fine which may extend to one thousand rupees, or with both and for every subsequent offence with simple imprisonment which may extend to three months, or with fine which may extend to five thousand rupees or with both.



P180609

भारत सरकार सेवार्थ  
**O.I.G.S.**

RP

सेवा में,



प्रेषक: R

कार्यालय संयुक्त मुख्य विस्फोटक नियन्त्रक

Office : Joint Chief Controller of Explosives

उत्तरी अंचल, हाल संख्या 502 एवं 507,

North Circle, Hall No. 502 & 507

लेवल 5, ब्लॉक II ओल्ड सी० जी० ओ० काम्प्लैक्स,

Level 5, Block II, Old C.G.O. Complex

एन.एच. 4, फरीदाबाद/NH-4, Faridabad 121 001

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00000000 00000000  
121001 24.12.2019

0077

WIND

TM

RH3402016121M

Counter No:1,24/12/2019,13:42

Net:0.00MT:20gas  
FM:22.00

From:MH4 FARIDABAD SO (121001)

From: Hub

To: Hub

Del PO:Panipat Refinery S.O(132140)





भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

Petroleum & Explosives Safety Organisation (PESO)

हाल संख्या 502 एवं 507, लेवल-5, ब्लॉक II, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4  
फरीदाबाद- 121001

Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,  
Faridabad - 121001

E-mail : jtccefaridabad@explosives.gov.in

Phone/Fax No : 0129 - 2410734, 2410732

संख्या /No : P/HQ/HN/15/2085 (P135610)

सेवा में /To,

Indian Oil Corporation Limited,  
Panipat Refinery,  
Post Office Panipat Refinery,  
Panipat,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

दिनांक /Dated: 26 DEC 2019

विषय /Sub Plot No. NA, Panipat Refinery, Village Baholi, Panipat, District: PANIPAT, State: Haryana, PIN: 999999 में स्थित विद्यमान पेट्रोलियम वर्ग A,B,C अस्थापन में अनुमति सं P/HQ/HN/15/2085 (P135610) के नवीकरण के संदर्भ में।  
Existing Petroleum Class A,B,C Installation at Plot No. NA, Panipat Refinery, Village Baholi, Panipat, District: PANIPAT, State: Haryana, PIN: 999999 - Licence No. P/HQ/HN/15/2085 (P135610) - Renewal regarding.

साहोदय /Sir  
(5)

कृपया आपके पत्र क्रमांक OIN392692 दिनांक 23/11/2019 का अवलोकन करें।

Please refer to your letter No. OIN392692, dated 23/11/2019

अनुमति संख्या P/HQ/HN/15/2085 (P135610) दिनांक 08/03/2006 को दिनांक 31/12/2024 तक नवीनीकृत कर इस पत्र के साथ अधिस्त की जा रही है।

Licence No. P/HQ/HN/15/2085 (P135610) dated 08/03/2006 is forwarded herewith duly renewed upto 31/12/2024.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कड़ाई से पालन करें। अनुमति के नवीकरण हेतु समस्त दस्तावेजों को अनुमति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व Jt. Chief Controller of Explosives, North Circle, Faridabad कार्यालय को प्रेषित करें।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence to Jt. Chief Controller of Explosives, North Circle, Faridabad, so as to reach his office on or before the date on which Licence expires.

कृपया फावरी दें।

Please acknowledge the receipt.

भवदीय /Yours faithfully,

((आर.एन.मीना)  
(R.N.Moena))

संयुक्त मुख्य विस्फोटक नियंत्रक  
Jt. Chief Controller of Explosives  
उत्तरी अंचल, फरीदाबाद  
North Circle, Faridabad

(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : <http://peso.gov.in> पर  
(For more information regarding status, fees and other details please visit our website. <http://peso.gov.in>)

**फॉर्म XV**  
(पथम अनुसूची का अनुच्छेद 6 देखिए)  
**FORM XV**  
(see Article 6 of the First Schedule)

**अधिष्ठापनों में पेट्रोलियम के आयात और भंडारण के लिए अनुमति**  
**LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION**

अनुमति सं. (Licence No.) : PIHQ/HN/15/2085(P135610)

फिस कए (Fee Rs.) 127500/- per year

Indian Oil Corporation Limited, Panipat Refinery, Post Office Panipat Refinery, Panipat, District: PANIPAT, State: Haryana, PIN: 132140 को केवल इसमें यथा विनिर्दिष्ट वर्ग और मात्राओं में पेट्रोलियम 12500.00 KL आयात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या PIHQ/HN/15/2085(P135610) तारीख 05/05/2017 जो कि इससे उपाबद्ध है, में दिखाए गए स्थान पर भण्डारण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुमति की अतिरिक्त शर्तों के अधीन रहते हुए यह अनुमति अनुदत्त की जाती है।

Licence is hereby granted to Indian Oil Corporation Limited, Panipat Refinery, Post Office Panipat Refinery, Panipat, District: PANIPAT, State: Haryana, PIN: 132140 valid only for the importation and storage of 12500.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No PIHQ/HN/15/2085(P135610) dated 05/05/2017 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुमति 31st day of December 2024 तक प्रवृत्त रहेगी।  
The Licence shall remain in force till the 31st day of December 2024

पेट्रोलियम का विवरण /Description of Petroleum	अनुमत्त मात्रा (क्विलीलीटर में) /Quantity licenced in KL
कमी क प्रचुज पेट्रोलियम /Petroleum Class A in bulk	6000.00 KL
कमी क प्रचुज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
कमी छ प्रचुज पेट्रोलियम /Petroleum Class B in bulk	500.00 KL
कमी छ प्रचुज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
कमी ग प्रचुज पेट्रोलियम /Petroleum Class C in bulk	6000.00 KL
कमी ग प्रचुज पेट्रोलियम से भिन्न /Petroleum Class C, otherwise than in bulk	NIL
<b>कुल क्षमता /Total Capacity</b>	<b>12500.00 KL</b>

March 8, 2008

—Sd/-  
Chief Controller of Explosives

**अनुमत्त परिसरों का विवरण और अवस्थान**  
**DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

अनुमत्त परिसर जिसकी विन्यास सीमाएं अलग विनिर्देशों संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: NA, Panipat Refinery, Village Baholi, Panipat, District: PANIPAT, State: Haryana, PIN: 999999 स्थान पर अवस्थित है तथा उसमें निम्नलिखित Three aboveground Petroleum Class A, One aboveground Petroleum Class B and Two aboveground Petroleum Class C storage tanks together with connected facilities. सम्मिलित हैं।

The licensed premises, the layout, boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: NA, Panipat Refinery, Village Baholi, Panipat, District: PANIPAT, State: Haryana, PIN: 999999 and consists of Three aboveground Petroleum Class A, One aboveground Petroleum Class B and Two aboveground Petroleum Class C storage tanks together with connected facilities, together with connected facilities.



अनुमति संख्या-(Licence No.) PIHQ/HN/15/2085 (P135610)

**नवीनीकरण के पृष्ठान्त के लिए स्थान**  
**SPACE FOR ENDORSEMENT OF RENEWALS**

पेट्रोलियम अधिनियम, 1934 के उपबन्धों या उनके अधीन बनाए गए नियमों या इस अनुमति की शर्तों का उल्लंघन न होने की दशा में यह अनुमति फिर से बिना किसी फीट के दस वर्ष तक नवीकृत की जा सकेगी।  
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence.

नवीकरण की तारीख  
Date of  
Renewal

अवधि की तारीख  
Date of  
Expiry of licence

अनुमति प्रधिकारी के हस्ताक्षर और स्टाम्प  
Signature and office stamp of the licensing  
authority

1) 03/01/2007 31/12/2007 Sd/  
Vinod Kumar

2) 21/01/2008 31/12/2010 Sd/-

3) 01/12/2010 31/12/2013 Sd/-  
A.K. Srivastava

4) 07/01/2014 31/12/2016 Sd/-

For Jt. Chief Controller of Explosives  
Faridabad

5) 07/11/2016 31/12/2019 Sd/-  
R.P. Singh  
Jt. Chief Controller of Explosives  
Faridabad

6) 13/12/2018 31/12/2024 R.N. Meena  
Jt. Chief Controller of Explosives  
Faridabad

संयुक्त प्रमुख विस्फोटक निगरानी  
Jt. Chief Controller of Explosives  
उत्तरी अंचल, फरीदाबाद  
North Circle, Faridabad

यदि अनुमति धारक इसमें उल्लंघन विधान और शर्तों के अनुसंधान नहीं पाए जाते हैं और जिन नियमों और शर्तों के अधीन यह अनुमति प्रदत्त की गई है उसमें से किसी का उल्लंघन होने की दशा में यह अनुमति रद्द की जा सकती है और अनुमतिधारी प्रथम अपराध के लिए साधारण कारावास से, जो एक मास तक हो सकता है, या जुर्माने से, जो एक हजार रुपये तक हो सकता है, या दोनों से, और प्रत्येक पश्चात्तर्ती अपराध के लिए साधारण कारावास से जो तीन मास तक हो सकता है, या जुर्माने से, जो पांच हजार रुपये तक हो सकता है, या दोनों से, दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description given on the approved plan attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable for the first offence with simple imprisonment which may be extend to one month, or with fine which may extend to one thousand rupees, or with both and for every subsequent offence with simple imprisonment which may extend to three months, or with fine which may extend to five thousand rupees or with both.



भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

Petroleum & Explosives Safety Organisation (PESO)

हॉल संख्या 502 एवं 507, लेवल-5, ब्लॉक II, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4

फरीदाबाद- 121001

Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,

Faridabad - 121001

E-mail: jccfaridabad@explosives.gov.in

Phone/Fax No: 0129 - 2410734, 2410732

संख्या /No: PIHQ/HN/15/534 (P3090)

दिनांक /Dated: 19/12/2019

सेवा में /To,

M/s. Indian Oil Corporation Limited,  
Indian Oil Corporation Ltd., Engg. Services Depart.,  
Panipat Refinery, Haryana-132140,  
Panipat,  
Panipat,  
Taluka: Panipat,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

26 DEC 2019

विषय /Sub:

Plot No. Mutation Nos. 1617, 457/503, 1897 (New Acquired Land), Battery Area, Panipat Refinery, Baholi, Taluka: Madhlouda, District: PANIPAT, State: Haryana, PIN: 132140 में स्थित विद्यमान पेट्रोलियम वर्ग A,B,C अधिष्ठापन में अनुमति सं PIHQ/HN/15/534 (P3090) के नवीकरण के संबंध में।  
Existing Petroleum Class A,B,C Installation at Plot No. Mutation Nos. 1617, 457/503, 1897 (New Acquired Land), Battery Area, Panipat Refinery, Baholi, Taluka: Madhlouda, District: PANIPAT, State: Haryana, PIN: 132140 - Licence No. PIHQ/HN/15/534 (P3090) - Renewal regarding

महोदय /Sir  
(s),

कृपया आपके पत्र क्रमांक OIN392697 दिनांक 23/11/2019 का अवलोकन करें।  
Please refer to your letter No. OIN392697, dated 23/11/2019

अनुमति संख्या PIHQ/HN/15/534 (P3090) दिनांक 09/02/2017 को दिनांक 31/12/2024 तक नवीकृत कर इस पत्र के साथ अधिष्ठित की जा रही है।  
Licence No. PIHQ/HN/15/534 (P3090) dated 09/02/2017 is forwarded herewith duly renewed upto 31/12/2024.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कड़ाई से पालन करें। अनुमति के नवीकरण हेतु सम्बन्धित इस्तेमाली को अनुमति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व Jt. Chief Controller of Explosives, North Circle, Faridabad कार्यालय को प्रेषित करें।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence to Jt. Chief Controller of Explosives, North Circle, Faridabad, so as to reach his office on or before the date on which Licence expires.

कृपया पावती दें।  
Please acknowledge the receipt.

भवदीय /Yours faithfully

((आर.एन.मीना)  
(R.N.Meena))

संयुक्त मुख्य विस्फोटक नियंत्रक  
Jt. Chief Controller of Explosives  
फरीदाबाद/Faridabad

(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट <http://peso.gov.in> देखें।  
(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)

फॉर्म XV  
(प्रथम अनुसूची का अनुच्छेद 6 देखिए)  
FORM XV  
(see Article 6 of the First Schedule)

अधिष्ठापनों में पेट्रोलियम के आवात और भंडारण के लिए अनुमति  
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

अनुमति सं. (Licence No.): PHQ/HN/15/534(P3090)

फीस स्तर (Fee Rs.) 150000/- per year

M/s. Indian Oil Corporation Limited, Indian Oil Corporation Ltd., Engg. Services Depart, Panipat Refinery, Haryana-132140, Panipat, Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, PIN: 132140 को केवल इससे तथा विनिर्दिष्ट वर्ग और मात्राओं में पेट्रोलियम 2040306.00 KL आवात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या PHQ/HN/15/534(P3090) तारीख 05/05/2017 जो कि इससे उपाबंध है, में दिखाए गए स्थान पर भंडारण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों का उसके अधीन बनाए गए नियमों तथा इस अनुमति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुमति अनुदान की जाती है।

Licence is hereby granted to M/s. Indian Oil Corporation Limited, Indian Oil Corporation Ltd., Engg. Services Depart, Panipat Refinery, Haryana-132140, Panipat, Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana, PIN: 132140 valid only for the importation and storage of 2040306.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No PHQ/HN/15/534(P3090) dated 05/05/2017 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence

यह अनुमति 31st day of December 2024 तक प्रवृत्त रहेगी।  
The Licence shall remain in force till the 31st day of December 2024

पेट्रोलियम का विवरण /Description of Petroleum	अनुमति मात्रा (क्विलीलीटरों में) /Quantity licenced in KL
वर्ग A प्रयुज पेट्रोलियम /Petroleum Class A in bulk	1020970.00 KL
वर्ग A प्रयुज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
वर्ग B प्रयुज पेट्रोलियम /Petroleum Class B in bulk	669436.00 KL
वर्ग B प्रयुज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
वर्ग C प्रयुज पेट्रोलियम /Petroleum Class C in bulk	349900.00 KL
वर्ग C प्रयुज पेट्रोलियम से भिन्न /Petroleum Class C, otherwise than in bulk	NIL
कुल क्षमता /Total Capacity	2040306.00 KL

November 18, 1997

  
Chief Controller of Explosives

- 1) Amendment dated - 22/08/2005
- 2) Amendment dated - 10/04/2006
- 3) Amendment dated - 26/05/2006
- 4) Amendment dated - 26/03/2007
- 5) Amendment dated - 17/07/2008
- 6) Amendment dated - 21/04/2009
- 7) Amendment dated - 06/05/2009
- 8) Amendment dated - 11/09/2009
- 9) Amendment dated - 30/09/2009
- 10) Amendment dated - 28/02/2011
- 11) Amendment dated - 09/02/2017

अनुमति परिसरों का विवरण और अवस्थान  
DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुमति परिसर जिसकी किन्नास सीमाएं अन्य विनिर्दिष्टा संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: Mutation Nos. 1617, 457/503, 1897 (New Acquired Land), Battery Area, Panipat Refinery, Baholi, Taluka: Madhlouda, District: PANIPAT, State: Haryana, PIN: 132140 स्थान पर अवस्थित है तथा उसमें निम्नलिखित 63 Above Ground tank(s) for CLASS A, 37 Above Ground tank(s) for CLASS B, 36 Above Ground tank(s) for CLASS C, सम्मिलित हैं।

The licensed premises, the layout, boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: Mutation Nos. 1617, 457/503, 1897 (New Acquired Land), Battery Area, Panipat Refinery, Baholi, Taluka: Madhlouda, District: PANIPAT, State: Haryana, PIN: 132140 and consists of 63 Above Ground tank(s) for CLASS A, 37 Above Ground tank(s) for CLASS B, 36 Above Ground tank(s) for CLASS C, together with connected facilities.

अनुज्ञापित संख्या (Licence No.) PHQ/HN/15/534 (P3090)

**नवीनीकरण के पृष्ठों के लिए स्थान**  
**SPACE FOR ENDORSEMENT OF RENEWALS**

पेट्रोलियम अधिनियम, 1934 के उपबन्धों या उनके अधीन बनाए गए शिबनों या इस अनुज्ञापित की शर्तों का उल्लंघन न होने की दशा में यह अनुज्ञापित फिर से बिना किसी छूट के दस वर्षों तक नवीकृत की जा सकती है।  
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence.

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry of license	अनुज्ञापित प्राधिकारी के हस्ताक्षर और स्टांप Signature and office stamp of the licensing authority.
04/03/2005	31/12/2005	Sd/- PESO ADMIN
01/12/2005	31/12/2006	Sd/-
03/01/2007	31/12/2007	Sd/- Vhod Kumar
21/01/2008	31/12/2010	Sd/-
17/02/2011	31/12/2013	Sd/- A. K. Srivastava
15/01/2014	31/12/2016	Sd/-  For Jt. Chief Controller of Explosives Fardabad
15/11/2018	31/12/2019	Sd/- R.P. Singh Jt. Chief Controller of Explosives Fardabad 
15/12/2019	31/12/2024	R.N.Meena Jt. Chief Controller of Explosives Fardabad

संयुक्त मुख्य विस्फोटक नियंत्रक  
Jt. Chief Controller of Explosives  
उत्तर प्रदेश सरकार, फरिदाबाद

यदि अनुज्ञापित धरिदार इसमें उपाबद्ध विवरण और शर्तों के अनुरूप नहीं पाए जाते हैं और जिन्हें नियमों और शर्तों के अधीन यह अनुज्ञापित मंजूर की गई है, अथवा यदि किसी का उल्लंघन होने की दशा में यह अनुज्ञापित रद्द की जा सकती है और अनुज्ञापित धरिदार के लिए साधारण कारावास में, जो एक मास तक हो सकता है, या जुर्माने में, जो एक हजार रुपये तक हो सकता है, या दोनों में, और इतनेक पश्चात्तर्फी अपराध के लिए साधारण कारावास में जो तीन मास तक हो सकता है, या जुर्माने में, जो पांच हजार रुपये तक हो सकता है, या दोनों में, दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description given on the approved plan attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable for the first offence with simple imprisonment which may be extend to one month, or with fine which may extend to one thousand rupees, or with both and for every subsequent offence with simple imprisonment which may extend to three months, or with fine which may extend to five thousand rupees or with both.





GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE & INDUSTRY  
PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION (PESO)  
NORTH CIRCLE

Tel:2410734,2410732  
Fax:(129)-2410733  
Email:jtecefaridabad@explosives.gov.in

Hall No. 502 & 507, Level 5, Block B  
Old CGO Complex, NH-4  
Faridabad -121001

Lic. No. :S/HO/HN/03/69 (S4221)  
(Old No :BV(NC)S-119/HN)

Date :31 Mar,2017

To,  
M/s. Indian Oil Corporation Limited,  
Chief Engineering Services Manager, Deptt.  
Engineering Services, Panipat Refinery,  
Panipat-132140,  
District : PANIPAT  
State : Haryana

5 APR 2017

Sub:- Storage of HYDROGEN, gas in pressure vessels at Village BOHLI- District : PANIPAT , State : Haryana -LIC. No. S/HO/HN/03/69 (S4221) Renewal Granted under SMPV(U) Rules, 2016

Sir/s,

Reference: Your letter No.nil dated: 3/3/2017

Licence Number: S/HO/HN/03/69 is renewed and is valid upto to 30/9/2021 is forwarded herewith.

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2021 . The renewal application along with fees, Original licence and other documents shall reach in the Office of North Circle, Faridabad latest by 30 September, 2021 positively to avoid late fees.

Balance of fee paid of Rs.490 is standing in your credit which may please be utilised in your further renewals by quoting this reference. Please acknowledge the receipt of the licence.

Yours faithfully,

(K. P. SHARMA )

Controller of Explosives  
for Jt. Chief Controller of Explosives North Circle  
North Circle , Faridabad

(For more information regarding status,fees and other details please visit our website <http://peso.gov.in>)

**Form LS-1A**

(See Rules 50, 51, 54 and 55)

**Licence to Store Compressed gas in pressure vessel or vessels**

Licence Number : S/HO/HN/03/69 (S4221)

Fee Rs : 50000/-

Licence is hereby granted to M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt Engineering Services, Panipat Refinery Panipat-132140 District :- PANIPAT State :- Haryana valid only for the storage of compressed gas in 4 Number/s. of pressure vessel/s as indicated below in the licensed premises described below and shown in the plan No. S/HO/HN/03/69 dtd 15 September, 1998 subject to the provisions of the Indian Explosives Act, 1884 ( 4 of 1884) and the rules made thereunder and to the further conditions of this licence.

Vessel No .	Name of Gas	Gas- State	Volume in Cubic M	Max Pressure(kg/cm 2)	Quantity Granted in kgs(Liquified gases)
42-VV-001-B	HYDROGEN	Gaseous	194	45	0
42-VV-001-C	HYDROGEN	Gaseous	194	45	0
42-VV-001-D	HYDROGEN	Gaseous	194	45	0
42-VV-001A	HYDROGEN	Gaseous	194	45	0
	Total Water capacity		776		

The licence shall remain in force upto 31<sup>st</sup> day of March , 1999.

Sd/-

The 15 September, 1998.

Chief Controller of Explosives

**DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No S/HO/HN/03/69 dated 15 September, 1998 and consists of 4 vessel(s) for storage of :

a) Flammable/Corrosive/Toxic Gases :HYDROGEN,

b) Non-toxic Gases :

and situated at Plot No: Name of Street: Village/Town : BOHLI Police Station : BOHLI District : PANIPAT State : Haryana

**SPACE FOR ENDORSEMENT OF RENEWALS**

	Date of renewal	Date of expiry	Signature and stamp of the licensing authority
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile pressure Vessels (Unfired) Rules, 2016 framed thereunder or of the conditions of the licence	31/3/2017 15/04/2014 08/08/2011 16/04/2008 30/01/2008	30/09/2021 31/03/2017 31/03/2014 31/03/2011 31/03/2008	 Jt. Chief Controller of Explosives, North Circle, Faridabad .

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and for contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable under the Act.

2-4221

भारत सरकार सेवाथ

R-222

O.I.G.S.



22  
222

11/15

सेवा में,  
M/S Ioc limited

Chief Engineering Services Manager, Ref.  
Engineering Services, Panipat Refinery,  
Panipat - 132140 (H.R.)

प्रेषक

कायालय संयुक्त मुख्य विस्फोटक नियन्त्रक  
Office : Joint Chief Controller of Explosives  
उत्तरी अंचल, हाल संख्या 502 एवं 507  
North Circle, Hall No. 502 & 507  
लेवल 5, ब्लॉक II ओल्ड सीओ ज़ीओ ओओ कामपलैक्स,  
Level 5, Block II, Old C.G.O. Complex  
एनओएचओ 4, फरीदाबाद / NH-4, Faridabad 121 001

भारत सरकार  
कार्यालय संयुक्त मुख्य विस्फोटक नियंत्रक,  
उत्तरांचल फरीदाबाद

पत्रांक -एस- 4223

दिनांक

सेवा में, मेरे आइड और सीओ लिफ्ट,  
पागीपत्र

= 6 JUN 2017.

विषय- अनुज्ञप्ति संख्या एस-

के नवीनीकरण के सम्बन्ध में ।

महोदय,

आपके पत्र दिनांक  
किया जा रहा है ।

के संदर्भ में इस पत्र के साथ अनुज्ञप्ति का नवीनीकरण करके सलंगन कर अर्पित

सलंगनक -संपरोक्तानुसार

महोदय  
कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
उत्तरी अंचल फरीदाबाद





Government of India  
Ministry of Commerce & Industry  
Petroleum & Explosives Safety Organisation (PESO)  
Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,  
Faridabad - 121001

E-mail : [jtccefaridabad@explosives.gov.in](mailto:jtccefaridabad@explosives.gov.in)

Phone/Fax No : 0129 - 2410734, 2410732

Dated : 31/05/2017

No : S/HO/HN/03/70(S4223)

To,

M/s. Indian Oil Corporation Limited,  
Chief Engineering Services Manager, Deptt,  
Engineering Services, Panipat Refinery,  
Panipat,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

Sub : Storage of LPG gas in pressure vessels at Plot No. /Mutation No. 1617 ,457-503 ,1897, Delhi-Amritsar (GT) Road to Assandh Village Link Road, Baholi, District: PANIPAT, State: Haryana, PIN: 999999 - Licence No : S/HO/HN/03/70 grant in form LS-1A of SMPV(U) Rules, 2016-Renewal of Licence Regarding

Sir(s),

Please refer to your application No **nil** dated 06/05/2017 .

Licence Number: **S/HO/HN/03/70** is renewed and is valid upto **30th September 2021** is forwarded herewith.

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2021. The renewal application along with fees, Original licence and other documents shall reach in the Office of **The Jt. Chief Controller of Explosives, North Circle, Faridabad**, latest by 30th September, 2021 to avoid late fee.

Please acknowledge the receipt of the licence.

Yours faithfully,

(K. P. SHARMA)  
Controller of Explosives  
For Jt. Chief Controller of Explosives  
Faridabad

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)

**FORM LS-1A**

(See Rules 50, 51, 54 and 55)

**Licence to Store Compressed gas in pressure vessel or vessels.**

Licence No. : S/HO/HN/03/70(S4223)

Fee Rs. 50000/- per year

Licence is hereby granted to M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, Panipat, District: PANIPAT, State: Haryana PIN: 132140 valid only for the storage of compressed gas in 4 Number(s) of pressure vessels as indicated below in the licence and premises described below and shown in the plan No.S/HO/HN/03/70(S4223) dated 06/12/2012 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

The Licence shall remain in force till the 30th September 2021.

Vessel No.	Name of Gas	State of Gas	Water Capacity in cubic meter	Max. working Pre.(kg/cm <sup>2</sup> )	Quantity Granted in kgs (Liquified gas)
T.01/48-TT-TS-008A	LPG	Liquified	1586.25	14.5	750637
T.02/48-TT-TS-008B	LPG	Liquified	1586.25	14.5	745934
T.03/48-TT-TS-008C	LPG	Liquified	1589.25	14.5	747345
T.04/48-TT-TS-008D	LPG	Liquified	1586.25	14.5	745934
<b>Total Water capacity</b>			<b>6358.00</b>		

December 10, 1997

Chief Controller of Explosives

- 1) Amendment dated - 03/03/2011
- 2) Amendment dated - 06/12/2012

**DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. S/HO/HN/03/70 dated 06/12/2012 are situated at Baholi and consists of 4 Number(s) vessel(s) (out of 0 vessel(s), one vessel each for of largest capacity will be kept empty for emergency) for storage of :

a) Flammable/Corrosive/Toxic Gases : LPG

and is situated at Plot No. : /Mutation No. 1617, 457-503, 1897 Village/Town : Baholi Police Station : Madhloula District : PANIPAT, State: Haryana.

**SPACE FOR ENDORSEMENT OF RENEWALS**

	Date of Renewal	Date of Expiry	Signature and stamp of the licensing authority
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Unfired) Rules, 2016, framed thereunder or of the conditions of the licence.	31/05/2017	30/09/2021	 <b>K. P. SHARMA</b> <b>CE</b> <b>For Jt. Chief Controller of Explosives</b> <b>Faridabad</b>

This licence is liable to be cancelled if the licenced premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

S. 4223

भारत सरकार सेवार्थ  
O.I.G.S.

Regd



RH2706303041N



सेवा में,

M/S Jee Limited,  
Chief Engineering Services Manager (H),  
Panipat Refinery, Panipat - 132140

(HR)

प्रेषक :

कार्यालय संयुक्त मुख्य विस्फोटक नियन्त्रक

Office : Joint Chief Controller of Explosives

उत्तरी अंचल, हाल संख्या 502 एवं 507

North Circle, Hall No. 502 & 507

लेवल 5, ब्लॉक II ओल्ड सीओ जीओ कामपलेक्स,

Level 5, Block II, Old C.G.O. Complex

एन0एच0 4, फरीदाबाद / NH-4, Faridabad 121 001

RE FARIDABAD HO (121001)  
B RH270630304IN  
Counter No:2,UP-Code:GHER  
#####  
PrePS:Rs22.00  
#####  
Wt:18grams,06/06/2017 13:57  
To:Panipat Refinery S.O(132140)







Government of India  
Ministry of Commerce & Industry  
Petroleum & Explosives Safety Organisation (PESO)  
Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,  
Faridabad - 121001

E-mail : [jtccefaridabad@explosives.gov.in](mailto:jtccefaridabad@explosives.gov.in)

Phone/Fax No : 0129 - 2410734, 2410732

Dated : 26/05/2017

31 MAY 2017

No : S/HO/HN/03/71(S4226)

To,

M/s. Indian Oil Corporation Limited.,  
Chief Engineering Services Manager, Deptt.,  
Engineering Services, IOCL,  
Panipat Refinery,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

Sub : Storage of LPG gas in pressure vessels at Plot No. /Mutation No. 1617 ,457-503 ,1897, Off De' i-  
Amritsar (GTRoad) to Assandh Village Link Road, Baholi / Tehsil Madloda, District: PANIPAT, State:  
Haryana, PIN: 999999 - Licence No : S/HO/HN/03/71 grant in form LS-1A of SMPV(U) Rules, 2016-  
Renewal of Licence Regarding

Sir(s),

Please refer to your application No. nil dated 15/05/2017 .

Licence Number: S/HO/HN/03/71 is renewed and is valid upto 30th September 2021 is forwarded herewith.

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2021. The renewal application along with fees, Original licence and other documents shall reach in the Office of The Jt. Chief Controller of Explosives, North Circle, Faridabad, latest by 30th September, 2021 to avoid late fee.

Please acknowledge the receipt of the licence.

Yours faithfully,

an

(K. P. SHARMA)  
Controller of Explosives  
For Jt. Chief Controller of Explosives  
Faridabad

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)



## FORM LS-1A

(See Rules 50, 51, 54 and 55)

Licence to Store Compressed gas in pressure vessel or vessels.

Licence No : S/HO/HN/03/71(S4226)

Fee Rs. 50000/- per year

Licence is hereby granted to M/s. Indian Oil Corporation Limited., Chief Engineering Services Manager, Deptt. Engineering Services, IOCL, Panipat Refinery, District: PANIPAT, State: Haryana PIN: 132140 valid only for the storage of compressed gas in 3 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No.S/HO/HN/03/71(S4226) dated 10/11/2015 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

The Licence shall remain in force till the 30th September 2021.

Vessel No.	Name of Gas	State of Gas	Water Capacity in cubic meter	Max. working Pre.(kg/cm <sup>2</sup> )	Quantity Granted in kgs (Liquified gas)
48-TT-TS-008E	LPG	Liquified	1596.25	14.5	750637
48-TT-TS-008F	LPG	Liquified	1596.25	14.5	750637
48-TT-TS-008G	LPG	Liquified	1596.25	14.5	750637
Total Water capacity			4788.75		

December 9, 1997

Chief Controller of Explosives

- 1). Amendment dated - 03/03/2011
- 2). Amendment dated - 06/12/2012

## DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. S/HO/HN/03/71 dated 10/11/2015 are situated at Baholi / Tehsil Madloda and consists of 3 Number(s) vessel(s) (out of 0 vessel(s), one vessel each for of largest capacity will be kept empty for emergency) for storage of :

a) Flammable/Corrosive/Toxic Gases : LPG

and is situated at Plot No : /Mutation No. 1617, 457-503, 1897 Village/Town : Baholi / Tehsil Madloda Police Station : Madloda District : PANIPAT, State: Haryana

## SPACE FOR ENDORSEMENT OF RENEWALS

	Date of Renewal	Date of Expiry	Signature and stamp of the licensing authority
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Unfired) Rules, 2016, framed thereunder or of the conditions of the licence.	26/05/2017	30/09/2021	 <b>K. P. SHARMA</b> <b>CE</b> <b>For Jt. Chief Controller of Explosives</b> <b>Faridabad</b>

This licence is liable to be cancelled if the licenced premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

1226

भारत सरकार सेवार्थ

Road

O.I.G.S.



सेवा में,



प्रेषक  
कार्यालय संयुक्त मुख्य विस्फोटक नियन्त्रक

Office : Joint Chief Controller of Explosives

उत्तरी अंचल, हाल संख्या 502 एवं 507

North Circle, Hall No 502 & 507

सेवल 5, ब्लाक II ओल्ड सी० जी० ओ० कामपलवास,

Level 5, Block II, Old C.G.O. Complex

एन०एच० 4, फरीदाबाद / NH-4, Faridabad 121 001

Panipat - 132140 (MR)

Chief Engineering Services,  
Panipat Refinery





भारत सरकार/Government of India  
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)/Petroleum & Explosives Safety Organisation (PESO)  
हॉल संख्या 502 एवं 507, लेवल-5, ब्लॉक II, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4  
फरीदाबाद- 121001  
Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,  
Faridabad - 121001

ई-मेल/E-mail : [jtccefaridabad@explosives.gov.in](mailto:jtccefaridabad@explosives.gov.in)

फोन / फैक्स नंबर/Phone/Fax No : 0129 - 2410734,  
2410732

दिनांक/Dated : 25/05/2018

अनुमति सं./No : S/HO/HN/03/81(S4246)

सेवा में/To,

M/s. Indian Oil Corporation Limited,  
Chief Engineering Services Manager, Deptt.  
Engineering Services, Panipat Refinery,  
Panipat,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

विषय :/Sub : Plot No, NA, BATHOLI, BATHOLI, District: PANIPAT, State: Haryana, PIN: 999999 स्थित PROPYLENE, गैस के संपीड़ित पात्र / पात्रों में भंडारण के लिए स्थिर एवं गतिशील दाब पात्र (अन्यथा) नियम, 2016 के अर्धीन स्वीकृत अनुमति संख्या S/HO/HN/03/81 के नवीनीकरण संबंध में /Storage of NPROPYLENE gas in pressure vessels at Plot No, NA, BATHOLI, BATHOLI, District: PANIPAT, State: Haryana, PIN: 999999 - Licence No : S/HO/HN/03/81 grant in form LS-1A of SMPV(U) Rules, 2016- Renewal of Licence Regarding

महोदय/Sir(s),

कृपया आपके दिनांक : 08/05/2018 के पत्र संख्या : - का संदर्भ ग्रहण करें ।/Please refer to your application No.- dated 08/05/2018 .

अनुमति संख्या : S/HO/HN/03/81 का नवीनीकरण दिनांक 30th सितंबर 2022 तक कर इसके साथ अव्यक्ति की जा रही है ।  
Licence Number: S/HO/HN/03/81 is renewed and is valid upto 30th September 2022 is forwarded herewith.

दिनांक 30/09/2022 से आगे अनुमति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाय । विलंब शुल्क से बचने हेतु शुल्क के साथ मूल अनुमति तथा अन्य दस्तावेज अधिकतम दिनांक : 30 सितंबर, 2022 तक The Jt. Chief Controller of Explosives, North Circle, Faridabad में जरूर पहुंच जाने चाहिए ।

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2022. The renewal application along with fees, Original licence and other documents shall reach in the Office of The Jt. Chief Controller of Explosives, North Circle, Faridabad, latest by 30th September, 2022 to avoid late fee.

कृपया अनुमति प्राप्ति की पावती दें ।/Please acknowledge the receipt of the licence

Note : Your Balance Amount with the Organisation is Rs. 690, which will be used for processing of the same Licence in future.

भवदीय/Yours faithfully,

((आर.एन.मीना)  
(R.N.Meena))

संयुक्त मुख्य विस्फोटक नियंत्रक  
Jt. Chief Controller of Explosives  
फरीदाबाद/Faridabad

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)





FORM LS-1A/प्रप - एनएस-1क  
(See Rules 50, 51, 54 and 55) (नियम 50, 51, 54 और 55 देखें)  
Licence to Store Compressed gas in pressure vessel or vessels  
गैस पात्र या पात्रों में संग्रहित गैस भण्डारण के लिए अनुमति

अनुमति No. SIHQ/HN/03/81(S4246)

कीमत (Fees) Rs. 5000/- per year/प्रति वर्ष

Licence is hereby granted to M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, Panipat, District: PANIPAT, State: Haryana PIN: 132140 valid only for the storage of compressed gas in 2 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No. SIHQ/HN/03/81(S4246) dated 25/05/2018 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

श्री M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, Panipat, District: PANIPAT, State: Haryana PIN: 132140 को यहाँ प्रमाणित अनुमति परिसरों में और रेखांकन संख्या SIHQ/HN/03/81(S4246) dated 25/05/2018 में भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4)

और उसके अधीन बनाए गए नियमों तथा इस अनुमति की अन्य शर्तों पर 2 टाइम पात्र / पात्रों में संग्रहित गैस के भण्डारण के लिए अनुमति प्रदत्त की जाती है।

यह अनुमति 30 सितंबर 2022 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the 30th September 2022.

Vessel No./वैश्ल नंबर	Name of Gas/गैस का नाम	State of Gas/गैस की स्थिति	Water Capacity in cubic meter/जल क्षमता (घ.मी.)	Max. working Pre. (kg/cm <sup>2</sup> )/अधिकतम वर्किंग प्रेशर	Quantity Granted in kgs/Liquidified gas/लिक्विफाइड गैस में जड़ी मात्रा (किग्रा/लिक्विफाइड गैस)
85-TT-TS-001A	PROPYLENE	Liquidified	805.0023.1		352000
85-TT-TS-001B	PROPYLENE	Liquidified	805.0023.1		352000
Total Water capacity			1610.00		

November 10, 2020

Chief Controller of Explosives

1). Amendment dated - 09/12/2012

DESCRIPTION AND LOCATION OF THE LICENSED PREMISES/अनुमति परिसर का विवरण और अवस्थिति

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. SIHQ/HN/03/81 dated 25/05/2018 are situated at BATHOLI and consists of 2 Number(s) vessel(s) for storage of compressed gas, प्रमाणित परिसर, प्रमाणित सीमा और अन्य विवरण जो संलग्न अनुमति परिसर में SIHQ/HN/03/81 दिनांक 25/05/2018 में दर्शाए गए हैं BATHOLI पर स्थित हैं और इसमें 2 वैश्ल शामिल हैं।

a) Flammable/Corrosive/Toxic Gases/ज्वलनशील / संक्षारक / विषैली गैसें: PROPYLENE

b) Non-Toxic Gases/अविषैली गैसें

and is situated at Plot No: NA Village/Town: BATHOLI Police Station: BATHOLI District: PANIPAT, State: Haryana  
आपत्त (शुद्ध) Plot No: NA गांव का नाम BATHOLI पुलिस थाना BATHOLI जिला PANIPAT राज्य Haryana में स्थित है।

SPACE FOR ENDORSEMENT OF RENEWALS/अनुमति के प्रमाणन के लिए स्थान

	Date of Renewal/अनुमति की तारीख	Date of Expiry/अनुमति की समाप्ति की तारीख	Signature and stamp of the licensing authority/अनुमति प्राप्ति के द्वारा और कर्मचारी की मुद्रा
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Unfired) Rules, 2015 framed thereunder or of the conditions of the licence/अनुमति, भारतीय विस्फोटक अधिनियम, 1884 या उसके अधीन अर्थात् बनाए गए नियम एवं शर्तों के अभाव में (अनुमति) नियम, 2015 या इस अनुमति की शर्तों का उल्लंघन न होने की दशा में, बीस में बिना किसी छूट के तीन वर्षों तक नवीकरण की जाएगी।	25/05/2018	30/09/2022	 <b>R.N. Meena</b> <b>JCC</b> <b>For Jt. Chief Controller of Explosives</b> <b>Faridabad</b>

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both, यदि विवरण के अन्वये अनुमति परिसर इसमें उल्लेखित विवरण और शर्तों के अनुषंग नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुमति प्रदत्त की गई है, उनमें से किसी का उल्लंघन होता है तो उस दशा में यह अनुमति रद्द की जा सकती है और अनुमति का धारक अल्पतम से, जिसकी अवधि दो वर्षों तक की हो सकती है, जो तीन हजार रुपये तक का हो सकता है, या दोनों से दण्डनीय भी होता है।



भारत सरकार/Government of India  
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो) /Petroleum & Explosives Safety Organisation (PESO)  
एलन संख्या 502 एवं 507, लेवल-5, ब्लॉक B, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4  
फरीदाबाद- 121001  
Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,  
Faridabad - 121001

ई-मेल/E-mail : jtccefaridabad@explosives.gov.in

फोन / फैक्स नंबर/Phone/Fax No : 0129 - 2410734,  
2410732

दिनांक/Dated : 25/05/2018

अनुमति सं./No : S/HO/HN/03/192(S24863)

सेवा में/To,

M/s. Indian Oil Corporation Limited,  
Chief Engineering Services Manager, Deptt,  
Engineering Services, Panipat Refinery,  
PANIPAT,  
District: PANIPAT,  
State: Haryana  
PIN: 132140

विषय :/Sub: Plot No. NA, Panipat Refinery, PANIPAT, District: PANIPAT, State: Haryana, PIN: 999999 स्थित NITROGEN, गैस के  
संचयित पात्र / पात्रों में भंडारण के लिए स्थिर एवं गतिशील दाब पात्र (अज्वलित) नियम, 2016 के अधीन स्वीकृत अनुमति संख्या  
S/HO/HN/03/192 के नवीनीकरण संबंध में /Storage of NNITROGEN gas in pressure vessels at Plot No. NA, Panipat  
Refinery, PANIPAT, District: PANIPAT, State: Haryana, PIN: 999999 - Licence No : S/HO/HN/03/192 grant in form LS-1A  
of SMPV(U) Rules, 2016-Renewal of Licence Regarding

महोदय/Sir(s),

कृपया आपके दिनांक : 08/05/2018 के पत्र संख्या - का संदर्भ ग्रहण करें। /Please refer to your application No. - dated 08/05/2018 .

अनुमति संख्या : S/HO/HN/03/192 का नवीनीकरण दिनांक 30th सितंबर 2022 तक कर इसके साथ अद्योतित की जा रही है।

Licence Number: S/HO/HN/03/192 is renewed and is valid upto 30th September 2022 is forwarded herewith.

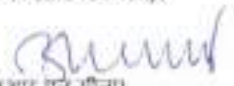
दिनांक 30/09/2022 से आने अनुमति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाए। विलंब शुल्क से  
बचने हेतु शुल्क के साथ मूल अनुमति तथा अन्य दस्तावेज अधिक्तरा दिनांक : 30 सितंबर, 2022 तक The Jt. Chief Controller of  
Explosives, North Circle, Faridabad में जकर पहुंच जाने चाहिए।

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2022. The  
renewal application along with fees, Original licence and other documents shall reach in the Office of The Jt. Chief Controller  
of Explosives, North Circle, Faridabad, latest by 30th September, 2022 to avoid late fee.

कृपया अनुमति प्राप्ति की पाबंदी दें। /Please acknowledge the receipt of the licence.

Note : Your Balance Amount with the Organisation is Rs. 690, which will be used for processing of the same Licence in future.

आपकी/Your faithfully,

  
(आर.एन.मीना)  
(R.N.Meena)  
संयुक्त मुख्य विस्फोटक नियंत्रक  
Jt. Chief Controller of Explosives  
फरीदाबाद/Faridabad

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)



FORM IS-1A/एनए - एनएस-1क

(See Rules 50, 51, 54 and 55) (नियम 50, 51, 54 और 55 देखें)

Licence to Store Compressed gas in pressure vessel or vessels

दाब पात्र या पात्रों में संपीड़ित गैस संग्रहण के लिए अनुमति

अनुमति सं./Licence No.: S/HO/HN/03/192(S24863)

फीस/चार्ज/Fee Rs. 50000/- per year/प्रति वर्ष

Licence is hereby granted to M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, PANIPAT, District: PANIPAT, State: Haryana PIN: 132140 valid only for the storage of compressed gas in 3 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No. S/HO/HN/03/192(S24863) dated 25/05/2018 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

श्री M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, PANIPAT, District: PANIPAT, State: Haryana PIN: 132140 को सीधे वर्णित अनुमति परिसरों में और रेखांकन संख्या S/HO/HN/03/192(S24863) dated 25/05/2018 में भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों तथा इस अनुमति की अन्य शर्तों पर 3 दाब पात्र / पात्रों में संपीड़ित गैस के संग्रहण के लिए अनुमति मंजूर की जाती है।

यह अनुमति 30 सितंबर 2022 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the 30th September 2022.

Vessel No./पात्र संख्या	Name of Gas/गैस का नाम	State of Gas/गैस की स्थिति	Water Capacity in cubic meter/जल क्षमता (घ.मी.)	Max. working Pre. (kg/cm <sup>2</sup> )/अधिकतम दबाव (किग्रा/से.मी.)	Quantity Granted in kgs/Liquidified gas/लिक्विफाइड गैस में जारी मात्रा (लिक्विफाइड गैस में)
37-V-611 A	NITROGEN	Gaseous	200.0045		0
37-V-611 B	NITROGEN	Gaseous	200.0045		0
37-V-611 C	NITROGEN	Gaseous	200.0045		0
Total Water capacity			600.00		

April 27, 2006

For Chief Controller of Explosives  
HQ. Nagpur  
कृते मुख्य विस्फोटक नियंत्रक  
नागपुर

1). Amendment dated - 06/12/2012

## DESCRIPTION AND LOCATION OF THE LICENSED PREMISES/अनुमति परिसर का विवरण और अवस्थिति

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. S/HO/HN/03/192 dated 25/05/2018 are situated at PANIPAT and consists of 3 Number(s) vessel(s) for storage of compressed gas in PANIPAT पर स्थित है और इसमें 3 वाहन सम्मिलित हैं।

a) Flammable/Corrosive/Toxic Gases /ज्वलनशील / संक्षारक / विषैली गैसें

b) Non-Toxic Gases /अविषैली गैसें NITROGEN

and is situated at Plot No.: NA Village/Town: PANIPAT Police Station: Panipat District: PANIPAT, State: Haryana

जगह संख्या Plot No.: NA गांव का नाम: PANIPAT पुलिस थाना Panipat जिला PANIPAT राज्य Haryana में स्थित है।

## SPACE FOR ENDORSEMENT OF RENEWALS/नवीकरण के पृष्ठान्त के लिए स्थान

	Date of Renewal/नवीकरण की तारीख	Date of Expiry/अनुमति की समाप्ति की तारीख	Signature and stamp of the licensing authority/अनुमति प्राधिकारी के हस्ताक्षर और सर्पोलप की मुद्रा
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Unfired) Rules, 2016, framed thereunder or of the conditions of the licence./अनुमति, भारतीय विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए नियमों एवं शर्तों के तहत (अन्यथा) नियम, 2016 या इस अनुमति की शर्तों का उल्लंघन न होने की दशा में, तीन वर्ष तक नवीकरणीय होगी।	25/05/2018	30/09/2022	 R.N. Meena JCCE For Jt. Chief Controller of Explosives Fardabad

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both, यदि निरीक्षण के समय अनुमति परिसर इससे उपाबंध विवरण और शर्तों के अनुसार





भारत सरकार/Government of India  
 वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
 पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो) (Petroleum & Explosives Safety Organisation (PESO)  
 हॉल संख्या 502 एवं 507, लेवल-5, ब्लॉक B, पुराना सी.जी.ओ. कॉम्प्लेक्स, एन.एच.4  
 फरीदाबाद- 121001  
 Hall No. 502 & 507, Level 5, Block B, Old CGO Complex, NH-4,  
 Faridabad - 121001

ई-मेल/E-mail : jtccefaridabad@explosives.gov.in

फोन / फैक्स नंबर./Phone/Fax No : 0129 - 2410734,  
 2410732

दिनांक/Dated : 16/05/2018

[ 4 JUN 2018

अनुमति सं./No : S/HO/HN/03/211(S31340)

सेवा में/To,

M/s. Indian Oil Corporation Limited,  
 Chief Engineering Services Manager, Deptt.,  
 Engineering Services, Panipat Refinery,  
 Panipat,  
 Taluka: Panipat,  
 District: PANIPAT,  
 State: Haryana  
 PIN: 132140

विषय :/Sub : Plot No, Mutation No. 1617,457/503, Delhi- Chandigarh(G.T.Road) to Refinery, Baholi, District: PANIPAT, State: Haryana, PIN: 132140 स्थित LPG, गैस के संपीड़ित पात्र / पात्रों में भंडारण के लिए स्थिर एवं गतिशील दाब पात्र (अडवर्तिल) नियम, 2016 के अधीन स्वीकृत अनुमति संख्या S/HO/HN/03/211 के नवीनीकरण संबंध में /Storage of NLPG gas in pressure vessels at Plot No, Mutation No. 1617,457/503, Delhi- Chandigarh(G.T.Road) to Refinery, Baholi, District: PANIPAT, State: Haryana, PIN: 132140 - Licence No : S/HO/HN/03/211 grant in form LS-1A of SMPV(U) Rules, 2016-Renewal of Licence Regarding

महोदय/Sir(s),

कृपया आपके दिनांक : 08/05/2018 के पत्र संख्या : - का संदर्भ ग्रहण करें ।/Please refer to your application No.- dated 08/05/2018 :

अनुमति संख्या : S/HO/HN/03/211 का नवीकरण दिनांक 30th सितंबर 2021 तक कर इसके साथ अद्योचित की जा रही है ।  
 Licence Number: S/HO/HN/03/211 is renewed and is valid upto 30th September 2021 is forwarded herewith.

दिनांक 30/09/2021 से आगे अनुमति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाए । विलंब शुल्क से बचने हेतु शुल्क के साथ मूल अनुमति तथा अन्य दस्तावेज अधिकतम दिनांक : 30 सितंबर, 2021 तक The Jt. Chief Controller of Explosives, North Circle, Faridabad में जरूर पहुंचाने चाहिए ।  
 The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2021. The renewal application along with fees, Original licence and other documents shall reach in the Office of The Jt. Chief Controller of Explosives, North Circle, Faridabad, latest by 30th September, 2021 to avoid late fee.

कृपया अनुमति प्राप्ति की पावती दें ।/Please acknowledge the receipt of the licence.

Note : Your Balance Amount with the Organisation is Rs. 50490, which will be used for processing of the same Licence in future.

भवदीय/Yours faithfully,

((आर.एन.मीना)  
 (R.N.Meena))

संयुक्त मुख्य विस्फोटक नियंत्रक  
 Jt. Chief Controller of Explosives  
 फरीदाबाद/Faridabad

(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)





FORM LS-1A/परम - एनएस-1क

(See Rules 50, 51, 54 and 55) (नियम 50, 51, 54 और 55 देखें)

Licence to Store Compressed gas in pressure vessel or vessels  
दाब पात्र या पात्रों में संपीड़ित गैस भण्डारण के लिए अनुमति

अनुमति सं/Licence No. : S/HO/HN/03/211(531340)

फीस शुल्क/Fee Rs. 50000/- per year/प्रति वर्ष

Licence is hereby granted to M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana PIN: 132140 valid only for the storage of compressed gas in 4 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No. S/HO/HN/03/211(531340) dated 16/05/2018 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

की M/s. Indian Oil Corporation Limited, Chief Engineering Services Manager, Deptt. Engineering Services, Panipat Refinery, Panipat, Taluka: Panipat, District: PANIPAT, State: Haryana PIN: 132140 को नीचे वर्णित अनुमति परिसरों में और रेखांकन संख्या S/HO/HN/03/211(531340) dated 16/05/2018 में भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों तथा इस अनुमति की अन्य शर्तों पर 4 दाब पात्र / पात्रों में संपीड़ित गैस के भण्डारण के लिए अनुमति मंजूर की जाती है।

यह अनुमति 30 सितंबर 2021 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the 30th September 2021.

Vessel No./वैसल संख्या	Name of Gas/गैस का नाम	State of Gas/गैस की स्थिति	Water Capacity in cubic meter/जल क्षमता (घ.मी.)	Max. working Pre. (kg/cm <sup>2</sup> )/अधिकतम दबाव (किग्रा/से.मी.)	Quantity Granted in kg/Liquidified gas/किग्रा/घ.मी. में जारी मात्रा (लिक्विफाईड गैस)
87-TT-TB-010 A (110522)	LPG	Liquidified	2873.00	14.5	1200000
87-TT-TB-010 B (110523)	LPG	Liquidified	2873.00	14.5	1200000
608-PV1(Equ. 87-TT-TB-010C)	LPG	Liquidified	2873.00	9	1351028
608-PV2(Equ. 87-TT-TB-010D)	LPG	Liquidified	2873.00	9	1351028
Total Water capacity			11492.00		

November 3, 2005

Chief Controller of Explosives

1. Amendment dated - 22/03/2010
2. Amendment dated - 06/12/2012

**DESCRIPTION AND LOCATION OF THE LICENSED PREMISES/अनुमति परिसर का विवरण और अवस्थिति**

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. S/HO/HN/03/211 dated 16/05/2018 are situated at Baholi and consists of 4 Mounded Number(s) vessel(s) for storage of compressed gas in pressure vessel or vessels as indicated below in the licensed premises described below and shown in the plan No. S/HO/HN/03/211 dated 16/05/2018 में दर्शाए गए हैं Baholi पर स्थित हैं और इसमें 4 Mounded वेसल संश्लिष्ट हैं।

- a) Flammable/Corrosive/Toxic Gases /ज्वलनशील / संक्षारक / विषैली गैसें: LPG
- b) Non-Toxic Gases /अविषैली गैसें:

and is situated at Plot No: Mutation No. 1617,457/503 Village/Town: Baholi Police Station: Madluda District: PANIPAT, State: Haryana, Pin: 13.  
/स्थल संख्या Plot No: Mutation No. 1617,457/503 गांव या नगर: Baholi पुलिस थाना Madluda जिला PANIPAT राज्य Haryana, Pin: 13 में स्थित है।

**SPACE FOR ENDORSEMENT OF RENEWALS/अनुमति के पुनर्वसन के लिए स्थान**

	Date of Renewal/अनुमति के तारीख	Date of Expiry/अनुमति की समाप्ति की तारीख	Signature and stamp of the licensing authority/अनुमति प्रदाता के हस्ताक्षर और कार्यालय की मुद्रा
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Unfired) Rules, 2016, framed thereunder or of the conditions of the licence./अनुमति, भारतीय विस्फोटक अधिनियम, 1884 का उसके अधीन अधिनियम बनाए गए नियम एवं सतिशील दाब पात्र (अज्वलित) नियम, 2016 का इस अनुमति की शर्तों का उल्लंघन न होने की दशा में, फीस में बिना किसी छूट के तीन वर्ष तक	16/05/2018	30/09/2021	 <b>R.N. Meena</b> <b>JCE</b> <b>Jt. Chief Controller of Explosives</b> <b>Faridabad</b>  <b>संयुक्त मुख्य विस्फोटक नियंत्रक,</b> <b>Jt. Chief Controller of Explosives</b> <b>उत्तरीखंड, फरीदाबाद</b> <b>North Circle, Faridabad</b>

तार-॥ -विस्फोटक', नागपुर  
Telegram: 'EXPLOSIVES', Nagpur  
Website: http://peso.gov.in  
Email: explosives@explosives.gov.in

दूरभाष/ Telephone: 0712-2510248

फैक्स/ FAX: 2510577

कार्यालयीन उद्देश्य के सभी पत्रादि  
"मुख्य विस्फोटक नियंत्रक" के पदनाम से  
भेजे जाए उनके व्यक्तिगत नाम से नहीं।  
All communications intended for  
this Office should be addressed to the  
"Chief Controller of Explosives" and  
NOT to him by name.



भारत सरकार

GOVERNMENT OF INDIA

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन  
Petroleum and Explosives Safety Organisation

(पूर्व नाम - विस्फोटक विभाग)

(Formerly - Department of Explosives)

पता: पॉचवा तल, केन्द्रीय कार्यालय परिसर,

"A" Block, 5<sup>th</sup> Floor, C&D Complex,

सेमिनरी हिल्स, नागपुर - 440 006 (महा)

Seminary Hills, Nagpur - 440006

स्पीड पोस्ट  
SPEED POST

संख्या /No. P-5(2)158/Refinery/XX

दिनांक /Nagpur, dated : 24/08/2020

17 AUG 2020

सेवाने/To,

The Executive Director,  
M/s. Indian Oil Corporation Limited,  
Panipat Refinery & Petrochemical Complex,  
Panipat - 132 140 (Haryana).

विषय/Sub:-Commissioning of 'Additional clay filter at Old ATF MEROX Unit' at Panipat Panipat Refinery, Panipat  
(Haryana) - P-12(2)158/Refinery - Regarding.

महोदय/Dear Sirs,

कृपया आपके पत्र क्रमांक PR/TS/Process Schemes/Clay Filter दिनांक 07/07/2020 का अवलोकन करें।

Reference your letter no. PR/TS/Process Schemes/Clay Filter dated 07/07/2020, on the subject cited above.

There is no objection for commissioning of the subject facilities at your refinery as approved vide this office approval No. P-12(2)158/Refinery/XVII dated 19/12/2019 subject to the following conditions.

1. The above activities shall be undertaken under the supervision of technical competent persons.
2. To Strictly follow the SOP
3. All relevant provisions of the Petroleum Rules, 2002 shall be complied with.
4. All due precautions and safety procedures required shall be strictly adhered to during commissioning.
5. The external safety audit report of the entire refinery shall be carried out as Rule 10 of MSIHC Rules, 1989 and the report shall be furnished to PESO alongwith compliance of recommendation.

After completion of the above said activities, you are advised to submit the commissioning report to Jt. Chief Controller of Explosives, North Circle, Faridabad with intimation to this office.

This permission for commissioning does not absolve you from obtaining necessary permission/clearance from other authorities or under other statutes as applicable.

भवदीय Yours faithfully,

CSM(RS) - PR  
17/8/20  
02/09/2020

(जे. राउट) ( J. Rout )

उप. विस्फोटक नियंत्रक Dy. Controller of Explosives

कृते मुख्य विस्फोटक नियंत्रक for Chief Controller of Explosives

Copy to the संयुक्त मुख्य विस्फोटक नियंत्रक, उत्तरी अंचल फरीदाबाद Jt. Chief Controller of Explosives, North Circle, Faridabad. He is requested to inspect the subject facilities in the ensuing inspection.

कृते मुख्य विस्फोटक नियंत्रक for Chief Controller of Explosives



CHIEF INSPECTOR OF  
FACTORIES, HARYANA

सत्यमेव जयते

DESCRIPTION OF THE  
LICENCED PREMISES

The licenced premises shown on  
Building Plan approved vide No.

FBP\_6774

Dated- 13-02-2020

are situated at the address given  
above and consist of building  
as per approved drawings.

DIRECTORATE OF  
INDUSTRIAL SAFETY  
& HEALTHLABOUR DEPARTMENT  
HARYANA, CHANDIGARHRENEWAL OF  
FACTORY LICENCEउत्पादकता एवं सामाजिक न्याय  
PRODUCTIVITY WITH SOCIAL JUSTICELABOUR DEPARTMENT HARYANA  
श्रम विभाग हरियाणाशान्ति, सार्मजस्य एवं सुरक्षा  
PEACE, HARMONY AND SAFETY

Licence is hereby granted to

Occupier Details

Sh./Smt. Gopal Chandra Sikder

Factory Details

M/s Indian Oil Corporation Ltd.

Panipat Refinery and Petrochemical Complex Panipat

Panipat, Panipat

Licence Registration No. PPT/T-2506

Licence Serial No. 1259

valid for the premises described below for use as a  
factory is hereby renewed for the year **2021**

subject to the provisions of the Factories Act, 1948  
and the rules made thereunder.

This licence shall remain in force till 31st day of  
December **2021**

## RENEWAL DETAILS

Year	Maximum Horse Power	Maximum No. of Workers	Amount of Fee paid	Authorised Officer
2021	344660	6220	294900	ADISH-PPT-II



Digitally Signed By SUNIL KUMAR  
KHURANA  
LABOUR DEPARTMENT  
Haryana

Chief Inspector of Factories,  
Haryana, Chandigarh

This is computer generated factory license to check & verify, please login to  
<http://hrylabour.gov.in> with factory license verify no. 3144 4a46 3181 0491

**Green Belts around the Refinery:**

- Greenbelt in S-E direction of the Refinery.
- Development of Greenbelt in coordination with Haryana Forest Department.
- Different species of trees

**Tree plantation detail(FY 2020-21)**

Location	No. of trees planted
World Environment Day Tree plantation @ Refinery- Ficus benjamina- Jun'20-	36
World Environment Day Tree plantation @ Township- Fruit tree sapling distribution to IOCL employee- Jun'20	200
15 Acre land- Jamun, Neem, Peepal, Banyan, Arjun, Sesame, Kanji, Silver Oak- Jul'20	2037
CISF Township Complex- Amla, Chikoo, Lemon, Amrut, Shahtoot, Mango, Jamun, Kinnow, Mosambi- Jul'20	1500
15 Acre land- Jamun, Neem, Peepal, Banyan, Arjun, Sesame, Kanji, Silver Oak- Aug'20	5732
CISF Township Complex- Jamun, Aug'20	300
Green Belt- Jamun, Guava- Aug'20	3146
Polishing Pond- Jamun, Sirsam, Amla, Sirsam, Arjun, Darek- Aug'20	5752
Village: Dharamgarh- Jamun, Guava- Aug'20	1000
Greenbelt- Neem, Jamun, Guava, Darek- Sep'20	3641
15 Acre land, Green belt near Pet coke area, Polishing pond green belt	7892
Nov'20	2764
Pet Coke- Jamun- Dec'20	1868
Bio Drainage- Arjun, Acacia, Guller, Silver Oak- Dec'20	4627
Pet Coke- Jamun- Jan'21	718
Bio Drainage- Arjun, Acacia, Guller, Silver Oak, Jamun- Jan'21	6800
Bio-drainage area- Cluster fig (Gullar) - Feb'21	2921
Bio-drainage area- Putranjeevi (Putranjiva roxburghii Wall)- Mar'21	2076
Total	53010





### Tree plantation detail(FY 2019-20)

Location	No. of trees planted
World Environment Day tree plantation - Polishing Pond & New Township- Eucalyptus, Neem, Jamun, Pilkhan, Champa, Bottle Pam,	660
2G Ethanol- Green Belt CESS area- Eucalyptus, Shisham, Jamun,	6450
Swachhta Pakhwada (1-15 July, 2019)- Khoar-Kheri, Dadlana, Kutana Sithana, CISF Township- Neem, Jamun, Pilkhan, Champa, Bottle Pam, Ashok, Guava, Bel etc.	530
Indian Oil Day- New Township- Ashok and Bottle Pam	190
Director(HR) & Chairman Visit- Refinery & Guest House T/Ship- Ficus & Magnolia grandiflora.	3
Target 2019-20 Green Belt of Panipat Refinery- Fruit Plants (Guava, Mango, Jamun, Naspatti, Amla, Bel, Kinoo)	6000
Target 2019-20 Green Belt of Panipat Refinery Township- Fruit Plants (Guava, Mango, Jamun, Naspatti, Amla, Bel, Kinoo)	3000

Carbon Neutral Event Guest House lawn area Ficus benjamina Cycus palm	57
Total	16890

**Tree plantation detail(FY 2018-19)**

Location	No. of trees planted
Eucalyptus, Neem, Jamun, Pilkhan, Champa, Bottle Pam, Ficus benjamina Cycus	6200

**Expenditure on Tree plantation and Greenbelt development**

Year	Expenditure in Rs. (Lakh)
2020-21	118.53
2019-20	13.69
2018-19	1.50



इंडियन ऑयल कॉर्पोरेशन लिमिटेड

पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स

पानीपत, हरियाणा - 132140

Indian Oil Corporation Limited

Panipat Refinery & Petrochemical Complex

Panipat, Haryana - 132140

वेबसाइट : www.iocl.com; ई-मेल : panipatrefinery@indianoil.in

दूरभाष : 0180-2524001; फैक्स : 0180-2578833



रिफाइनरीज़ प्रभाग

Refineries Division

Ref No: PR/HSE/EC Compliance

Date: 25.01.2021

## ANNEXURE-5 of ATR

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

**Sub:** Six Monthly Environmental Clearances (ECs) Compliance Report- Panipat Refinery Complex

Dear Sir,

Enclosed please find herewith the Six Monthly Environmental Clearances (ECs) Compliance Report- Panipat Refinery Complex for the period of Jul'2020 to Dec'2020 of the MoEFCC stipulations w.r.t. following EC letters;

1. EC Letter No. J-11011/27/91-IA II(I) dated 16.07.1992 for setting up of a grass root refinery at Karnal district by Indian Oil Corporation Limited.
2. EC Letter No. J.11011/60/2000-IA.II dated 09.04.2001 for Expansion of Panipat Refinery (PREP) from 6 MMTPA to 12 MMTPA.
3. EC Letter No. J.11011/52/2000-IA.II dated 30.04.2001 for Integrated Paraxylene and Purified Terphthalic Acid Projects at Panipat by M/s IOCL.
4. EC Letter No. J.11011/9/2001-IA II (I) dated 06.12.2001 for MS Quality Up-gradation Project at Panipat Refinery by IOCL.
5. EC Letter No. J.11011/52/2000-IA II (I) dated 20.01.2003 for Modification in Plant layout of Paraxylene and Purified Terephthalic Acid (PX/PTA) Project within Panipat Refinery Complex and Integrated with Panipat Refinery (PR) and Panipat Refinery Expansion Project (PREP).
6. EC Letter No. J.11011/7/2004-IA II (I) dated 09.08.2004 for expansion of Panipat Refinery (From 12 MMTPA to 15 MMTPA) and Setting up of Indalin+ unit at Panipat Refinery Complex of IOCL, Panipat Refinery Haryana.
7. EC Letter No. J.11011/177/2016-IA II (I) dated 26<sup>th</sup> March, 2018 for BS-VI Fuel Quality up-gradation and expansion of PX/PTA plant at Panipat Refinery & Petrochemical Complex (PRPC), Panipat (Haryana) by M/s Indian Oil Corporation Limited.
8. EC Letter No. IA-J-11011/43/2018-IA- II (I) dated 13.11.2019 for installation of 100 KLPD Ligno-Cellulosic 2G Ethanol Plant at Baholi, Block Madlauda, Panipat Refinery road, District Panipat (Haryana) By M/S Indian Oil Corporation Limited.
9. EC Letter No. J-11011/78/2018-IA- II (I) dated 25.11.2019 for setting up 128 KL per day Ethanol Production Plant by M/s Indian Oil Corporation Ltd. (IOCL) In Panipat Refinery & Petrochemical Complex at Panipat, Haryana.

Thanking you,

Yours faithfully,

  
(Utpal Deka)

General Manager (HS&E)

For and on behalf of

Executive Director & Refinery Head  
Panipat Refinery & Petrochemical Complex

Copy to:

Regional Officer, HSPCB, Panipat

Chairman, HSPCB, Panchkula



## INDEX

S N	EC General & Specific Conditions / Environmental Monitoring Reports	Compliance Status
1.	EC Letter No. J-11011/27/91-IA II(I) dated 16.07.1992 for setting up of a grass root refinery at Karnal district by Indian Oil Corporation Limited.	Attached as Annexure 1
2.	EC Letter No. J.11011/60/2000-IA.II dated 09.04.2001 for Expansion of Panipat Refinery (PREP) from 6 MMTPA to 12 MMTPA.	Attached as Annexure 2
3.	EC Letter No. J.11011/52/2000-IA.II dated 30.04.2001 for Integrated Paraxylene and Purified Terphthalic Acid Projects at Panipat by M/s IOCL.	Attached as Annexure 3
4.	EC Letter No. J.11011/9/2001-IA II (I) dated 06.12.2001 for MS Quality Up-gradation Project at Panipat Refinery by IOCL.	Attached as Annexure 4
5.	EC Letter No. J.11011/52/2000-IA II (I) dated 20.01.2003 for Modification in Plant layout of Paraxylene and Purified Terephthalic Acid (PX/PTA) Project within Panipat Refinery Complex and Integrated with Panipat Refinery (PR) and Panipat Refinery Expansion Project (PREP).	Attached as Annexure 5
6.	EC Letter No. J.11011/7/2004-IA II (I) dated 09.08.2004 for expansion of Panipat Refinery (From 12 MMTPA to 15 MMTPA) and Setting up of Indalin+ unit at Panipat Refinery Complex of IOCL, Panipat Refinery Haryana.	Attached as Annexure 6
7.	Amendments in the environmental clearance granted by the Ministry vide EC Letter No. J.11011/177/2016-IA II (I) dated 26 <sup>th</sup> March, 2018 for BS-VI Fuel Quality up-gradation and expansion of PX/PTA plant at Panipat Refinery & Petrochemical Complex (PRPC), Panipat (Haryana) by M/s Indian Oil Corporation Limited on 20 <sup>th</sup> May 2020.	Attached as Annexure 7
8.	EC Letter No. IA-J-11011/43/2018-IA- II (I) dated 13.11.2019 for installation of 100 KLPD Ligno-Cellulosic 2G Ethanol Plant at Baholi, Block Madlauda, Panipat Refinery road, District Panipat (Haryana) By M/S Indian Oil Corporation Limited.	Attached as Annexure 8
9.	EC Letter No. J-11011/78/2018-IA- II (I) dated 25.11.2019 for setting up 128 KL per day Ethanol Production Plant by M/s Indian Oil Corporation Ltd. (IOCL) In Panipat Refinery & Petrochemical Complex at Panipat, Haryana	Attached as Annexure 8
10.	Six Monthly Ambient Air Quality and Stack Monitoring Data	Attached as Annexure 10
11.	Six Monthly Treated Effluent Quality Data (ETP and STP)	Attached as Annexure 11
12.	Six Monthly Fugitive Emission Data	Attached as Annexure 12
13.	Noise Survey Data	Attached as Annexure 13



**COMPLIANCE TO ENVIRONMENTAL CLEARANCE STIPULATIONS FROM MOEF FOR SETTING  
UP OF A GRASSROOT REFINERY AT KARNAL, DISTRICT BY INDIAN OIL CORPORATION  
LIMITED - EC Letter no. J-11011/27/91-(A.II(I) dated 16.07.1992**

SN	Stipulation	Compliance
1.	The project authority must strictly adhere to the stipulations laid down by the State Pollution Control Board and State Government.	<b>Being Complied</b>
2.	Any expansion of the plant, either with the existing product mix or new products can be taken up only with the prior approval of this ministry.	<b>Being Complied</b>
3.	Sulphur recovery unit with more than 90% Sulfur Recovery should be installed and commissioned before the project is completed, and measure for its continuous operation must be taken. Techno-economic feasibility study for additional standby sulphur recovery system may be initiated after the installation of first unit.	<b>Being Complied</b> Panipat Refinery has 5 nos. Sulphur Recovery Units (SRUs) as detailed below and 4 (3 units of 99.9 % recovery and 1 of 99% efficiency) out of 5 units are in operation: • 2 no. SRUs: 99% efficiency ,2X115 MT/day capacity • 3 no. SRUs: 99.9% efficiency ,2X225 MT/day capacity
4.	Low Sulfur fuel (Sulphur content not exceeding 1%) should be used in the boilers/furnaces.	<b>Being Complied</b>
5.	Low NO <sub>x</sub> burners should be used to avoid excessive formation of NO <sub>x</sub> .	<b>Being Complied</b> Low NO <sub>x</sub> burners have been installed in the process heaters , Boilers , furnaces etc.
6.	Total emission of SO <sub>2</sub> from the refinery should not exceed 1 Ton/hr.	<b>Being Complied</b> SO <sub>2</sub> emission from the Refinery is below 1 TPH.
7.	The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> etc.) from various process units should conform to the standards prescribed by the concerned authorities, from time to time. At no time the emission levels should go beyond the stipulated standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control measure are rectified to achieve the desired efficiency.	<b>Being Complied</b>
8.	Adequate number (a minimum of 7) of air quality monitoring stations should be set up in the down-wind direction as well as where maximum ground level concentration is anticipated. Stack emission should be	<b>Being Complied</b> Total 9 nos. of CAAQMS (2 nos. in Panipat city, 1 no. in Refinery township, 5 nos. in Refinery & 1 in Polishing Pond area) are in operation. These were set up in consultation with HSPCB. Also,

SN	Stipulation	Compliance
	monitored by setting up of an automatic continuous stack monitoring unit. The data on stack emission should be submitted to the State Pollution Control Board once in three months and to this Ministry once in six months along with the statistical analysis. The air quality monitoring station should be selected on the basis of modeling exercise to represent the short-term ground level concentrations.	one mobile van for ambient air quality monitoring is in place.  For all stacks: SO <sub>2</sub> , NO <sub>x</sub> , CO & PM analyzers are available and connected to CPCB/HSPCB server.  Data on stack emission are submitted to HSPCB/MoEFCC as per frequency mentioned.
9.	Fugitive emissions of hydrocarbons from storage tanks etc. should be minimized by adopting necessary measures.	<b>Being Complied</b>
10.	Fugitive emission should be regularly monitored and record maintained.	<b>Being Complied</b> Fugitive emission monitoring for Hydrocarbon and Benzene is done quarterly through approved agency.
11.	There should be no change in the stack design without the approval of the State Pollution Control Board. Alternate pollution control system and proper design in the stack should be provided to take care of excess emissions due to failure in any system of the plant.	<b>Noted.</b>  <b>Being Complied.</b>
12.	The height of stacks attached to AVU, FCCU and TPS etc. should not be less than 100 m.	<b>Implemented.</b>
13.	Total fresh water consumption (Industrial as well as township) should not exceed 8 MGD. Ground Water should not be tapped for this purpose.	8 MGD water allocated for 6 MMTPA Refinery. However, further EC granted to Refinery expansion from 6 to 12 MMTPA (J.11011/7/2004-IA-II (I) dated 09.08.2004) Fresh water allocation increased to 30 cusec.
14.	The project authorities must recycle wastewater to the maximum extent possible (at least 25% to 30% to start with). The treated effluent coming out of the plant must meet MINAS.	<b>Being Complied</b>  ETP-I and II Treated effluent meeting Refinery MINAS parameter is "Recycled and Reused" as feed to RO plant and make up water to Cooling Tower.
15.	Adequate number of effluent quality (oil & Grease, COD, BOD, suspended Solids, Phenols, Sulphides, pH and Flow) monitoring stations must be set up in consultation with State Pollution Control Board.	Effluent quality is being monitored at various stages of Effluent Treatment Plant. Also final Treated Effluent Quality parameters (pH, BOD, COD & TSS) are connected online to CPCB/HSPCB server.
16.	Maximum recovery of oil from the sludge should be done and residual oily sludge should be incinerated.	The raw oily sludge generated from the Refinery is subjected to Oil recovery / Melting Pit treatment for recovery of oil. The recovered



SN	Stipulation	Compliance
		oil is recycled back with crude oil for processing. <ul style="list-style-type: none"> <li>The residual sludge is disposed-off through confined Bio-remediation.</li> <li>Part of the sludge is processed in Coker unit.</li> <li>There are 4 nos. lined pits available for storing residual oily sludge.</li> </ul>
17.	The project authorities must prepare a scheme for solid and hazardous waste disposal. The plan for disposal duly approved from the State Pollution Control Board should be submitted to this Ministry within one year and adequate space should be provided for it within the plant premises.	<b>Being Complied</b> A common hazardous waste disposal site is developed in the state by Haryana Environmental Management Society (HEMS) in consultation with Haryana State Pollution Control Board. Panipat Refinery is the member of this society.
18.	A green belt of at least 500 m width and adequate density should be developed and maintained. Selection of the species should be done in consultation with the State Forest Department. A detailed green belt development plan taking into account attenuation factors, soil characteristics etc. should be prepared and submitted to this Ministry within six months.	<b>Complied</b> Greenbelt of 500 m width have been developed and maintained after consultation with State Forest Department.
19.	A detailed risk analysis study based on Maximum Credible Accident (MCA) analysis should be done and submitted to this Ministry once the process design/technology and layout is finalized. Based on this, a Disaster Management Plan has to be prepared and after approval by the concerned Nodal Agency, should be submitted to this ministry within six months. The impact zone under no circumstances should cross the plant premises.	A Comprehensive Risk Analysis is conducted. Report has been submitted.  On-site Disaster Management Plan based on this Risk Analysis is also prepared which is accredited from approved Third Party Inspection agency of PNGRB.
20.	A 'no development zone' of minimum 5km radius in between the refinery and the Panipat town should be provided. Where only restricted growth on nonpolluting industries may be allowed (Action – State Govt.)	Action by State Government.  Letter sent from PR to DC, Panipat dated 16.05.2020 requesting enforcement of this condition.
21.	No tree should be cut from the site without prior written order of the competent authority.	<b>Being Complied</b>
22.	The industrial township should be located on the northern side of the refinery i.e. in the up-wind direction.	<b>Complied</b>

SN	Stipulation	Compliance																								
23.	A detailed Rehabilitation Plan for the affected people should be prepared and submitted to this Ministry within 3 months.	Complied																								
24.	Contractor's labourers must leave place after the construction work is over to avoid creation of slum in the adjoining areas of the refinery and township.	Complied																								
25.	A comprehensive EIA must be prepared and submitted to this Ministry by September, 1993 covering regional implications and 'no development zone' aspects.	Complied																								
26.	Feasibility of using 20 tonner trucks may be studied / assessed wherever road transport is being envisaged and report submitted to this Ministry within three months.	Bulk Movement of Products through Pipeline and Rail.																								
27.	Necessary approval may be obtained from the Regulatory Authority as per Section 5(2) and 5(3) of the Hazardous Wastes (Management and Handling) Rules, 1989 of the Environment (Protection) Act, 1986.	Being Complied																								
28.	The State Govt. should prepare a Master Plan for the region to avoid haphazard growth of industries and human settlements in the area.	Action by State Government.																								
29.	The project authority must set up laboratory facilities for collection and analysis of samples under the supervision of competent technical personnel, who will directly report to the Chief Executive.	Complied																								
30.	A separate Environment Management Cell with suitably qualified people to carry out various functions should be set up under the control of Sr. Executive, who will report directly to the Head of the organization.	Complied																								
31.	The funds earmarked for the environmental protection measures should not be diverted for other purposes and year wise expenditure should be reported to this Ministry.	Being Implemented. Year-wise expenditure: <table><tr><th colspan="2">FY:2017-18</th><th colspan="2">FY:2018-19</th><th colspan="2">FY:2019-20</th></tr><tr><th colspan="6">(Rupees in lacs)</th></tr><tr><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th></tr><tr><td>151.3</td><td>640.4</td><td>394.2</td><td>1728.6</td><td>551.77</td><td>3060.26</td></tr></table>	FY:2017-18		FY:2018-19		FY:2019-20		(Rupees in lacs)						Recurring	Non-recurring	Recurring	Non-recurring	Recurring	Non-recurring	151.3	640.4	394.2	1728.6	551.77	3060.26
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**Compliance status with respect to the EC conditions stipulated in the letter for Panipat Refinery Expansion Projects (PREP) from 6 MMTPA to 12 MMTPA – EC letter no. J.11011/60/2000-IA.II dated 09.04.2001 :**

Status of Panipat Refinery Expansion Project from 6MMTPA to 12 MMTPA –Reference letter no. J.11011/60/2000-IA II issued by Government of India, MOE&F I.A. Division dated 09.04.2001 on the subject of "Issuing Environmental Clearance"

SN	Conditions stipulated in the EC letter	Status/Action Plan
1.	The company should strictly adhere to the stipulations made by MOE&F vide O.M. No. J.11011/76/96-IAII dated 5 <sup>th</sup> March,1997	<b>Being Complied</b>
2.	a) The total SO <sub>2</sub> emission from the entire Refinery complex should not exceed 1000 kg/hr even after proposed expansion.	<b>Being Complied</b> SO <sub>2</sub> emission from the Refinery is below 1000 kg/hr.
	b) The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> , HC, CO) and particulate matters, from various process units should conform to the standards prescribed under Environmental (Protection) Rules, 1986 or norms stipulated by SPCB whichever is most stringent.	<b>Being Complied.</b>
	c) At no time, the emission level should go beyond the stipulated standards.	<b>Being Complied</b>
	d) 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.	<b>Being Complied</b>
3.	Sulphur recovery units with more than 99% efficiency shall be provided.	<b>Being Complied</b> Three SRUs with 99.9% recovery have been installed & are operational.



4.	a)	Adequate ambient air quality monitoring stations SO <sub>2</sub> , NO <sub>x</sub> , HC should be set up in the Refinery area in consultation with SPCB, based on occurrence of maximum ground level concentration and down-wind direction of wind.	<b>Being Complied</b> 9 nos. of CAAQMS (5 nos. in Refinery, 2 nos. in Panipat city, 1 no. each in Refinery Township, and Polishing Pond area) are in operation. These were set up in consultation with HSPCB.  Also mobile van for ambient air quality monitoring is in place.
	b)	The monitoring network must be decided based on making exercise to represent short term GLCs.	<b>Complied</b>
	c)	In addition, a mobile van with adequate facilities to monitor ambient air quality outside the Refinery premises should be provided.	<b>Complied</b> Mobile van with adequate facilities for ambient air quality monitoring is already available & is in operation.
	d)	Continuous on-line stack monitoring equipment should be installed for measurement of SO <sub>2</sub> , NO <sub>x</sub> , CO & PM.	For all stacks: SO <sub>2</sub> , NO <sub>x</sub> , CO & PM analyzers are available and connected to CPCB / HSPCB server.
5.	a)	Fugitive emission of HC from product storage tank yard, crude oil tanks etc, must be regularly monitored.	<b>Being Complied</b> Fugitive emission monitoring for Hydrocarbon and Benzene is done quarterly through approved agency.
	b)	Sensors for detecting HC leakages should also be provided at strategic locations.	Hydrocarbon leak detectors installed at strategic locations.
6.	a)	As per the commitment given, there will be no discharge of treated effluent into Thirana drain.	Treated effluent from ETP-1 & ETP-2 is reused as feed to RO plant and as make up to Cooling Tower. Treated Effluent from PTA-ETP (ETP-3) meeting Petrochemical MINAS is discharged into THIRANA DRAIN as per permission granted by statutory bodies (MoEFCC & HSPCB).

	<p>b) The liquid effluent generated from the Refinery should be treated comprehensively to conform to the load based standards and concentration limits prescribed under EPA rules.</p> <p>c) The entire treated wastewater should be recycled for reuse in the plant operation and green belt development so as to maintain zero discharge.</p>	<p>Liquid effluent generated from Refinery &amp; PX-PTA Petrochemical Complex is being treated in Waste Water Treatment Plant(s) which are meeting applicable Refinery &amp; Petrochemical MINAS standards.</p> <p>Treated effluent from ETP-1 &amp; ETP-2 is reused as feed to RO plant and as make up to Cooling Tower.</p> <p>Treated Effluent from PTA-ETP (ETP-3) meeting Petrochemical MINAS is discharged into THIRANA DRAIN as per permission granted by statutory bodies (MoEFCC &amp; HSPCB).</p> <p>ETP-1 &amp; ETP-2 treated effluent is recycled and reused as feed to RO plant and as make up to Cooling Tower.</p> <p>Treated Effluent from PTA-ETP (ETP-3) meeting Petrochemical MINAS is discharged into THIRANA DRAIN as per permission granted by statutory bodies (MoEFCC &amp; HSPCB).</p>
7.	<p>a) Guard ponds of sufficient holding capacity should be provided to contain the effluent during process disturbance and or ETP failure.</p> <p>b) The concerned units must be shut down in case of effluent quality exceeding the prescribed limits.</p>	<p><b>Complied.</b></p> <p><b>Being Complied with.</b></p>
8.	<p>a) The company should adopt mounded storage for LPG.</p> <p>b) The recommendations made in the Rapid Risk Assessment Report must be incorporated while firming up the plant layout and equipment design.</p> <p>c) The company must prepare a comprehensive risk assessment/analysis of the Refinery and associated facilities once the engineering design and layout is frozen.</p> <p>d) Based on this, on-site and off-site emergency preparedness plan must be prepared.</p>	<p><b>Complied.</b></p> <p>Mounded storage is used for LPG storage.</p> <p><b>Complied.</b></p> <p>The recommendations of the Rapid Risk Assessment for the study have been incorporated in the plant layout and equipment design.</p> <p><b>Complied.</b></p> <p><b>Complied.</b></p> <p>Onsite and Offsite Emergency Preparedness plans already prepared for Panipat Refinery.</p>



	e) Approval from the nodal agency must be obtained before commissioning the project.	<b>Complied.</b>
9.	The drawl of water from the Munak Head-works should not exceed 30 cusecs even after the proposed expansion.	<b>Being Complied.</b>  Drawl of water from Munak Head Works is not exceeding 30 cusecs even after expansion.
<b>General conditions:</b>		
<b>SN</b>	<b>Conditions stipulated in the EC letter</b>	<b>Status/Action Plan</b>
1.	The project authorities must strictly adhere to the stipulations made by the Haryana State Pollution Control Board and the State Government.	<b>Being complied</b>
2.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forest.	<b>Being complied</b>
3.	In case of deviations or alterations in the project proposed from those submitted to this Ministry for Clearance, a fresh reference should be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	<b>Being complied</b>
4.	Data on ambient air quality, stack emission as well as fugitive emissions of HC must be regularly monitored and submitted to CPCB once in 3 months and to Ministry's Regional Office once in 6 months.	<b>Being complied.</b>  Mentioned reports are being sent to MOEF&CC once in 6 months. Stack analyzers are online connected with CPCB/HSPCB server.
5.	Influent and effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for the MINAS parameters.	Influent and Effluent quality is being monitored at various stages of Effluent Treatment Plants also Final Treated Effluent Quality parameters (pH, BOD, COD & TSS) also connected online to CPCB/HSPCB server.
6.	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended, on 3 <sup>rd</sup> October, 1994. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire & Safety Inspectorate etc. must be obtained.	<b>Being complied.</b>
7.	The project authorities must strictly comply with the rules and regulations with	<b>Being complied.</b>

	regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 1989. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.	
8.	Occupational health surveillance program should be undertaken as regular exercise for all the employees, especially for those engaged in handling hazardous substances.	Being complied.
9.	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (Day time) and 70 dBA (night time)	Being complied.  The Refinery has provided silencers on compressor discharge, acoustic leggings on turbo generators & ejectors and acoustic chambers at the burners. The ambient noise level meets the standards.
10.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA and risk analysis report.	Complied.
11.	The project proponent should have a scheme upliftment in the nearby villages with reference to contribution in road construction, education of children, festivals, health centers, sanitation facilities, drinking water supply, community awareness and employment to local people whenever possible both for technical and non technical jobs.	Being complied Social upliftment and community development has been properly taken care as per IOCL's Corporate Social Responsibility Policy through following CSR activities. <ul style="list-style-type: none"> <li>- Promoting Sanitation</li> <li>- Environment Sustainability/ Renewable Energy Sources</li> <li>- Rural Development/ Promoting Preventive Healthcare/ Promotion of Sports</li> <li>- Promoting Education</li> <li>- Enhancement of Vocational Skills</li> <li>- Empowering Women</li> <li>- Welfare of Underprivileged</li> </ul> CSR expenditures details: <ul style="list-style-type: none"> <li>• FY 2017-18 : Rs. 461.02 Lacs</li> <li>• FY 2018-19 : Rs. 746.34 Lacs</li> <li>• FY 2019-20 : Rs. 531.00 Lacs</li> </ul>
12.	A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and	Being Complied  Separate Environment Management Cell is in



	monitored functions.	place.																								
13.	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.	<b>Being Implemented.</b> Details Year-wise expenditure: <table><tr><th colspan="2">FY:2017-18</th><th colspan="2">FY:2018-19</th><th colspan="2">FY:2019-20</th></tr><tr><th colspan="6">(Rupees in lakhs)</th></tr><tr><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th></tr><tr><td>151.3</td><td>640.4</td><td>904.2</td><td>1,728.6</td><td>551.8</td><td>3060.9</td></tr></table>	FY:2017-18		FY:2018-19		FY:2019-20		(Rupees in lakhs)						Recurring	Non-recurring	Recurring	Non-recurring	Recurring	Non-recurring	151.3	640.4	904.2	1,728.6	551.8	3060.9
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151.3	640.4	904.2	1,728.6	551.8	3060.9																					
14.	The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Chandigarh / State Pollution Control Board / Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.	<b>Being Complied.</b>  Six monthly compliance reports along with monitoring data are being submitted regularly.																								
15.	The project proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locally concerned informing 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 <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . the advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office.	<b>Complied.</b>																								
16.	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.	<b>Complied</b>																								



Integrated Paraxylene and Purified Terphthalic Acid Projects at Panipat by M/s IOCL – Environmental Clearance MOEF, N. Delhi letter no. J.11011/52/2000-IA,II dated 30.04.2001

SN	Conditions stipulated in the EC letter	Status/Action plan
1	a) The gaseous emission (SO <sub>2</sub> , NO <sub>x</sub> 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.	<b>Being Complied.</b>  Emission from the stack is being monitored online and from approved lab on Bi-monthly basis.  45 stacks are connected online to CPCB/HSPCB server with parameters such as SO <sub>2</sub> , NO <sub>x</sub> , CO & PM.
	b) 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.	<b>Being Complied.</b>
2	a) Adequate ambient air quality monitoring stations (SPM, SO <sub>2</sub> , NO <sub>x</sub> , HC and Benzene) should be set up in the petrochemical complex in consultation with SPCB, based on occurrence of maximum ground level concentration and down-wind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs	<b>Being Complied.</b>  Out of 9 AAQMS, two Ambient Air Monitoring stations set up in PX-PTA plant area. The location of these is finalized after consultation with HSPCB.
	b) Continuous on-line stack monitoring equipment should be installed for measurement of SO <sub>2</sub> and NO <sub>x</sub> .	<b>Being Complied.</b>  PX-PTA stacks are connected online to CPCB/SPCB server with parameters such as SO <sub>2</sub> , NO <sub>x</sub> , CO & PM.
3	a) Fugitive emission of HC from product storage tank yard, crude oil tanks etc. must be regularly monitored.	<b>Being Complied</b>  Fugitive emission monitoring for Hydrocarbon and Benzene is done quarterly through approved agency.
	b) Sensors for detecting HC leakage should also be provided at strategic locations.	<b>Being Complied</b>  Hydrocarbon leak detectors installed at strategic locations.
4	a) Liquid effluent generated from the petrochemical complex should be treated comprehensively to conform	For Treating liquid effluent generated from Petrochemical complex separate ETP has been installed. PTA-ETP treated

	to the load based standards and concentration limits prescribed under EPA rules ( MINAS standards).	effluent meets the petrochemical MINAS.  PTA ETP envisages Aerobic and Anaerobic Biological systems for treatment and the final effluent will meet Petrochemical MINAS.
	b) The BOD of the treated effluent should not exceed 30 mg/l at any point of time.	BOD is being maintained below 30 mg /l.
	c) The Company must undertake maximum recycling/ reusing of the treated effluent for process purposes in addition to green belt development and also adopt adequate water conservation measures.	Process Licensor M/s INVISTA has confirmed that "Recycle & Reuse" of PTA treated effluent is not feasible. However, Technical feasibility study for "Recycle & Reuse" of PTA treated effluent is being taken up with leading technology providers in the field of water treatment.
	d) As per the commitment given the total quantity of treated effluent discharged into Thirana drain should not exceed 255 m <sup>3</sup> /hr.	The discharge of PTA-ETP treated effluent into Thirana Drain is being restricted well below 255 m <sup>3</sup> /hr.
	e) The effluent quality at the discharge point must also be monitored periodically by an independent agency authorized by CPCB and report of the independent agency should be submitted to Ministry's Regional office at Chandigarh/CPCB/ HSPCB.	Effluent Quality of PTA ETP is monitored monthly by an authorized independent agency and report is being submitted to HSPCB (Monthly) and to MoEF&CC (Six-Monthly).
	d) The Company shall fully abide by the Hon'ble Supreme Court orders on regulation of industrial discharge to River Yamuna and it's canals / drains:	<b>Being Complied.</b>
5.	a) Guard ponds of sufficient holding capacity should be provided to contain the effluent during process disturbances and or ETP failure.	<b>Complied.</b> Guard ponds of sufficient holding capacity are provided.
	b) The concerned units must be shut down in cases of effluent quality exceeding the prescribed limits.	<b>Being Complied.</b>
	<b>General Conditions</b>	
<b>SN.</b>	<b>Conditions stipulated in the EC letter</b>	<b>Status/Action plan</b>
1	The project authority must adhere to the stipulations made by Haryana State Pollution Control Board and State Government.	<b>Being Complied</b>
2	No expansion or modification of the plant should be carried out without prior	<b>Noted</b>



	approval of Ministry.	
3	Data on ambient air quality and stack emissions as well as fugitive emissions of HC and Benzene from product storage tanks yard, naphtha tanks etc. must be regularly monitored and submitted to CPCB/ SPCB once in 3- months and to Ministry (Regional Office, Chandigarh) one in 6-months.	<p><b>Being complied.</b></p> <p>Mentioned reports are being sent to MOEF&amp;CC once in 6 months and to HSPCB on bi-monthly basis.</p> <p>Stack analyzers are online connected with CPCB/HSPCB server.</p>
4	The effluent quality before and after treatment should be regularly monitored. The frequency of monitoring and number of influent and effluent quality monitoring stations should be set up in consultation with the State PCB. The monitored data should be submitted to CPCB/ SPCB once in 3-months and to Ministry (Regional Office, Chandigarh) once in 6-months.	<p><b>Being Complied</b></p> <p>Influent and Effluent quality is being monitored at various stages of Effluent Treatment Plants also Final Treated Effluent Quality parameters (pH, BOD, COD &amp;TSS) also connected online to CPCB/HSPCB server.</p> <p>Mentioned reports are being sent to MOEF&amp;CC once in 6 months and to HSPCB on monthly basis</p>
5.	Handling, manufacturing, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacture, Storage & Import of Hazardous chemicals Rules, 1989, as amended in 1991. Permissions from State and Central nodal agencies in this regard must be obtained.	<b>Being Complied</b>
6	Hazardous wastes, if any, must be handled and disposed as per Hazardous waste (Management and Handling) Rules, 1989. Authorization from State Pollution Control Board in this regard must be obtained.	<p><b>Being complied</b></p> <p>Authorization for Hazardous Waste has been obtained from HSPCB which is valid up to 30.09.2024.</p>
7	Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. should be ensured for construction workers during the construction phase so as to avoid felling of trees and pollution of water and the surroundings.	<b>Complied.</b>
8.	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	<p><b>Being complied.</b></p> <p>Silencers are provided on compressor discharge, acoustic leggings on turbo generators &amp; ejectors and acoustic chambers at the burners.</p>



	noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time).	The ambient noise level meets the standards.																								
9	Occupational Health Surveillance of the workers should be done on regular basis and records maintained.	Complied																								
10	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP and risk analysis report.	Complied																								
11	The project proponent should have a scheme for social upliftment in the surrounding villages with reference to contribution in road construction ,education of children festivals, health centers, sanitation facilities, drinking water supply, community awareness and employment to local people especially the displaced people whenever and wherever possible both for technical and non-technical jobs.	<b>Being complied</b> Social upliftment and community development has been properly taken care as per IDCL's Corporate Social Responsibility Policy through following CSR activities. <ul style="list-style-type: none"><li>– Promoting Sanitation</li><li>– Environment Sustainability/ Renewable Energy Sources</li><li>– Rural Development/ Promoting Preventive Healthcare/ Promotion of Sports</li><li>– Promoting Education</li><li>– Enhancement of Vocational Skills</li><li>– Empowering Women</li><li>– Welfare of Underprivileged</li></ul> CSR expenditures details: <ul style="list-style-type: none"><li>• FY 2017-18 : Rs. 461.02 Lacs</li><li>• FY 2018-19 : Rs. 746.34 Lacs</li><li>• FY 2019-20 : Rs. 531.00 Lacs</li></ul>																								
12	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions should be set up under the control of senior executive.	<b>Being Complied</b>  Separate environment management cell is in place.																								
13	The company must obtain ISO-14000 certification within a time frame of 5 years or so after the commissioning.	ISO-14000 certification has been obtained. Validity of same is up to Jan'2021.																								
14	The funds earmarked for the environmental protection measures should not be diverted for any other purpose and year-wise expenditure should be submitted to this Ministry (Regional Office, Chandigarh/CPCB/SPCB)	<b>Being Implemented.</b> Details of Year-wise expenditure: <table><tr><th colspan="2">FY:2017-18</th><th colspan="2">FY:2018-19</th><th colspan="2">FY:2019-20</th></tr><tr><th colspan="6">(Rupees in lacs)</th></tr><tr><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th></tr><tr><td>151.3</td><td>640.4</td><td>394.2</td><td>1728.6</td><td>351.8</td><td>3060.3</td></tr></table>	FY:2017-18		FY:2018-19		FY:2019-20		(Rupees in lacs)						Recurring	Non-recurring	Recurring	Non-recurring	Recurring	Non-recurring	151.3	640.4	394.2	1728.6	351.8	3060.3
FY:2017-18		FY:2018-19		FY:2019-20																						
(Rupees in lacs)																										
Recurring	Non-recurring	Recurring	Non-recurring	Recurring	Non-recurring																					
151.3	640.4	394.2	1728.6	351.8	3060.3																					
15	Six monthly status reports on the project vis-à-vis environmental measures should	<b>Being Complied.</b> Six monthly compliance reports along																								

	be submitted to this Ministry (Regional Office, Chandigarh/ CPCB/SPCB.	with monitoring data is being submitted regularly.
16	The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Chandigarh/ State Pollution Control Board/ Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.	<b>Will be adhered to.</b>
17	The project proponent should advertise in at least two local newspaper widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearances 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 <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>	<b>Complied</b>
18	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.	<b>Complied</b>

**COMPLIANCE TO ENVIRONMENTAL CLEARANCE STIPULATIONS FROM MOEF FOR MS  
QUALITY UPGRADATION PROJECT AT PANIPAT REFINERY BY IOCL, - J-11011/9/2001-IA, II  
(I) DATED 06.12.2001**

SN	EC Conditions	Compliance Status
1.	The company shall ensure strictly implementations / Compliance of the terms and conditions mentioned vide Ministry's letter no. J.11011/60/2000-IA II dated 9 <sup>th</sup> April, 2001.	<b>Being Complied</b> (Stipulations are being strictly adhered for 6 MMTPA EC condition).
2.	The company shall also ensure that total SO <sub>2</sub> emission from the Panipat Refinery (including expansion and MS Quality Improvement Project) will not exceed 1000 kg/hr.	<b>Being Complied</b> SO <sub>2</sub> emission from the Panipat Refinery (including expansion and MS Quality Improvement Project) is below 1000 kg/hr.
3.	The company shall comply with all recommendations made by Haryana SPCB vide consent order dated 24.01.2001.	<b>Complied.</b>
4.	The company shall comply with all recommendations made by EMP and risk Analysis reports.	<b>Complied.</b>
5.	The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Chandigarh / State Pollution Control Board / Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.	<b>Being Complied.</b>  Six monthly compliance reports along with monitoring data are being submitted regularly.
6.	The project proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locally concerned informing 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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> the advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office.	<b>Complied.</b>
7.	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.	<b>Complied.</b>





**Modification in Plant Layout of Paraxylene and Purified Terephthalic Acid (PX/PTA) Project within Panipat Refinery Complex and Integrated with Panipat Refinery (PR) and Panipat Refinery Expansion Project (PREP) by M/s IOCL – Reg. Environmental Clearance - J.11011/52/2000-IA II (I) dated 20.01.2003**

SN	Conditions stipulated in the EC letter	Status/Action Plan
1	The company shall ensure strict implementation / compliance to the stipulations made by MOEF vide OM no. J-11011/60/2000-IA-II dated 9 <sup>th</sup> April, 2001 for expansion of Panipat Refinery from 6 MMTPA to 12 MMTPA and J-11011/52/2000-IA-II dated 30 <sup>th</sup> April, 2001 for integrated Paraxylene and Purified Terephthalic acid project at Panipat by M/s IOCL.	Being Complied.
2	Total SO <sub>2</sub> emission after integration of PX-PTA project with PR/PREP shall not exceed 1275 kg/hr (i.e. 1000kg/hr. for PREP and 275 kg/hr from the proposed PX/PTA/CPP Project.)	Being Complied. SO <sub>2</sub> emission is being maintained below 1275 Kg /hr.
3	As per the commitment given, the total quantity of treated effluent shall not exceed 255m <sup>3</sup> /hr from the proposed integration project.	Being Complied. Total quantity of treated effluent discharged into Thirana Drain is maintained well below 255m <sup>3</sup> /hr.
4	The company shall develop green belt in an area of 75 acres as per the original plan in the PX-PTA project area.	Complied.
5	The project authorities shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP and risk analysis report submitted while seeking environmental clearance for the PREP and PX/PTA and PX/PTA/ PR project.	Being Complied.
6	As per the recommendations made in the Risk assessment study for the composite facility i.e. PX/PTA/PREP and associated facilities carried out by M/s KLG-TNO Safety Technology Ltd., the various elements of safety management system should be reviewed and updated keeping in view the new facilities added to the Refinery Complex. These include: Process and facilities Information and documentation; Process Hazard Analysis; Operation Procedures; Inspection and Maintenance and Onsite Emergency Management Plan.	Various elements of Safety Management System (SMS) has been reviewed and updated keeping in view the new facilities added. On-site Disaster Management Plan based on this Risk Analysis is also prepared which is accredited from PNGRB approved Third Party Inspection agency.
7	The project authorities must adhere to the stipulations made by the HSPCB for the PREP, PX/PTA projects and NOC granted for the installation of Captive Power Plant.	Being Complied.

**COMPLIANCE TO ENVIRONMENTAL CLEARANCE STIPULATIONS FROM MOEF FOR  
EXPANSION OF PANIPAT REFINERY (FROM 12 MMTPA TO 15 MMTPA) AND SETTING UP  
OF INDALIN<sup>®</sup> UNIT AT PANIPAT REFINERY COMPLEX OF IOCL, PANIPAT REFINERY HARYANA  
J-11011/7/2004-IA, II (I) dated 09.08.2004**

SN	EC Conditions	Compliance Status
1.	The company shall ensure strict implementation / compliance to the stipulations made by MOEF vide OM no. J-11001/60/2000-IA-II dated 9 <sup>th</sup> April, 2001 for expansion of Panipat Refinery from 6 MMTPA to 12 MMTPA	Being Complied
2.	The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> 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 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.	Being Complied.  Emission from the stack is being monitored online and from approved lab on bi-monthly basis. All stacks are connected online to CPCB / HSPCB server for parameters such as SO <sub>2</sub> , NO <sub>x</sub> , CO & PM.  Gaseous emission from various process units meets the prescribed standards.
3.	Adequate ambient air quality monitoring stations, (SPM, SO <sub>2</sub> , NO <sub>x</sub> and HC, Benzene) should be set up in the refinery complex in consultation with SPCB, 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. Continuous on-line stack monitoring equipment should be installed for measurement of SO <sub>2</sub> and NO <sub>x</sub> . Data on VOC should be monitored and submitted to the SPCB / Ministry.	9 nos. CAAQMS (5 nos. in Refinery, 2 nos. in Panipat city, 1 no. each in Refinery township and Polishing Pond area are in operation. These were set up in consultation with HSPCB. Also mobile van for ambient air quality monitoring is in place.  For all stacks: SO <sub>2</sub> , CO, PM & NO <sub>x</sub> analyzers are available and connected with CPCB server.  Fugitive emission monitoring for Hydrocarbon and benzene is done quarterly through approved agency.  All reports are submitted to HSPCB regularly.
4.	Fugitive emission of HC from product storage tank yard, crude oil tanks etc. must be regularly monitored. Sensors for detecting HC leakage should also be provided at strategic locations.	Fugitive emission monitoring for Hydrocarbon and Benzene for product storage tanks and crude oil storage tanks is done through approved agency on quarterly basis.  Hydrocarbon detectors have been provided at strategic locations.



SN	EC Conditions	Compliance Status
5.	The company shall also ensure that the total SO <sub>2</sub> emissions from the Panipat Refinery after expansion shall not exceed i.e. 1000 kg/hr. The company shall install an additional Sulphur Recovery Unit (225 MT/day capacity) with 99.9% efficiency and the entire gas generated should be amine treated to reduce the SO <sub>2</sub> emissions level from the Refinery.	<p>The total SO<sub>2</sub> emission of Panipat Refinery not exceeding the mentioned limit i.e. 1000 kg/hr.</p> <p>Panipat Refinery has 5 nos. Sulphur Recovery Units (SRUs) as detailed below and 4 (3 units of 99.9 % recovery and 1 of 99% efficiency) out of 5 units are in operation:</p> <ul style="list-style-type: none"> <li>• 2 no. SRUs: 99% efficiency ,2X115 MT/day capacity</li> <li>• 3 no. SRUs: 99.9% efficiency ,2X225 MT/day capacity</li> </ul>
6.	<p>As per the commitment given, there should be zero effluent discharge due to the proposed expansion.</p> <p>The company should ensure that there will be no discharge of treated effluent into Thirana Drain and the treated effluent from the refinery is not discharged along with the treated effluent from PX-PTA plant.</p> <p>The entire treated waste water should be recycled for reuse in the plant operation and greenbelt development so as to maintain zero discharge. Further, the liquid effluent generated from the Refinery should be treated comprehensively to conform to the load based standards and concentration limits prescribed under Environment (Protection) Act, 1986 Rules.</p>	<p>There is no discharge of treated effluent from Refinery operation into Thirana drain.</p> <p>ETP-1 &amp; ETP-2 treated effluent meets Refinery MINAS. These treated effluents are re-used as a feed to RO plant and makeup to Cooling Towers.</p> <p>PTA-ETP treated effluent meeting Petrochemical MINAS is discharged into Thirana Drain as per Consent-To-Operate /approvals from MOEFCC, HSPCB &amp; Irrigation Department.</p>
7.	The IOCL shall ensure installation of continuous flow measurement devices so that only the permitted quantity of treated effluent from PX-PTA plant (255 m <sup>3</sup> /hr.) is discharged. Further, IOCL shall make all efforts to recycle and reuse the treated effluent from PX-PTA plant after commencing of the unit.	<p>Flow meters were installed at the time of setting up PTA-ETP. At no point of time discharge of treated effluent is exceeding the prescribed limit of 255 m<sup>3</sup>/hr.</p> <p>Process Licensor M/s INVISTA has confirmed that "Recycle and Reuse" of PTA treated effluent is not feasible.</p> <p>However technical feasibility studies for Recycle and Reuse of PTA treated effluent is being taken up with leading technology providers in the field of Water Treatment.</p>
8.	Additional water requirement shall not exceed 400 m <sup>3</sup> /hr. The total quantity of effluent generation should not exceed 1280 m <sup>3</sup> /hr. as indicated in the Environment Management Plan. The treated effluent should be reused/ recycled to achieve zero discharge.	<p>The total allowable withdrawal of fresh water as per previous EC was 3000 m<sup>3</sup>/hr (as per EC of 6-12 MMTPA expansion).</p> <p>Adding the additional quantity of 400 m<sup>3</sup>/hr., the overall total allowable water quantity is 3400 m<sup>3</sup>/hr. Presently, fresh water consumption of the Refinery is well below the above mentioned limits.</p>



SN	EC Conditions	Compliance Status
		<p>Total quantity of effluent generation remains &lt;1100 m<sup>3</sup>/hr.</p> <p>ETP-1 &amp; ETP-2 treated effluent meets MINAS. These treated effluents from Refinery operation are completely re-used as a feed to RO plant and as a makeup to Cooling Towers.</p> <p>PTA-ETP treated effluent meeting Petrochemical MINAS is discharged into Thirana Drain as per approvals/ Consent to Operate from MOEFCC, HSPCB, and Irrigation Department.</p>
9.	Green belt of adequate width and density should be provided to mitigate the effects of fugitive emissions all around the plant. The bio-sludge from the ETP should be used as manure in the green belt development. Company shall develop greenbelt in consultation with DFO as per CPCB guidelines.	<p>Greenbelts with adequate width &amp; density were already provided. These greenbelts were developed in consultation with the District Forest Deptt.</p> <p>Bio-sludge from ETP is being used as manure after converting it to semi solid form.</p>
10.	The IOCL shall make efforts to sell petroleum coke (0.9 MMTPA) to organized industries having consent from the concerned State Pollution Control Board. Further, the Pet-coke from the Delayed Coker Unit should be conveyed to storage area by pipe conveyer system. The company should ensure to prevent seepage in Pet-coke stockpile / storage area to prevent soil and ground water pollution.	<p>The Refinery gives Pet-coke to a separate IOCL division called Marketing Division which sells the same to consented/registered industries.</p> <p>Pet-coke is conveyed to storage area by pipe conveyer system.</p>
11.	The oily sludge generated from the refinery operation should be subjected to melting pit treatment for recovery of oil. The recovered oil should be recycled. The residual oily sludge should be disposed off in the HDPE lined pits.	<p>The raw oily sludge generated from the Refinery is subjected to Oil recovery/Melting Pit treatment for recovery of oil. The recovered oil is recycled back with crude oil for processing.</p> <ul style="list-style-type: none"> <li>- The residual sludge is disposed-off through confined Bio-remediation.</li> <li>- Part of the sludge is processed in Coker unit.</li> </ul> <p>There are 4 nos. lined pits available for storing oily sludge.</p>
12.	The company should adopt mounded storage for LPG. The project authorities shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP and risk analysis report.	The Mounded Bullets are in operation.
13.	Occupational Health Surveillance of the workers should done on a regular basis and records maintained as per the Factories Act.	The Refinery has a full-fledged Occupational Health Centre (OHC) in operation. The OHC carries out health surveillance of the workers

SN	EC Conditions	Compliance Status																								
		on a regular basis and records are maintained.																								
General conditions																										
1.	The project authorities must strictly adhere to the stipulations made by the Haryana State Pollution Control Board and the State Government.	Complied																								
2.	No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment & Forests.	Noted.																								
3.	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.	Being Complied. Emission from the stack is being monitored online and from approved lab on bi-monthly basis. All stacks are connected online to CPCB/HSPCB server with parameters such as SO <sub>2</sub> , NO <sub>x</sub> , CO & PM.																								
4.	The overall noise levels in and around plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time).	The Refinery has provided silencers on compressor discharge, acoustic leggings on turbo generators & ejectors and acoustic chambers at the burners.  The ambient noise level meets the standards.																								
5.	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the project.	Complied.																								
6.	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 & Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections / treatment / storage / disposal of hazardous waste.	Complied.  Authorization for Hazardous Wastes from HSPCB has been obtained which is valid up to Sep'24.																								
7.	The project authorities will provide adequate funds both recurring and non-recurring 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	Being Implemented. Details of Year-wise expenditure: <table><tr><th colspan="2">FY:2017-18</th><th colspan="2">FY:2018-19</th><th colspan="2">FY:2019-20</th></tr><tr><th colspan="6">(Rupees in lacs)</th></tr><tr><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th><th>Recurring</th><th>Non-recurring</th></tr><tr><td>151.3</td><td>640.4</td><td>394.2</td><td>1728.6</td><td>551.8</td><td>5060.5</td></tr></table>	FY:2017-18		FY:2018-19		FY:2019-20		(Rupees in lacs)						Recurring	Non-recurring	Recurring	Non-recurring	Recurring	Non-recurring	151.3	640.4	394.2	1728.6	551.8	5060.5
FY:2017-18		FY:2018-19		FY:2019-20																						
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Recurring	Non-recurring	Recurring	Non-recurring	Recurring	Non-recurring																					
151.3	640.4	394.2	1728.6	551.8	5060.5																					

SN	EC Conditions	Compliance Status
	should not be diverted for any other purposes.	
8.	The stipulated conditions will be monitored by the Regional of this Ministry at Chandigarh / Central Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly.	Six monthly compliance report on EC conditions is regularly sent along with various monitoring reports.
9.	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 of Environment and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> 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.
10.	The project authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied



**ENVIRONMENTAL CLEARANCE STIPULATIONS FROM MOEFCC FOR BS-VI FUEL QUALITY UP-GRADATION AND EXPANSION OF PX/PTA PLANT AT PANIPAT REFINERY & PETROCHEMICAL COMPLEX (PRPC), PANIPAT (HARYANA) BY M/S INDIAN OIL CORPORATION LIMITED - ENVIRONMENTAL CLEARANCE - REG.**

(Ref. No. J-11011/177/2016-IA- II (I) dated 26.03.2018)

Sl. No.	Condition	Status
(i)	Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	Consent to Operate for BS-VI facilities including Panipat Refinery & PX-PTA Petrochemical Complex received from HSPCB on 05.05.2020.
(ii)	As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.	There is no discharge of treated effluent from Refinery operation into Thirana drain.  ETP-1 & ETP-2 treated effluent meets Refinery MINAS. These treated effluents are re-used as a feed to RO plant and makeup to Cooling Towers.  PTA-ETP treated effluent meeting Petrochemical MINAS is discharged into Thirana Drain as per Consent-To-Operate/approvals from MOEFCC, HSPCB & Irrigation Department.
(iii)	In case of PX/PTA expansion project, there shall not be any increase in effluent discharge and the treated effluent of 255 cum/hr shall continue to be discharged to the existing Thirana Drain.	No increase in treated effluent discharge into Thirana Drain post PX-PTA capacity expansion project. 255 m <sup>3</sup> /hr. shall continue to be discharged to the existing Thirana Drain.
(iv)	Necessary authorization required under the Hazardous and Other Wastes Management Rules, 2016 shall be obtained and the previous contained in the Rules shall be strictly adhered to.	Authorization under Hazardous and Other Wastes Management Rules, 2016 received from HSPCB on 16.06.2020.
(v)	Total SO <sub>2</sub> emissions from the Refinery (including BS-VI Upgradation project) shall not exceed 1100 kg/hr whereas, for the PX/PTA plant after expansion, total SO <sub>2</sub> emissions shall not exceed 375 kg/hr. Accordingly, total SO <sub>2</sub> emissions from the Refinery Complex shall be limited to 1475 kg/hr.	SO <sub>2</sub> emissions from the Refinery (including BS-VI Up gradation project) is within 1100 kg/hr. SO <sub>2</sub> emissions from the PX-PTA petrochemical project is well within 275 Kg/hr. PX-PTA expansion project is under Implementation post commissioning, it will be maintained below 375 Kg/hr. Presently cumulative SO <sub>2</sub> emission from Panipat Refinery & PX-PTA Complex is below 1375 kg/hr.
(vi)	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21 <sup>st</sup> July, 2010 and amended from time to time shall be followed.	Being complied.
(vii)	To control source and the fugitive emissions, suitable pollution control devices shall be installed with different stacks (attached to DHDT, HGU, Prime G) to meet the prescribed norms and /or the NAAQS. The	For BS-VI fuel quality up gradation project being complied. For PX-PTA capacity expansion project shall be ensured.



Sl. No.	Condition	Status
	gaseous emissions shall be dispersed through stacks of adequate height as per CPCB / SPCB guidelines.	
(viii)	Total fresh water requirement shall not exceed 354 m <sup>3</sup> /hr (8500 KLD) to be met from Munak Regulator. Necessary permission in this regard shall be obtained from the concerned regulatory authority.	Complied
(ix)	Process effluent/any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Being complied
(x)	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Complied
(xi)	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers/cement industry.	Complied,  Being mixed fuel (Liquid +Gas) firing in the Boiler will be no ash generation.
(xii)	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.	Being complied
(xiii)	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure to workers to fly ash & dust should be avoided.	Not Applicable
(xiv)	The company shall undertake waste minimization measures as below: (a) Metering and control of quantities of active ingredients to minimize waste. (b) Reuse of by-products from the process as raw material or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Complied
(xv)	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	Complied



Sl. No.	Condition	Status
	State Forest Department.	
(xvi)	At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Complied
(xvii)	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
(xviii)	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.	Complied
(xix)	Continuous online (24X7) monitoring system for stack emission 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.  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.	Complied  Complied
(xx)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Being complied
<b>General Conditions</b>		
(i)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	Complied
(ii)	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 alternations 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 locations of ambient air quality monitoring stations shall be decided in consultation with 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.	2 nos. of additional CAAQMS under BS-VI fuel quality up-gradation project commissioned in addition to existing 7 nos. of CAAQMS.



Sl. No.	Condition	Status
(iv)	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 <sup>th</sup> November, 2009 shall be followed.	Complied
(v)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Complied
(vi)	The Company shall harvest rainwater from the roof tops of the building 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.	Complied
(vii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Being complied
(viii)	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	Shall be complied
(ix)	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.	Complied
(x)	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Complied
(xi)	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	Complied
(xii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila	Complied

Sl. No.	Condition	Status
	Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.	
(xiii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website to the company.	This is being complied already and will continue to do so in future
(xiv)	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	This is being complied already and will continue to do so in future
(xv)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied and informed
(xvi)	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.	Complied



**General Conditions:**

SN	Description	Action By
1.	The project authorities must strictly adhere to the stipulations made by State Pollution Control Board (SPCB), State Govt. and/or any other statutory authority.	Shall be adhered
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 this ministry for clearance a fresh reference should be made to the ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted & Shall be adhered
3.	The location of Ambient Air Quality Monitoring Stations shall be decided in consultation with the State Pollution Control Board and it shall be ensured that at least one stations each is installed in upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Will be complied.
4.	The Nation Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16 <sup>th</sup> November, 2009 shall be complied with.	Shall be 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 source of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 and the rules made there under.	Will be complied.
6.	The company shall harvest rain water from the rooftops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations inside the plant.	Will be complied.
7.	Training shall be imparted to all employees on safety and health aspects of chemical 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.	Will be complied
8.	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environmental management risk mitigation measures and public hearing shall be implemented.	Will be complied.
9.	The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental shall be undertaken for overall improvement of the environment.	Will be complied
10.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Will be complied



11.	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forests and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	Complied
12.	A copy of the clearance letter shall be sent by the project proponent to the concerned Panchayat, Zila Parishad/Municipal corporation, urban local body and local NGO, if any, from whom suggestion/representation, if any, were received while processing the proposal.	Complied
13.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (Both in hard copy as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	Complied
14.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Environmental Clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Will be complied
15.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of issue of clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office of the Ministry.	Complied

General Conditions:

SN	Description	Action By
1.	The project authorities must strictly adhere to the stipulations made by State Pollution Control Board (SPCB), State Govt. and/or any other statutory authority.	Shall be adhered
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 this ministry for clearance a fresh reference should be made to the ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted & Shall be adhered
3.	The location of Ambient Air Quality Monitoring Stations shall be decided in consultation with the State Pollution Control Board and it shall be ensured that at least one stations each is installed in upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Will be complied.
4.	The Nation Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16 <sup>th</sup> November, 2009 shall be complied with.	Shall be 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 source of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 and the rules made there under.	Will be complied.
6.	The company shall harvest rain water from the rooftops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations inside the plant.	Will be complied.
7.	Training shall be imparted to all employees on safety and health aspects of chemical 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.	Will be complied
8.	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environmental management risk mitigation measures and public hearing shall be implemented.	Will be complied.
9.	The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental shall be undertaken for overall improvement of the environment.	Will be complied
10.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Will be complied



11.	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forests and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	Complied
12.	A copy of the clearance letter shall be sent by the project proponent to the concerned Panchayat, Zila Parishad/Municipal corporation, urban local body and local NGO, if any, from whom suggestion/representation, if any, were received while processing the proposal.	Complied
13.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (Both in hard copy as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	Complied
14.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Environmental Clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Will be complied
15.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of issue of clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office of the Ministry.	Complied



**Specific Conditions:**

SN	Description	Action By
1.	The project proponent shall install 10 TPD 2G Ethanol demo plant for R&D purpose.	Will be complied.
2.	Prior approval shall be obtained from the Petroleum & Explosive Safety Organization (PESO) for the site and layout plan submitted to this ministry along with the proposal for EC. In case of any changes therein post PESO approval, the proposal shall require fresh appraisal by the sectoral EAC.	Will be complied.
3.	Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as applicable from time to time shall be obtained from the State Pollution Control Board as required.	Complied
4.	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.
5.	Sludge management plan shall be formulated and ensured.	Will be complied.
6.	Ash management shall be ensured by utilizing for manufacturing bricks.	Will be complied.
7.	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement Rules, 2016 Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Will be complied.
8.	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Will be complied.
9.	Total fresh water requirement shall not exceed 109 m <sup>3</sup> /hr., proposed to be met from Munak Regulator on Western Yamuna Canal. Prior permission shall be obtained from the concerned regulatory authority.	Will be complied.
10.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arrester shall be provided on tank farm and the solvent transfer through pumps.	Will be complied.
11.	Process organic residue and spent carbon, if any shall be sent to cement industries. ETP sludge, process inorganic and evaporation salt shall be disposed off to the TSDF.	Will be complied.
12.	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as mentioned time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicles Act, 1989.	Will be complied.
13.	The company shall undertake waste minimization measures as below:- (a) Metering and control of quantities of active ingredients to minimize waste. (b) Reuse of by-products from the process as raw materials or as raw materials substitutes in other processes. (c) Use of automatic filling to avoid spillage.	Project under execution.

	(d) Use of Close Feed System into batch reactors. (e) Venting equipment through vapor recovery system (f) Use of high pressure hoses for equipment cleaning to reduce waste water generation.	
14.	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 done as per the CPCB guidelines in consultation with the State Forest Department.	Will be complied.
15.	All the commitments made regarding issues raised during the public hearing / consultation meeting shall be satisfactorily implemented.	Will be complied.
16.	At least 1% 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.
17.	For the DG sets, emission limits and stack height shall be in conformity with the extant regulations and the CPCB regulations. Acoustic enclosures shall be provided to the DG set for controlling the noise pollution.	Will be complied.
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.	Will be ensured, after project execution.
19.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	
20.	There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	Will be ensured, after project execution.
21.	Storage of raw material shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	Will be ensured, after project execution.
22.	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. 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.	



**ENVIRONMENTAL CLEARANCE STIPULATIONS FROM MOEFCC FOR SETTING UP 128 KL PER DAY ETHANOL PRODUCTION PLANT BY M/S INDIAN OIL CORPORATION LTD. (IOCL) IN PANIPAT REFINERY & PETROCHEMICAL COMPLEX AT PANIPAT, HARYANA - ENVIRONMENTAL CLEARANCE – REGARDING**  
(Ref. No. J-11011/78/2018-IA-II (I) dated 25.11.2019)

SN	Description	Action By
<b>General Conditions</b>		
1.	The project authorities must strictly adhere to the stipulations made by State Pollution Control Board (SPCB), State Govt. and/or any other statutory authority.	Shall be adhered.
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 this ministry for clearance a fresh reference should be made to the ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Shall be adhered.
3.	The location of Ambient Air Quality Monitoring Stations shall be decided in consultation with the State Pollution Control Board and it shall be ensured that at least one stations each is installed in upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	Will be complied
4.	The Nation Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R No. 826 (E) dated 16 <sup>th</sup> November, 2009 shall be complied with.	Will be 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 source of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 and the rules made there under.	Will be complied
6.	The company shall harvest rain water from the rooftops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations inside the plant.	Will be complied
7.	Training shall be imparted to all employees on safety and health aspects of chemical 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.	Will be complied
8.	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the ministry. All the recommendations made in the EIA/EMP in respect of environmental management risk mitigation measures and public hearing shall be implemented.	Will be Complied
9.	The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental shall be undertaken for overall improvement of the environment.	Will be Complied
10.	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Will be Complied
11.	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forests and Climate Change as well as the State Government	Will be Complied



	along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	
12.	A copy of the clearance letter shall be sent by the project proponent to the concerned Panchayat, Zila Parishad/Municipal corporation, urban local body and local NGO, if any, from whom suggestion/representation, if any, were received while processing the proposal.	Complied
13.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (Both in hard copy as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status reports shall be posted on the website of the company.	Will be Complied
14.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of Environmental Clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Will be Complied
15.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of issue of clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional Office of the Ministry.	Complied
<b>Specific Conditions</b>		
1.	Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 as applicable from time to time shall be obtained from the State Pollution Control Board as required.	Complied
2.	Effluent of 209 cum per day shall be treated in existing Effluent Treatment Plant of Panipat Refinery and Panipat Refinery will not exceed the permissible discharge as allowed to Panipat Refinery while granting environmental clearance vide letter dated 26 <sup>th</sup> March 2018.	Will be ensured
3.	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement Rules ,2016 Solid Waste Management Rules ,2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	Will be complied
4.	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Will be complied
5.	Odour shall be prevented at the source and effective odour management scheme shall be implemented.	Will be complied
6.	Total fresh water requirement shall not exceed 3600 cum/day, proposed to be met from Munak Regulator on Western Yamuna Canal. Prior permission shall be obtained from the concerned regulatory authority.	Will be ensured
7.	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arrester shall be provided on tank farm and the solvent transfer through	Will be complied

	pumps.	
8.	Process organic residue and spent carbon, if any shall be sent to cement industries. ETP sludge, process inorganic and evaporation salt shall be disposed off to the TSDF.	Will be complied
9.	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as mentioned time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicles Act, 1989.	Continuous, Will be complied
10.	The company shall undertake waste minimization measures as below:- (a) Metering and control of quantities of active ingredients to minimize waste. (b) Reuse of by-products from the process as raw materials or as raw materials substitutes in other processes. (c) Use of automatic filling to avoid spillage. (d) Use of Close Feed System into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure hoses for equipment clearing to reduce waste water generation.	Project under execution
11.	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 done as per the CPCB guidelines in consultation with the State Forest Department.	Will be complied
12.	All the commitments made regarding issues raised during the public hearing / consultation meeting shall be satisfactorily implemented.	Will be complied
13.	At least 1% 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. Priority shall be given for construction/repair of the village roads.	Will be complied
14.	For the DG sets, emission limits and stack height shall be in conformity with the extant regulations and the CPCB regulations. Acoustic enclosures shall be provided to the DG set for controlling the noise pollution.	Will be complied
15.	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
16.	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Will be complied
17.	There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	Will be ensured after project execution
18.	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. 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.	Will be complied
19.	The unit shall comply with NGT order and shall not damage environment any further including ground water.	Will be complied
20.	The unit shall take precautionary measures for control of VOCs and shall follow CPCB guideline and norms.	Will be complied



# MARYANA TEST HOUSE

& Consultancy Services

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

Ph: (0182) 3296463, (011) 9429917165, Tele-Fax: (0182) 2671112, Website: www.maryanatesthouse.net, e-mail: info@maryanatesthouse.net



## Test Results of Ambient Air Monitoring

On: 05.08.2020

Unit: Panipat Refinery

Month : July 2020

Location: Project Building

URL NO. TC781120100009114F

## Test Results

DATE OF SAMPLING	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	NH <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	O <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )	Benzene ( $\mu\text{g}/\text{m}^3$ )	Ni ( $\text{ng}/\text{m}^3$ )	As ( $\text{ng}/\text{m}^3$ )	Benzo(a) Pyrene ( $\text{ng}/\text{m}^3$ )
Time Weighted Average	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Standard Limit	100 max.	60 max.	80 max.	80 max.	420 max.	1 max.	100 max.	2 max.	5 max.	30 max.	5 max.	1 max.
Date of Sampling												
09.07.2020	92.29	55.42	18.19	38.72	57.33	< 0.02	27.05	< 1.14	1.25	< 1.0	< 0.5	< 0.2
13.07.2020	95.01	52.92	20.83	38.16	54.65	< 0.02	25.47	< 1.14	1.25	< 1.0	< 0.5	< 0.2
17.07.2020	93.44	51.67	22.82	38.72	57.33	< 0.02	27.05	< 1.14	1.14	< 1.0	< 0.5	< 0.2
20.07.2020	90.31	55.83	18.85	37.59	55.54	< 0.02	23.91	< 1.14	1.41	< 1.0	< 0.5	< 0.2
27.07.2020	92.15	52.92	23.49	37.59	54.65	< 0.02	24.69	< 1.14	1.36	< 1.0	< 0.5	< 0.2
31.07.2020	89.38	53.75	22.16	38.72	55.99	< 0.02	27.05	< 1.14	1.19	< 1.0	< 0.5	< 0.2
Minimum	89.38	51.67	18.19	37.59	54.65	< 0.02	23.91	< 1.14	1.25	< 1.0	< 0.5	< 0.2
Maximum	95.01	55.83	23.49	38.72	57.33	< 0.02	27.05	< 1.14	1.25	< 1.0	< 0.5	< 0.2
Average	92.10	53.75	21.06	38.25	55.92	< 0.02	25.87	< 1.14	1.25	< 1.0	< 0.5	< 0.2

Remarks: Protocol used IS: 5192

*[Signature]*  
Sr. Chemist / Mgr. (Lab)

*[Signature]*  
05.08.2020  
Authorized Signatory



# MARYANA TEST HOUSE

& Consultancy Services

58/47, Noida-25, Park-II, GUDA, Panipat-131 004 (HARYANA)

Ph: (+91) 01823290803, (M) 94160-17160, Toll-Free: 800-2611132, Website: www.maryanatesthouse.net, e-mail: info@maryanatesthouse.net



## Test Results of Ambient Air Monitoring

Dt: 09.09.2020

Unit: Panipat Refinery

Month : August 2020

Location: Project Building

URL NO: TC781120100010238F

## Test Results

DATE OF SAMPLING	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	NH <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	O <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )	Benzene ( $\mu\text{g}/\text{m}^3$ )	NI ( $\text{ng}/\text{m}^3$ )	As ( $\text{ng}/\text{m}^3$ )	Benzofluoranthene ( $\text{ng}/\text{m}^3$ )
Time Weighted Average	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Standard Limit	500 max	50 max	60 max	60 max	400 max	1 max	100 max	2 max	5 max	20 max	2 max	1 max
Date of Sampling												
04.08.2020	72.28	54.58	17.96	35.69	60.97	<0.02	18.02	<1.14	1.27	<1.0	<0.5	<0.2
07.08.2020	85.67	54.58	19.92	31.37	58.67	<0.02	25.16	<1.14	1.21	<1.0	<0.5	<0.2
10.08.2020	88.26	54.58	18.53	38.32	60.97	<0.02	20.39	<1.14	1.21	<1.0	<0.5	<0.2
13.08.2020	82.97	49.58	23.85	34.24	65.14	<0.02	26.87	<1.14	1.32	<1.0	<0.5	<0.2
18.08.2020	93.95	56.25	22.53	35.96	56.84	<0.02	21.25	<1.14	1.24	<1.0	<0.5	<0.2
21.08.2020	97.06	56.25	22.53	35.96	57.30	<0.02	25.67	<1.14	1.37	<1.0	<0.5	<0.2
24.08.2020	80.43	54.00	23.84	35.69	57.30	<0.02	25.12	<1.14	1.20	<1.0	<0.5	<0.2
29.08.2020	78.54	42.92	19.28	31.37	57.75	<0.02	22.03	<1.14	1.28	<1.0	<0.5	<0.2
Minimum	72.28	42.92	17.96	31.37	56.84	<0.02	18.02	<1.14	1.21	<1.0	<0.5	<0.2
Maximum	97.06	56.25	23.85	38.32	65.14	<0.02	26.87	<1.14	1.27	<1.0	<0.5	<0.2
Average	84.90	52.84	21.05	34.90	59.37	<0.02	23.17	<1.14	1.24	<1.0	<0.5	<0.2

Remarks: Protocol used is IS:1382

Sr. Chemist (Sp. Lab.)

Signature  
09.09.2020  
Authorized Signatory

# Haryana Test House

& Consultancy Services

39-C, Sector-25, Part-II, HUDRA, Faridkot-151 108 (HARYANA)

Ph: (011) 813250431, (M) 99160-17160, Tele-Fax: 0186-2671112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net



## Test Results of Ambient Air Monitoring

Unit: Panipat Refinery

Month : Sept. 2020

Location: Project Building

URL NO. TC781126100011801F

Dt: 03.10.2020

## Test Results

DATE OF SAMPLING	PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	PM <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NH <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )	Pb ( $\mu\text{g}/\text{m}^3$ )	O <sub>3</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\text{mg}/\text{m}^3$ )	Benzene ( $\mu\text{g}/\text{m}^3$ )	NI ( $\text{ng}/\text{m}^3$ )	As ( $\text{ng}/\text{m}^3$ )	Benzopyrene ( $\text{ng}/\text{m}^3$ )
Time Weighted Average	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Standard Limit	100 max.	50 max.	80 max.	80 max.	400 max.	1 max.	100 max.	2 max.	5 max.	20 max.	6 max.	1 max.
Data of Sampling												
01.09.2020	90.78	43.60	18.48	35.10	58.97	< 0.02	22.03	< 1.14	1.15	< 1.0	< 0.5	< 0.02
04.09.2020	81.58	44.58	21.22	35.68	57.30	< 0.02	21.28	< 1.14	1.24	< 1.0	< 0.5	< 0.02
07.09.2020	86.88	41.82	20.57	34.24	55.02	< 0.02	24.36	< 1.14	1.20	< 1.0	< 0.5	< 0.02
11.09.2020	78.38	51.25	19.92	37.15	41.83	< 0.02	24.62	< 1.14	1.32	< 1.0	< 0.5	< 0.02
14.09.2020	84.58	52.73	19.41	34.24	58.87	< 0.02	22.77	< 1.14	1.25	< 1.0	< 0.5	< 0.02
18.09.2020	82.12	43.75	18.61	34.53	52.64	< 0.02	25.85	< 1.14	1.05	< 1.0	< 0.5	< 0.02
21.09.2020	97.12	52.92	18.61	37.15	55.24	< 0.02	22.92	< 1.14	1.33	< 1.0	< 0.5	< 0.02
25.09.2020	93.27	52.08	19.92	36.58	55.24	< 0.02	21.17	< 1.14	1.02	< 1.0	< 0.5	< 0.02
28.09.2020	89.52	45.90	18.48	34.96	62.91	< 0.02	25.83	< 1.14	1.31	< 1.0	< 0.5	< 0.02
Minimum	78.38	43.60	18.48	34.24	41.83	< 0.02	21.17	< 1.14	1.02	< 1.0	< 0.5	< 0.02
Maximum	97.12	52.92	21.22	37.15	62.91	< 0.02	25.85	< 1.14	1.33	< 1.0	< 0.5	< 0.02
Average	86.98	47.85	19.47	37.74	55.29	< 0.02	23.42	< 1.14	1.21	< 1.0	< 0.5	< 0.02

Remarks: Protocol used IS: 5182

TOTD  
(Chemist / Mgr Lab.)



# Haryana Test House

& Consultancy Services

70/4, Sector-25, Plot E, HTDA, Pwani-132 304 (HARYANA)

Ph: (+91) 0180-3290001, (+91) 94160-17106, Toll Free: 0800-2671112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net



## Test Results of Ambient Air Monitoring

Dr: 02.11.2020

Unit: Panipat Refinery

Month : Oct. 2020

Location: Project Building

URL NO. TC281120100013663F

## Test Results

DATE OF SAMPLING	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	NH <sub>3</sub> (µg/m <sup>3</sup> )	Pb (µg/m <sup>3</sup> )	O <sub>3</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Semene (µg/m <sup>3</sup> )	B (ng/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Benz(a) Pyrene (ng/m <sup>3</sup> )
Time Weighted Average	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	24 hrs	8 hrs	8 hrs	Annual	Annual	Annual	Annual
Standard Limit	130 max	95 max	80 max	80 max	400 max	1 max	500 max	2 max	5 max	20 max	6 max	1 max
Date of Sampling												
02.10.2020	144.95	63.75	22.95	37.39	57.32	< 0.02	23.02	< 1.14	1.32	< 2.0	< 1.0	< 0.2
05.10.2020	129.20	70.42	21.64	37.60	53.78	< 0.02	24.15	< 1.14	1.35	< 2.0	< 1.0	< 0.2
08.10.2020	135.19	66.36	20.34	38.20	59.11	< 0.02	23.56	< 1.14	1.24	< 2.0	< 1.0	< 0.2
10.10.2020	125.11	67.08	23.39	36.15	51.15	< 0.02	23.02	< 1.14	1.26	< 2.0	< 1.0	< 0.2
16.10.2020	153.92	77.55	24.84	35.14	53.84	< 0.02	24.70	< 1.14	1.26	< 2.0	< 1.0	< 0.2
19.10.2020	142.75	69.58	22.53	37.61	50.27	< 0.02	25.29	< 1.14	1.42	< 2.0	< 1.0	< 0.2
23.10.2020	152.62	89.35	25.98	38.38	65.64	< 0.02	25.26	< 1.14	1.46	< 2.0	< 1.0	< 0.2
Minimum	125.11	63.75	20.34	35.14	50.27	< 0.02	23.02	< 1.14	1.24	< 2.0	< 1.0	< 0.2
Maximum	153.92	89.35	25.98	38.38	65.64	< 0.02	25.29	< 1.14	1.46	< 2.0	< 1.0	< 0.2
Average	140.91	71.36	23.10	37.36	55.90	< 0.02	24.05	< 1.14	1.35	< 2.0	< 1.0	< 0.2

Remarks: Protocol used H-5402

Sr. Chemist / Mgr (Lab)





HE 1041130-325001 (M44 MLT714). Tel/Fax 0180 367111. Website [www.humanscience.co.uk](http://www.humanscience.co.uk) e-mail [info@humanscience.co.uk](mailto:info@humanscience.co.uk) or [humanscience@btinternet.com](mailto:humanscience@btinternet.com)

Oct 03 10:20:20

Month: Sep 2020 (URL No. TC731120100012978F)

Sl. No.	Stack Particulars	Date of Sampling	Temp. °C	Diameter of Stack (m)	Gas Velocity (m/sec)	Flue Gas Volume at STP (Nm <sup>3</sup> /hr)	Particulate Matter (PM <sub>10</sub> ) Limit Gas: 15 mg/Nm <sup>3</sup> Liquid: 100 mg/Nm <sup>3</sup>		Sulphur Dioxide (SO <sub>2</sub> ) Limit Gas: 50 mg/Nm <sup>3</sup> Liquid: 1700 mg/Nm <sup>3</sup>		Oxides of Nitrogen (NO <sub>x</sub> ) Limit Gas: 200 mg/Nm <sup>3</sup> Liquid: 400 mg/Nm <sup>3</sup>		Carbon Monoxide (CO) Limit Gas: 150 mg/Nm <sup>3</sup> Liquid: 200 mg/Nm <sup>3</sup>		Mercury (Hg) mg/Nm <sup>3</sup> mg/hr		Vapour (V) mg/Nm <sup>3</sup> mg/hr		Residue/Variation Limit: 24 - 48, Liquid: 5 mg/lit				
							mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	mg/Nm <sup>3</sup>	mg/hr	
A. MCR Section																							
1	CCM Stack-4F 101 FF 102 FF 206	21.01.2020	101	0.34	0.25	7604.00	14.32	1.14	280	5.24	0.41	37.30	50.02	0.29	2	3.75	0.40	<0.002	0.0017	<0.002	0.0017	0.04	0.0024
2	CCM Stack-FF 201 FF 202 FF 203	21.01.2020	100	0.34	0.26	26742.46	14.30	0.84	130	2.52	0.51	20.30	62.07	1.40	0	3.87	0.29	<0.002	0.0008	<0.002	0.0009	0.04	0.0017
Total in (kg/hr)									1.04		0.92			0.69		0.71		0.003		0.003		0.005	
B. General Hydrocarbon (ppb)																							
3	CHM-FF Hydroc 01	20.06.2020	170	1.00	0.71	40230.11	17.34	0.50	800	18.67	0.85	30.35	75.30	1.58	37	36.84	1.77	<0.002	0.0071	<0.002	0.0071	0.04	0.0027
4	CHM-FF Hydroc 02	20.06.2020	152	1.00	0.81	38273.41	12.71	0.40	370	7.80	0.45	60.90	50.02	1.30	30	41.02	0.68	<0.002	0.0071	<0.002	0.0071	0.04	0.0022
Total in (kg/hr)									1.24		0.80			1.82		1.64		<0.002		0.002		0.004	
C. CO Section																							
5	Waste Chargo Heater	21.01.2020	100	2.00	2.00	51102.07	14.30	0.25	200	5.24	0.37	14.00	30.03	1.20	17	13.00	0.64	<0.002	0.0071	<0.002	0.0071	0.04	0.0043
6	Waste Chargo Heater	21.01.2020	104	1.10	0.84	30111.30	14.30	0.20	130	2.62	0.30	13.90	20.17	1.40	12	13.74	0.30	<0.002	0.0008	<0.002	0.0008	0.04	0.0009
7	Waste Chargo Heater	21.01.2020	100	1.30	2.00	20000.00	17.30	0.20	200	5.24	0.70	30.30	50.04	1.00	0	0.16	0.18	<0.002	0.0008	<0.002	0.0008	0.04	0.0008
Total in (kg/hr)									1.20		2.40			2.60		1.10		0.0020		0.0008		0.004	
D. MSD																							
8	MSD CO (Waste 201) MSD	21.01.2020	100	2.00	0.70	70700.00	10.00	0.00	1.00	2.60	0.07	10.00	10.74	0.50	10	0.00	1.00	<0.002	0.0010	<0.002	0.0010	0.04	0.0001
9	MSD CO (Waste 101)	21.01.2020	100	2.00	0.20	13000.00	10.00	0.00	1.00	0.34	0.07	10.00	10.00	1.00	0	0.07	0.00	<0.002	0.0008	<0.002	0.0008	0.04	0.0001
Total in (kg/hr)									2.00		0.00			1.00		2.00		0.005		0.005		0.0001	
E. TPS Section																							
10	MSD CO	21.01.2020	100	0.00	10.00	10000.00			0.00	10.00	0.07	10.00	10.00	1.00	0	0.00	0.00	-					



# HARYANA TEST HOUSE & Consultancy Services

50-C, Sector-25, Part-II, HTDA, Faridkot-152 304 (HARYANA)

Ph: (01) 276437, (01) 24160-17/68, Tele Fax: 0182-2671112, Website: www.haryanatesthouse.com, e-mail: info@haryanatesthouse.net, haryanatesthouse@gmail.com



## Test Results of Stack Emissions

Dt: 03.10.2020

Unit: Panipat Refinery

Month: Sep 2020 (URL No. TC781120100012978F)

Sl. No.	Stack Particulars	Date of Sampling	Temp. °C	Diameter of Stack (m)	Gas Velocity (m/sec)	Flue Gas Volume at 25°C (m³/sec)	Particulate Matter (PM)		Sulphur Dioxide (SO <sub>2</sub> )			Oxides of Nitrogen (NO <sub>x</sub> )			Carbon Monoxide (CO)			Winds (m)		Direction (°)		Speed (km/hr)	
							Limit: 50 mg/Nm³	Limit: 100 mg/Nm³	Limit: 50 mg/Nm³	Limit: 100 mg/Nm³	Limit: 100 mg/Nm³	Limit: 50 mg/Nm³	Limit: 100 mg/Nm³	Limit: 100 mg/Nm³	Limit: 50 mg/Nm³	Limit: 100 mg/Nm³	Limit: 100 mg/Nm³	Limit: 50 mg/Nm³	Limit: 100 mg/Nm³	Limit: 50 mg/Nm³	Limit: 100 mg/Nm³	Limit: 50 mg/Nm³	Limit: 100 mg/Nm³
							mg/Nm³	kg/hr	ppm	mg/Nm³	kg/hr	ppm	mg/Nm³	kg/hr	ppm	mg/Nm³	kg/hr	mg/Nm³	kg/hr	mg/Nm³	kg/hr	mg/Nm³	kg/hr
11	HH0027	21.09.2020	108	1.30	12.25	15770.08	-	-	1.05	7.85	1.55	93.00	69.00	28.40	8	5.15	1.55	-	-	-	-	-	-
12	HH0028	21.09.2020	101	1.28	10.38	20186.75	-	-	1.05	7.85	1.55	93.00	69.00	28.40	8	5.15	1.55	-	-	-	-	-	-
13	HH0029	21.09.2020	103	1.30	12.25	15770.08	-	-	1.05	7.85	1.55	93.00	69.00	28.40	8	5.15	1.55	-	-	-	-	-	-
	Total in (kg/hr)										6.25			14.50		6.01							

Dr. Chandra Mohan (S.O.)



# HARYANA TEST HOUSE

& Consultancy Services

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

Ph: (0191) 3290493, (0194) 660-17360, Tele/Fax: 0190-3875112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net



## Test Results of Stack Emissions

Dt: 04.08.2020

Unit: Panipat Refinery

Month: July 2020 (URL NO. TC781120104069354F)

Stack Particular	Date of Sampling	Temp. °C	Diameter of Stack (m)	Gas Velocity (m/sec)	Flue Gas Volume at 25°C (Nm <sup>3</sup> /hr)	Sulphur Dioxide (SO <sub>2</sub> )			Dioxides of Nitrogen (NO <sub>x</sub> )			Carbon Monoxide (CO)			Hydrogen Sulphide (H <sub>2</sub> S)		
						ppm	mg/Nm <sup>3</sup>	kg/hr	ppm	mg/Nm <sup>3</sup>	kg/hr	ppm	mg/Nm <sup>3</sup>	kg/hr	ppm	mg/Nm <sup>3</sup>	kg/hr
SRU New Unit 26	13.07.2020	180.00	1.04	0.72	100949.11	4.00	16.47	1.88	98.00	124.12	15.93	10.30	11.45	1.84	<0.2	<0.28	<0.01
SRU New Unit 57	13.07.2020	178.00	1.30	1.44	194966.62	3.00	7.85	1.45	12.00	14.82	21.52	7.05	8.02	1.42	<0.2	<0.28	<0.01

  
Mgr. Lab. / Sr. Chemist

  
04/08/2020  
Authorized Signatory  
CM/ TM/ AM





### Test Results of Stack Emissions

Unit: Panipat Refinery

Month: Aug 2020 (URL NO. TC751120100010881F)

Dt: 09.09.2020

Stack Particular	Date of Sampling	Temp. °C	Diameter of Stack (m)	Gas Velocity (m/sec)	Flue Gas Volume at 25°C (Nm <sup>3</sup> /hr)	Sulphur Dioxide (SO <sub>2</sub> )			Oxides of Nitrogen (NO <sub>x</sub> ) Limit: Old SRO 250 mg/Nm <sup>3</sup> Limit: New SRO 200 mg/Nm <sup>3</sup>			Carbon Monoxide (CO) Limit: Old SRO 150 mg/Nm <sup>3</sup> Limit: New SRO 100 mg/Nm <sup>3</sup>			Hydrogen Sulphide (H <sub>2</sub> S) Limit: Old SRO 15 mg/Nm <sup>3</sup> Limit: New SRO 10 mg/Nm <sup>3</sup>		
						ppm	mg/m <sup>3</sup>	kg/hr	ppm	mg/m <sup>3</sup>	kg/hr	ppm	mg/m <sup>3</sup>	kg/hr	ppm	mg/m <sup>3</sup>	kg/hr
SRU CW-22	16.08.2020	162.00	1.04	10.24	18216.74	5.00	12.88	2.16	52.00	17.28	52.15	26.00	28.77	4.91	< 0.2	< 0.28	< 0.01
SRU New (Unit 20)	17.08.2020	180.00	1.30	8.48	18470.22	5.00	12.88	2.42	52.00	17.28	55.07	46.00	52.67	9.73	< 0.2	< 0.28	< 0.01
SRU New (Unit 17)	17.08.2020	162.00	1.30	9.57	19120.96	4.00	10.47	2.18	63.00	118.98	22.86	52.00	58.54	11.80	< 0.2	< 0.28	< 0.01

*[Signature]*

Mgr. Lab. / Sr. Chemist

*[Signature]*  
09.09.2020

Authorised Signatory  
CM/ TNA AM

# HARYANA TEST HOUSE

& Consultancy Services

30-1, Sector-25, Part-II, R.D.N., Panch-132 004 HARYANA

Ph. (011) 265 5766/67, (011) 265 5768, Tele-Fax: 011-265 2671112, Website: www.haryanatesthouse.net, info@haryanatesthouse.net, haryanatesthouse@gmail.com



## Test Results of Stack Emissions

Dr: 02.11.2020

Unit: Panipat Refinery

Month: Oct 2020

Sl. No.	Stack Particulars	Date of Sampling	Temp. °C	Diameter of Stack (m)	Gas Velocity (m/sec)	Flow Rate Volume at 25°C (Nm³/hr)	Particulate Matter (PM) Unit: Gm. 10 mg/m³ Liquid: 100 mg/m³		Sulphur Dioxide (SO₂) Unit: Gm. 10 mg/m³ Liquid: 100 mg/m³			Oxides of Nitrogen (NOx) Unit: Gm. 10 mg/m³ Liquid: 100 mg/m³			Carbon Monoxide (CO) Unit: Gm. 10 mg/m³ Liquid: 100 mg/m³			Moisture (H₂O)		Velocity (V)		Moisture Content Unit: (H₂O + V) Liquid: 1 mg/m³	
							mg/m³	kg/hr	ppm	mg/m³	kg/hr	ppm	mg/m³	kg/hr	ppm	mg/m³	kg/hr	mg/m³	kg/hr	mg/m³	kg/hr	mg/m³	kg/hr
01	MSU 75	12.10.2020	100	3.40	10.25	17100.00	11.20	0.29	480	10.47	2.77	30.00	8.19	2.17	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
Total in (mg/m³)								0.27			0.00			0.30			0.29			0.000		0.000	
D. PK Section																							
10	MSU Header	14.10.2020	100	1.50	10.05	16000.00	11.00	0.28	400	11.47	0.79	30.00	10.60	2.71	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
11	MSU Charge Header	14.10.2020	100	2.00	10.30	17000.00	10.00	0.26	400	10.47	0.71	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
12	MSU Charge Header	14.10.2020	100	1.50	10.05	16000.00	10.00	0.26	400	10.47	0.71	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
13	MSU Charge Header	14.10.2020	100	1.50	10.05	16000.00	10.00	0.26	400	10.47	0.71	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
Total in (mg/m³)								1.00			2.26			12.35			1.10		0.0000		0.0000		0.000
E. TPS Section																							
20	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
21	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
22	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
23	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
24	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
25	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
26	MSU 10	14.10.2020	100	2.50	10.05	15000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
Total in (mg/m³)								10.20			17.00			10.70			10.20		0.0000		0.0000		0.000
F. DCS Section																							
30	MSU 10	14.10.2020	100	2.50	11.05	16000.00	11.40	0.29	500	11.71	1.10	30.00	10.30	2.67	9	10.20	0.28	+1000	0.0000	+1000	0.0000	0.39	0.000
Total in (mg/m³)								0.20			0.20			0.20			0.20		0.0000		0.0000		0.000
G. MSU																							

TOR  
GTC/Chemistry (Lab.)

Signature  
02.11.2020  
Authorized Signatory



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OK 02.11.2020

### Test Results of Stack Emissions

Unit: Panipat Refinery

Month: Oct 2020

Sr No	Stock Performance	Type of Monitoring	Temp	Diameter of Stock (in)	Free Surface Velocity (m/sec)	Free Surface Slope (1:100)	Particle Size Distribution (PSD)		Solids Concentration (SS)		Sedimentation Rate (mm/hr)		Sedimentation Rate (mm/hr)		Remarks
							mm	mm	mm	mm	mm	mm	mm	mm	
1	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
3	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
4	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
6	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
11	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
13	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
14	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
16	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
17	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
18	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
19	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
20	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
21	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
22	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
23	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
24	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
26	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
27	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
29	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
30	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
31	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
32	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
33	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
34	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
36	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
37	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
38	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
39	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
40	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
41	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
42	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
43	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
44	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
46	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
47	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
48	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
49	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
50	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
51	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
52	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
53	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
54	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
56	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
57	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
58	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
59	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
60	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
61	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
62	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
63	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
64	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
66	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
68	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
69	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
70	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
71	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
73	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
74	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
76	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
77	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
78	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
79	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
80	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
81	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
82	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
83	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
84	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
86	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
87	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
88	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
89	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
90	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
91	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
92	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
93	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
94	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
96	Stock Performance	Temp	25	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1</	

TABLE 1

See also: [Bibliography](#)





# HARYANA TEST HOUSE

& Consultancy Services

50-C, Sector-25, Phase-I, DDA, Panipat-132-104 (HARYANA)

Ph: (0151) 50-129043, (M) 94169-37166, Tele Fax: 9150-2671112, Website: www.haryanatesthouse.com, e-mail: info@haryanatesthouse.com



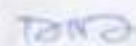
## Test Results of Stack Emissions

DT: 02.11.2020

Unit: Panipat Refinery

Month: Oct 2020 (URS NO: TC/81120160014418F)

Stack Particular	Date of Sampling	Temp. °C	Diameter of Stack (m)	Gas Velocity (m/sec)	Flue Gas Volume at 25°C (Nm <sup>3</sup> /hr)	Sulphur Dioxide (SO <sub>2</sub> )			Oxides of Nitrogen (NO <sub>x</sub> )			Carbon Monoxide (CO)			Hydrogen Sulphide (H <sub>2</sub> S)		
						ppm	mg/m <sup>3</sup>	kg/hr	ppm	mg/m <sup>3</sup>	kg/hr	ppm	mg/m <sup>3</sup>	kg/hr	ppm	mg/m <sup>3</sup>	kg/hr
SO <sub>2</sub> (In - 2)	11.10.2020	45.40	3.04	9.10	15960.24	4.00	10.47	1.52	33.50	82.27	12.00	26.00	26.72	4.00	<0.2	<0.2	<0.2
SO <sub>2</sub> (New Limit 50)	15.10.2020	50.00	3.00	9.16	16277.01	3.00	7.64	1.08	56.50	140.94	19.20	<10	26.00	0.80	<0.2	<0.2	<0.2
SO <sub>2</sub> (New Limit 50)	18.10.2020	50.00	3.00	9.28	16550.12	4.00	10.47	1.54	57.00	142.00	17.10	36.00	37.56	0.80	<0.2	<0.2	<0.2

  
Mr. Lab. Sr. Chemist

  
Authorized Signatory  
Date: 02.11.2020

# HARYANA TEST HOUSE & Consultancy Services



SHC, Sector-25, Plot-42, Gurgaon, Phase-1 G-116 (HARYANA)

Ph: (0122) 4296001, 4296002, 4296003, 4296004, 4296005, 4296006, 4296007, 4296008, 4296009, 4296010, 4296011, 4296012, Website: www.haryanatesthouse.com, e-mail: info@haryanatesthouse.com, haryanatesthouse@gmail.com

Test Results of Waste Water Sample  
Unit: Panipat Refinery  
Month: July, 2020  
Date of sampling: 18.07.2020

Dr: 04.08.2020

TEST RESULTS						
Job Order No.				H/H/2020/1619		H/H/2020/1619
(SRI)				TC/011/2020/001318		TC/011/2020/001318
Sr. No.	Parameter	Unit	Limit	Protocol Limit	ETP-1 (Treated Effluent)	ETP-2 (Treated Effluent)
1	pH	—	6.5 - 8.5	IS 3025 (P-13)-1993	7.30	7.30
2	Oil & Grease	mg/l	5	IS 3025 (P-30)-1993	2.5	3.0
3	Chemical Oxygen Demand (COD)	mg/l	100	IS 3025 (P-46)-2003	55.0	87.0
4	BOD for 5 days at 20°C	mg/l	30	IS 3025 (P-44)-1993	9.0	12.0
5	Total Suspended Solids	mg/l	30	IS 3025 (P-17)-1993	12.0	17.0
6	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.05	IS 3025 (P-42)-1992	< 0.01	< 0.01
7	Sulphide as H <sub>2</sub> S	mg/l	10	IS 3025 (P-28)-1993	< 0.05	< 0.05
8	Cyanide as CN	mg/l	0.5	IS 3025 (P-27)-1993	< 0.03	< 0.03
9	Ammonia as N	mg/l	10	IS 3025 (P-34)-1993	< 1.0	< 1.0
10	Total Kjeldahl Nitrogen as N	mg/l	40	IS 3025 (P-34)-1993	< 1.0	< 1.0
11	Phosphate as P	mg/l	3	IS 3025 (P-31)-1993	1.34	1.90
12	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.1	IS 3025 (P-42)-2003	< 0.05	< 0.05
13	Total Chromium as Cr	mg/l	3	IS 3025 (P-42)-2003	< 0.2	< 0.2
14	Lead as Pb	mg/l	0.1	IS 3025 (P-51)-2004	< 0.02	< 0.02
15	Mercury as Hg	mg/l	0.01	IS 3025 (P-48)-1993	< 0.002	< 0.002
16	Zinc as Zn	mg/l	5	IS 3025 (P-2)-2004	< 0.3	< 0.3
17	Nickel as Ni	mg/l	5	IS 3025 (P-2)-2004	< 0.3	< 0.3
18	Copper as Cu	mg/l	1	IS 3025 (P-2)-2004	< 0.3	< 0.3
19	Vanadium as V	mg/l	0.2	By GC	< 0.2	< 0.2
20	Boron as B	mg/l	0.1	By GC	< 0.01	< 0.01
21	Elemental Fines	mg/l	0.2	By GC	< 0.004	< 0.004

N.D.: Not Detectable

Sr. Chemist / Mgr (Lab)

Authorised Signatory



**Ministry of Health, Government of India**  
**Central Board of Secondary Education**

The Central Board of Secondary Education, New Delhi-110 022

**Final Results at Mount Visnu Varaha**

**10th, 12th Standard**

**Month : August 2020**

**Date of Issuing : 10.08.2020**

10.08.2020

Sl. No.	Candidate's Name	Roll No.	Grade	10th Standard		12th Standard		Total	Percentage	Remarks
				Mark	Grade	Mark	Grade			
1	A. A. A.	1000000000	10	100	A	100	A	200	100%	
2	A. A. A.	1000000000	10	100	A	100	A	200	100%	
3	A. A. A.	1000000000	10	100	A	100	A	200	100%	
4	A. A. A.	1000000000	10	100	A	100	A	200	100%	
5	A. A. A.	1000000000	10	100	A	100	A	200	100%	
6	A. A. A.	1000000000	10	100	A	100	A	200	100%	
7	A. A. A.	1000000000	10	100	A	100	A	200	100%	
8	A. A. A.	1000000000	10	100	A	100	A	200	100%	
9	A. A. A.	1000000000	10	100	A	100	A	200	100%	
10	A. A. A.	1000000000	10	100	A	100	A	200	100%	
11	A. A. A.	1000000000	10	100	A	100	A	200	100%	
12	A. A. A.	1000000000	10	100	A	100	A	200	100%	
13	A. A. A.	1000000000	10	100	A	100	A	200	100%	
14	A. A. A.	1000000000	10	100	A	100	A	200	100%	
15	A. A. A.	1000000000	10	100	A	100	A	200	100%	
16	A. A. A.	1000000000	10	100	A	100	A	200	100%	
17	A. A. A.	1000000000	10	100	A	100	A	200	100%	
18	A. A. A.	1000000000	10	100	A	100	A	200	100%	
19	A. A. A.	1000000000	10	100	A	100	A	200	100%	
20	A. A. A.	1000000000	10	100	A	100	A	200	100%	
21	A. A. A.	1000000000	10	100	A	100	A	200	100%	
22	A. A. A.	1000000000	10	100	A	100	A	200	100%	
23	A. A. A.	1000000000	10	100	A	100	A	200	100%	
24	A. A. A.	1000000000	10	100	A	100	A	200	100%	
25	A. A. A.	1000000000	10	100	A	100	A	200	100%	
26	A. A. A.	1000000000	10	100	A	100	A	200	100%	
27	A. A. A.	1000000000	10	100	A	100	A	200	100%	
28	A. A. A.	1000000000	10	100	A	100	A	200	100%	
29	A. A. A.	1000000000	10	100	A	100	A	200	100%	
30	A. A. A.	1000000000	10	100	A	100	A	200	100%	
31	A. A. A.	1000000000	10	100	A	100	A	200	100%	
32	A. A. A.	1000000000	10	100	A	100	A	200	100%	
33	A. A. A.	1000000000	10	100	A	100	A	200	100%	
34	A. A. A.	1000000000	10	100	A	100	A	200	100%	
35	A. A. A.	1000000000	10	100	A	100	A	200	100%	
36	A. A. A.	1000000000	10	100	A	100	A	200	100%	
37	A. A. A.	1000000000	10	100	A	100	A	200	100%	
38	A. A. A.	1000000000	10	100	A	100	A	200	100%	
39	A. A. A.	1000000000	10	100	A	100	A	200	100%	
40	A. A. A.	1000000000	10	100	A	100	A	200	100%	
41	A. A. A.	1000000000	10	100	A	100	A	200	100%	
42	A. A. A.	1000000000	10	100	A	100	A	200	100%	
43	A. A. A.	1000000000	10	100	A	100	A	200	100%	
44	A. A. A.	1000000000	10	100	A	100	A	200	100%	
45	A. A. A.	1000000000	10	100	A	100	A	200	100%	
46	A. A. A.	1000000000	10	100	A	100	A	200	100%	
47	A. A. A.	1000000000	10	100	A	100	A	200	100%	
48	A. A. A.	1000000000	10	100	A	100	A	200	100%	
49	A. A. A.	1000000000	10	100	A	100	A	200	100%	
50	A. A. A.	1000000000	10	100	A	100	A	200	100%	
51	A. A. A.	1000000000	10	100	A	100	A	200	100%	
52	A. A. A.	1000000000	10	100	A	100	A	200	100%	
53	A. A. A.	1000000000	10	100	A	100	A	200	100%	
54	A. A. A.	1000000000	10	100	A	100	A	200	100%	
55	A. A. A.	1000000000	10	100	A	100	A	200	100%	
56	A. A. A.	1000000000	10	100	A	100	A	200	100%	
57	A. A. A.	1000000000	10	100	A	100	A	200	100%	
58	A. A. A.	1000000000	10	100	A	100	A	200	100%	
59	A. A. A.	1000000000	10	100	A	100	A	200	100%	
60	A. A. A.	1000000000	10	100	A	100	A	200	100%	
61	A. A. A.	1000000000	10	100	A	100	A	200	100%	
62	A. A. A.	1000000000	10	100	A	100	A	200	100%	
63	A. A. A.	1000000000	10	100	A	100	A	200	100%	
64	A. A. A.	1000000000	10	100	A	100	A	200	100%	
65	A. A. A.	1000000000	10	100	A	100	A	200	100%	
66	A. A. A.	1000000000	10	100	A	100	A	200	100%	
67	A. A. A.	1000000000	10	100	A	100	A	200	100%	
68	A. A. A.	1000000000	10	100	A	100	A	200	100%	
69	A. A. A.	1000000000	10	100	A	100	A	200	100%	
70	A. A. A.	1000000000	10	100	A	100	A	200	100%	
71	A. A. A.	1000000000	10	100	A	100	A	200	100%	
72	A. A. A.	1000000000	10	100	A	100	A	200	100%	
73	A. A. A.	1000000000	10	100	A	100	A	200	100%	
74	A. A. A.	1000000000	10	100	A	100	A	200	100%	
75	A. A. A.	1000000000	10	100	A	100	A	200	100%	
76	A. A. A.	1000000000	10	100	A	100	A	200	100%	
77	A. A. A.	1000000000	10	100	A	100	A	200	100%	
78	A. A. A.	1000000000	10	100	A	100	A	200	100%	
79	A. A. A.	1000000000	10	100	A	100	A	200	100%	
80	A. A. A.	1000000000	10	100	A	100	A	200	100%	
81	A. A. A.	1000000000	10	100	A	100	A	200	100%	
82	A. A. A.	1000000000	10	100	A	100	A	200	100%	
83	A. A. A.	1000000000	10	100	A	100	A	200	100%	
84	A. A. A.	1000000000	10	100	A	100	A	200	100%	
85	A. A. A.	1000000000	10	100	A	100	A	200	100%	
86	A. A. A.	1000000000	10	100	A	100	A	200	100%	
87	A. A. A.	1000000000	10	100	A	100	A	200	100%	
88	A. A. A.	1000000000	10	100	A	100	A	200	100%	
89	A. A. A.	1000000000	10	100	A	100	A	200	100%	
90	A. A. A.	1000000000	10	100	A	100	A	200	100%	
91	A. A. A.	1000000000	10	100	A	100	A	200	100%	
92	A. A. A.	1000000000	10	100	A	100	A	200	100%	
93	A. A. A.	1000000000	10	100	A	100	A	200	100%	
94	A. A. A.	1000000000	10	100	A	100	A	200	100%	
95	A. A. A.	1000000000	10	100	A	100	A	200	100%	
96	A. A. A.	1000000000	10	100	A	100	A	200	100%	
97	A. A. A.	1000000000	10	100	A	100	A	200	100%	
98	A. A. A.	1000000000	10	100	A	100	A	200	100%	
99	A. A. A.	1000000000	10	100	A	100	A	200	100%	
100	A. A. A.	1000000000	10	100	A	100	A	200	100%	



**CLUB**

Class - 10th

*(Signature)*



# Haryana Test House

& Consultancy Services

SAC, Sector-23, Part-II, RTI/A, Panch-132 004 (DAREKAR)

Ph: 011-261529493, 011-261529494, Tele-Fax: 011-261529493, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net, haryanatesthouse@gmail.com



Test Results of Waste Water Sample

Unit: Panipat Refinery

Month : Sept. 2020

Date of sampling : 26.09.2020

Dr: 03.10.2020

TEST RESULTS						
Job Order No.				HTH/2019/2019	HTH/2019/2019	
ORL				TCR/2019/2019/15/2/3F	TCR/2019/2019/15/2/3F	
Sr. No.	Parameters	Unit	Limit	Protocol Used	ETP-1 (Treated Effluent)	ETP-2 (Treated Effluent)
1	pH	-	6.5 - 8.5	IS 3025 (P-11) : 1981	8.8	7.9
2	Oil & Grease	mg/l	5	IS 3025 (P-30) : 1980	4.8	4.2
3	Chemical Oxygen Demand (COD)	mg/l	120	IS 3025 (P-10) : 2005	77.0	80.0
4	BOD for 5 days at 20°C	mg/l	10	IS 3025 (P-40) : 1980	9.8	8.2
5	Total Suspended Solids	mg/l	20	IS 3025 (P-12) : 1980	22.0	16.0
6	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.25	IS 3025 (P-42) : 1980	< 0.01	< 0.01
7	Sulphide as H <sub>2</sub> S	mg/l	0.5	IS 3025 (P-29) : 1980	< 0.5	< 0.5
8	Cyanide as CN	mg/l	0.2	IS 3025 (P-23) : 1980	< 0.02	< 0.02
9	Ammonia as N	mg/l	15	IS 3025 (P-39) : 1980	0.4	< 0.1
10	Total Kjeldahl Nitrogen as N	mg/l	40	IS 3025 (P-34) : 1980	5.0	< 0.1
11	Phosphate as P	mg/l	2	IS 3025 (P-27) : 1980	1.0	0.9
12	Hexavalent Chromium as Cr <sup>VI</sup>	mg/l	0.1	IS 3025 (P-52) : 2003	< 0.05	< 0.05
13	Total Chromium as Cr	mg/l	2	HTH/2019/2019/15/2/3F	< 0.2	< 0.2
14	Lead as Pb	mg/l	0.1	HTH/2019/2019/15/2/3F	< 0.02	< 0.02
15	Mercury as Hg	mg/l	0.01	HTH/2019/2019/15/2/3F	< 0.002	< 0.002
16	Zinc as Zn	mg/l	5	HTH/2019/2019/15/2/3F	< 0.2	< 0.2
17	Nickel as Ni	mg/l	1	HTH/2019/2019/15/2/3F	< 0.2	< 0.2
18	Copper as Cu	mg/l	1	HTH/2019/2019/15/2/3F	< 0.2	< 0.2
19	Vanadium as V	mg/l	0.2	HTH/2019/2019/15/2/3F	< 0.2	< 0.2
20	Barium	mg/l	0.1	By GC	< 0.1	< 0.1
21	Benz(a) Pyrene	mg/l	0.2	By GC	< 0.2	< 0.2

N.D. : Not Detectable

10/10

Sr. Chemist / Mgr. (Lab.)

Authorized Signatory

#### • Consultancy Services

596 C. Nogueira-Marras, P. J. L. Carrilho, J. L. F. Costa, J. L. F. Costa, J. L. F. Costa



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### Test Results of Waste Water Sample

Unit: Panipat Refinery

Month : Oct 2020

Date of sampling: 26.10.2020

On: 02/11/2020

TEST RESULTS						
		Job Order No.	WATER BODY	WATER USE		
		UAT	TC281F20000147518	TC7812810004101		
Sr. No.	Parameters	Unit	Limit	Present Limit	CTP-1 (Treated Effluent)	CTP-2 (Treated Effluent)
1	pH	-	6.5-8.5	6.50 (pH) - 8.00	8.24	8.00
2	Oil & Grease	mg/l	5	0.000 (pH) - 0.000	1.8	1.2
3	Chemical Oxygen Demand (COD)	mg/l	105	0.000 (pH) - 0.000	64.0	58.0
4	BOD for 5 days at 20°C	mg/l	15	0.000 (pH) - 0.000	10.2	8.8
5	Total Suspended Solids	mg/l	30	0.000 (pH) - 0.000	10.0	18.0
6	Free Chlorine (mg/l)	mg/l	0.20	0.000 (pH) - 0.000	<0.01	<0.01
7	Cyanide as CN <sup>-</sup>	mg/l	0.5	0.000 (pH) - 0.000	<0.01	<0.01
8	Cyanide as CN <sup>-</sup>	mg/l	0.2	0.000 (pH) - 0.000	<0.01	<0.01
9	Ammonia as N	mg/l	1.0	0.000 (pH) - 0.000	<0.1	11.8
10	Total Kjeldahl Nitrogen as N	mg/l	1.0	0.000 (pH) - 0.000	<0.1	14.2
11	Phosphate as P	mg/l	1	0.000 (pH) - 0.000	0.6	0.0
12	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.1	0.000 (pH) - 0.000	<0.05	<0.05
13	Total Chromium as Cr	mg/l	2	<0.000 (pH) - 0.000	<0.2	<0.2
14	Lead as Pb	mg/l	0.1	<0.000 (pH) - 0.000	<0.01	<0.01
15	Mercury as Hg	mg/l	0.01	<0.000 (pH) - 0.000	<0.001	<0.001
16	Zinc as Zn	mg/l	5	<0.000 (pH) - 0.000	<0.2	<0.2
17	Nickel as Ni	mg/l	1	<0.000 (pH) - 0.000	<0.2	<0.2
18	Copper as Cu	mg/l	1	<0.000 (pH) - 0.000	<0.2	<0.2
19	Vanadium as V	mg/l	10	<0.000 (pH) - 0.000	<0.2	<0.2
20	Selenium	mg/l	0.1	<0.01	<0.1	<0.1
21	Selenium Pheno	mg/l	0.1	<0.01	<0.2	<0.2

84 DE West Dutchman

5. Certified / Mai (Lati)

02-11-2002

#### A. Consultancy Services

DOI: 10.1002/ajb.a.100447, J. Morphol. 171:164–176, 2002. © 2002 Wiley-Liss, Inc. Web site: www.interscience.wiley.com. Received 10 October 2001; Accepted 11 February 2002



DE 64 38 FD10

Month: July, 2020

Date of sampling : 18.07.2020

TEST RESULTS						
		Job Order No.		ST/20120011902		
		URI		TC/0112010000000000		
Sr. No.	Parameters	Unit	Limit	Permitted Limit	PDA, LTP (Permitted Difference)	
1	pH	-	6.5-8.5	6.500 pH $\pm$ 0.05	0.42	
2	Chemical Oxygen Demand (COD)	mg/l	200	6.500 g/kg $\pm$ 0.05	100.0	
3	BOD for 5 days at 20°C	mg/l	30	6.500 g/kg $\pm$ 0.05	30.0	
4	Total Suspended Solids	mg/l	100	6.500 g/kg $\pm$ 0.05	20.0	
5	Phenol as Cu(OH)	mg/l	10	6.500 g/kg $\pm$ 0.05	< 0.01	
6	Sulphide as H <sub>2</sub> S	mg/l	2.0	6.500 g/kg $\pm$ 0.05	< 1.0	
7	Cyanide as CN	mg/l	20	6.500 g/kg $\pm$ 0.05	< 0.02	
8	Hexavalent Chromium as Cr <sup>VI</sup>	mg/l	0.1	6.500 g/kg $\pm$ 0.05	< 0.05	
9	Total Chromium as Cr	mg/l	20	6.500 g/kg $\pm$ 0.05	< 0.1	
10	Fluoride as F	mg/l	10	6.500 g/kg $\pm$ 0.05	1.0	

Dr. Chandra / Mr. (Lab)

04 of 202



# HARYANA TEST HOUSE

& Consultancy Services

10-C, Sector-01, Phase-II, Gurgaon, Haryana-122 004 (INDIA)

Ph: (0124) 3226603, (0124) 3226604, Toll-Free: 1800-101-1112, Website: www.haryanatesthouse.com, e-mail: info@haryanatesthouse.com



Test Results of Waste Water Sample

DT: 09.09.2020

Unit: Panipat Refinery

Month: August, 2020

Date of sampling: 19.08.2020

TEST RESULTS						
					Job Order No.	HT/HCH/2019/10010
					Lab.	TC7415201000116230
Sr. No.	Parameters	Unit	Limit	Protocol Date	PTA/ETP (Treated Effluent)	
1	pH	-	6.5-8.5	0.300 (P-1) 1996	8.47	
2	Chemical Oxygen Demand (COD)	mg/l	250	0.300 (P-16) 2006	86.0	
3	BOD for 5 days at 20°C	mg/l	20	0.300 (P-46) 1992	16.0	
4	Total Suspended Solids	mg/l	100	0.300 (P-11) 1992	40.0	
5	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.5	0.300 (P-43) 1992	< 0.01	
6	Sulphide as H <sub>2</sub> S	mg/l	2.0	0.300 (P-29) 1996	< 1.0	
7	Cyanide as CN <sup>-</sup>	mg/l	0.5	0.300 (P-21) 1996	< 0.02	
8	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.1	0.300 (P-52) 2003	< 0.05	
9	Total Chromium as Cr	mg/l	1.0	0.300 (P-5) 2004	< 0.2	
10	Fluoride as F <sup>-</sup>	mg/l	15	APHA 8190C/920	1.60	

Signature of Client / Mgr (Lab.)

Authorized Signatory

# Haryana Test House

& Consultancy Services

Plot-1, Sector-25, Phase-II, Gurgaon, Haryana-122 001 (HARYANA)

Ph: (0124) 999-9299/9303, Fax: (0124) 999-171/66, Telex/Fax: 0090-2871112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.com



Test Results of Waste Water Sample

Unit: Panipat Refinery

Month : Sept. 2020

Date of sampling : 26.09.2020

Dt: 03.10.2020

TEST RESULTS					
Job Order No.					HTH/CH/2020/02062
URL					TC/RA/120100/0134367
Sr. No.	Parameters	Unit	Limit	Protocol Used	HTA-ETP (Treated Effluent)
1	pH	-	6.5 - 8.5	IS 3025 (P-11) : 1996	8.0
2	Chemical Oxygen Demand (COD)	mg/l	500	IS 3025 (P-102) : 2004	97.5
3	BOD for 5 days at 20°C	mg/l	30	IS 3025 (P-101) : 1992	11.5
4	Total Suspended Solids	mg/l	100	IS 3025 (P-11) : 1996	12.0
5	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	5.0	IS 3025 (P-43) : 1992	<0.01
6	Sulphide as H <sub>2</sub> S	mg/l	10	IS 3025 (P-26) : 1996	< 0.5
7	Cyanide as CN	mg/l	20	IS 3025 (P-37) : 1996	<0.02
8	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.4	IS 3025 (P-52) : 2002	<0.05
9	Total Chromium as Cr	mg/l	5.0	IS 3025 (P-5) : 2004	<0.2
10	Fluoride as F	mg/l	15	APHA (2310) 02	1.42

Signature

Er. Chemist / Mgr. (Lab.)



Authorized Signatory

# Haryana Test House

At Consultancy Services

Plot No. 25, Sector 16, Gurgaon (Haryana), India (122001) Phone: (0122) 304 1000 (Haryana)

For: Haryana Pollution Control Board, Gurgaon (Haryana), India (122001) Website: www.haryanapollutioncontrolboard.org

Test Results of Waste Water Sample

Unit: Panipat Refinery

Month: Oct. 2020

Date of sampling: 28.10.2020

On: 02.11.2020

TEST RESULTS					
Sl. No.		Sample Name	Unit	Limit	Proposed Limit
1	PH			5.5 - 8.5	7.18
2	Chemical Oxygen Demand (COD)		mg/l	250	37.0
3	BOD for 5 days at 20°C		mg/l	30	12.5
4	Total Suspended Solids		mg/l	100	40.5
5	Hardness as CaCO <sub>3</sub>		mg/l	500	40.5
6	Softness as HCO <sub>3</sub>		mg/l	200	40.5
7	Chloride as Cl <sup>-</sup>		mg/l	250	40.5
8	Residual Chlorine as Cl <sub>2</sub>		mg/l	0.5	40.5
9	Total Chlorine as Cl <sub>2</sub>		mg/l	0.5	40.5
10	Fluoride as F <sup>-</sup>		mg/l	1.5	40.5

2020

Dr. Chandrajit Singh

Signature

Authorized Signatory



# HARYANA TEST HOUSE

& Consultancy Services



SAC, Sector-25, Part-II, MIDC, Panipat-132 104 (HARYANA)

Ph: (0177) 616663, 3296403, (M) 991099-473460, Tele Fax: 0180-2071112, Website: www.haryanatesthouse.com, e-mail: info@haryanatesthouse.com

Test Results of Waste Water Sample (STP- Outlet)

Dt: 04.05.2020

Unit: Panipat Refinery

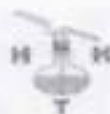
Month : July, 2020

Date of Sampling: 16.07.2020

TEST RESULTS					
				Job Order No.	HTHCH/000118931
				URL	TC28112016000553F
S. No.	Parameters	Unit	Limit	Protocol Used	STP/Water Outlet
1	pH	-	6.5 - 8.5	IS 3025 (P-11) : 1993	7.52
2	Color, Hazen	-	-	IS 3025 (P-8) : 1993	Yellowish
3	Odour	-	-	IS 3025 (P-5) : 1993	Odorless
4	Oil & Grease	mg/l	10	IS 3025 (P-39) : 1993	1.0
5	Chemical Oxygen Demand (COD)	mg/l	200	IS 3025 (P-24) : 2009	80.0
6	BOD for 5 days at 20°C	mg/l	30	IS 3025 (P-44) : 1993	8.2
7	Total Suspended Solids	mg/l	100	IS 3025 (P-17) : 1993	25.0
8	Residual Free Chlorine	mg/l	1.0	IS 3025 (P-26) : 1993	< 0.05
9	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	1.0	IS 3025 (P-43) : 1993	< 0.01
10	Sulphide as H <sub>2</sub> S	mg/l	0.05	IS 3025 (P-25) : 1993	< 1.0
11	Cyanide as CN	mg/l	0.2	IS 3025 (P-27) : 1993	< 0.02
12	Free Ammonia as NH <sub>3</sub>	mg/l	1.0	APHA-4500 NH <sub>3</sub> -C	< 0.5
13	Fluoride as F	mg/l	2.0	IS 3025 (P-55) : 2009	0.50
14	Ammonia as N	mg/l	50	IS 3025 (P-34) : 1993	19.00
15	Total Kjeldahl Nitrogen as N	mg/l	100.0	IS 3025 (P-34) : 1993	32.40
16	Phosphate as P	mg/l	5.0	IS 3025 (P-31) : 1993	1.40
17	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.1	IS 3025 (P-62) : 2007	< 0.05
18	Total Chromium as Cr	mg/l	0.05	IS 5559 (P-2) : 2004	< 0.2
19	Lead as Pb	mg/l	0.1	IS 3025 (P-2) : 1993	< 0.02
20	Mercury as Hg	mg/l	0.01	IS 3025 (P-48) : 1993	< 0.002
21	Zinc as Zn	mg/l	5.0	IS 3025 (P-2) : 1993	< 0.2
22	Nickel as Ni	mg/l	5.0	IS 3025 (P-2) : 1993	< 0.2
23	Copper as Cu	mg/l	5.0	IS 3025 (P-2) : 1993	< 0.2
24	Vanadium as V	mg/l	0.2	IS 1027	< 0.2
25	Arsenic as As	mg/l	0.2	IS 3025 (P-2) : 1993	< 0.2
26	Cadmium as Cd	mg/l	0.01	IS 3025 (P-2) : 1993	< 0.2
27	Manganese as Mn	mg/l	-	IS 3025 (P-2) : 1993	< 0.2
28	Iron as Fe	mg/l	20	IS 3025 (P-2) : 1993	0.45
29	Nitrate Nitrogen as NO <sub>3</sub>	mg/l	10.0	IS 3025 (P-38) : 1993	5.40

# HARYANA TEST HOUSE

## & Consultancy Services



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

Ph: (0) 0180-2299463, (M) 94360-17160, Tlx-Fax: 0180-2671112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net

Test Results of Waste Water Sample (STP- Outlet)

DT: 09.09.2020

Unit: Panipat Refinery

Month : August, 2020

Date of Sampling: 19.08.2020

TEST RESULTS					
Job Order No.				HTH0CH200919023	
URL				TC705120100011026F	
Sr. No.	Parameters	Unit	Limit	Protocol Used	STP- Water Outlet
1	pH	—	6.0 - 8.5	IS 3025 (P-11) : 1996	7.87
2	Colour, Hazen	—	—	IS 3025 (P-4) : 1993	Yellowish
3	Odour	—	—	IS 3025 (P-6) : 1993	Odourless
4	Oil & Grease	mg/l	10	IS 3025 (P-38) : 1996	4.4
5	Chemical Oxygen Demand (COD)	mg/l	250	IS 3025 (P-54) : 2000	49.0
6	BOD for 3 days at 27°C	mg/l	30	IS 3025 (P-44) : 1993	8.6
7	Total Suspended Solids	mg/l	100	IS 3025 (P-17) : 1993	23.0
8	Residual Free Chlorine	mg/l	1.0	IS 3025 (P-26) : 1996	< 0.05
9	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	1.0	IS 3025 (P-43) : 1993	< 0.01
10	Sulphide as H <sub>2</sub> S	mg/l	0.05	IS 3025 (P-28) : 1996	< 1.0
11	Cyanide as CN <sup>-</sup>	mg/l	0.2	IS 3025 (P-27) : 1996	< 0.02
12	Free Ammonia as NH <sub>3</sub>	mg/l	5.0	APHA-4500 NH <sub>3</sub> -C	< 0.5
13	Fluoride as F <sup>-</sup>	mg/l	2.0	IS 3025 (P-40) : 2000	0.96
14	Ammonia as N	mg/l	50	IS 3025 (P-34) : 1996	11.2
15	Total Kjeldahl Nitrogen as N	mg/l	500.0	IS 3025 (P-36) : 1996	19.0
16	Phosphate as P	mg/l	5.0	IS 3025 (P-21) : 1996	2.0
17	Hexavalent Chromium as Cr <sup>VI</sup>	mg/l	0.1	IS 3025 (P-12) : 2000	< 0.05
18	Total Chromium as Cr	mg/l	0.05	IS 3025 (P-2) : 2004	< 0.2
19	Lead & Pb	mg/l	0.1	IS 3025 (P-2) : 1994	< 0.02
20	Mercury as Hg	mg/l	0.01	IS 3025 (P-45) : 1994	< 0.002
21	Zinc as Zn	mg/l	5.0	IS 3025 (P-2) : 1994	< 0.2
22	Nickel as Ni	mg/l	1.0	IS 3025 (P-2) : 2004	< 0.2
23	Copper as Cu	mg/l	1.0	IS 3025 (P-2) : 1992	< 0.2
24	Vanadium as V	mg/l	0.2	By ICP	< 0.2
25	Arsenic as As	mg/l	0.2	IS 3025 (P-2) : 1992	< 0.2
26	Cadmium as Cd	mg/l	0.05	IS 3025 (P-2) : 1992	< 0.2
27	Manganese as Mn	mg/l	—	IS 3025 (P-2) : 2000	< 0.2
28	Iron as Fe	mg/l	3.0	IS 3025 (P-2) : 2000	0.21
29	Nitrate Nitrogen as NO <sub>3</sub>	mg/l	10.0	IS 3025 (P-34) : 1996	4.8

Dr. Chander Negi (Lab.)

Authorized Signatory

# Haryana Test House & Consultancy Services

39-C, Sector-25, Phase-II, HUDA, Panipat-132 104 (HARYANA)

Ph: (01) 2380-3290403, (M) 94168-17188, Tele-Fax: 0180-2671112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net



Test Results of Waste Water Sample (STP- Outlet)

Dt: 03.10.2020

Unit: Panipat Refinery

Month : Sept, 2020

Date of Sampling: 26.09.2020

TEST RESULTS					
				Job Order No.	HTH/CH/200925003
				URL	TC781120100013435F
Sr. No.	Parameters	Unit	Limit	Protocol Used	STP- Water Outlet
1	pH	-	6.5 - 8.5	IS 3025 (P-11) : 1988	7.24
2	Colour, Hazen	-	-	IS 3025 (P-4) : 1983	Yellowish
3	Odour	-	-	IS 3025 (P-6) : 1983	Odourless
4	Oil & Grease	mg/l	18	IS 3025 (P-36) : 1988	1.4
5	Chemical Oxygen Demand (COD)	mg/l	200	IS 3025 (P-46) : 2008	108.0
6	BOD for 3 days at 27°C	mg/l	30	IS 3025 (P-44) : 1983	14.0
7	Total Suspended Solids	mg/l	100	IS 3025 (P-17) : 1983	10.0
8	Residual Free Chlorine	mg/l	1.0	IS 3025 (P-20) : 1988	< 0.05
9	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	1.0	IS 3025 (P-43) : 1982	< 0.01
10	Sulphide as H <sub>2</sub> S	mg/l	0.04	IS 3025 (P-22) : 1983	< 1.0
11	Cyanide as CN	mg/l	0.2	IS 3025 (P-27) : 1988	< 0.02
12	Free Ammonia as NH <sub>3</sub>	mg/l	0.0	APHA 4500 NH <sub>3</sub> -C	< 0.5
13	Fluoride as F	mg/l	2.0	IS 3025 (P-40) : 2008	1.04
14	Ammonia as N	mg/l	10	IS 3025 (P-34) : 1988	14.5
15	Total Kjeldahl Nitrogen as N	mg/l	100.0	IS 3025 (P-34) : 1988	31.4
16	Phosphate as P	mg/l	0.0	IS 3025 (P-21) : 1988	4.2
17	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.1	IS 3025 (P-52) : 2003	< 0.05
18	Total Chromium as Cr	mg/l	0.05	IS 3025 (P-5) : 2004	< 0.2
19	Lead as Pb	mg/l	0.1	IS 3025 (P-25) : 1984	< 0.02
20	Mercury as Hg	mg/l	0.01	IS 3025 (P-48) : 1994	< 0.002
21	Zinc as Zn	mg/l	5.0	IS 3025 (P-26) : 1984	< 0.2
22	Nickel as Ni	mg/l	0.0	IS 3025 (P-2) : 2004	< 0.2
23	Copper as Cu	mg/l	0.0	IS 3025 (P-23) : 1983	< 0.2
24	Vanadium as V	mg/l	0.2	IS 3025 (P-24) : 1984	< 0.2
25	Arsenic as As	mg/l	0.2	IS 3025 (P-3) : 1983	< 0.2
26	Cadmium as Cd	mg/l	0.0	IS 3025 (P-2) : 1983	< 0.2
27	Manganese as Mn	mg/l	-	IS 3025 (P-2) : 2003	< 0.2
28	Iron as Fe	mg/l	0.0	IS 3025 (P-10) : 2003	0.90
29	Nitrate Nitrogen as NO <sub>3</sub>	mg/l	10.0	IS 3025 (P-34) : 1988	1.2

Sr. Chemist (HGT) (Lao)





# Haryana Test House & Consultancy Services



30-C, Sector-25, Part-B, G.D.A., Panipat-132 104 (HARYANA)

Ph: (0182) 2299483, (0182) 2299484, Tele-Fax: (0182) 2571112, Website: www.haryanatesthouse.net, e-mail: info@haryanatesthouse.net

Test Results of Waste Water Sample (STP- Outlet)

Dt: 02.11.2020

Unit: Panipat Refinery

Month : Oct. 2020

Date of Sampling: 23.10.2020

TEST RESULTS					
				Job Order No.	HTH/GH/201026007
				URL	TC781120100015147F
Sr. No.	Parameters	Unit	Limit	Protocol Used	STP- Water Outlet
1	pH	-	6.5 - 8.5	IS 3025 (P-11) : 1998	7.12
2	Colour, Hazen	-	-	IS 3025 (P-4) : 1983	Yellowish
3	Odour	-	-	IS 3025 (P-5) : 1983	Odourless
4	Oil & Grease	mg/l	10	IS 3025 (P-28) : 1998	5.2
5	Chemical Oxygen Demand (COD)	mg/l	250	IS 3025 (P-60) : 2006	41.8
6	BOD for 5 days at 27°C	mg/l	30	IS 3025 (P-44) : 1993	7.6
7	Total Suspended Solids	mg/l	100	IS 3025 (P-17) : 1993	30.6
8	Residual Free Chlorine	mg/l	1.0	IS 3025 (P-29) : 1998	< 0.05
9	Phenol as C <sub>6</sub> H <sub>5</sub> OH	mg/l	1.0	IS 3025 (P-43) : 1993	< 0.01
10	Sulphide as H <sub>2</sub> S	mg/l	0.05	IS 3025 (P-25) : 1998	< 0.05
11	Cyanide as CN	mg/l	0.2	IS 3025 (P-27) : 1998	< 0.02
12	Free Ammonia as NH <sub>3</sub>	mg/l	5.0	APHA 4500 NH <sub>3</sub> -C	< 0.5
13	Fluoride as F	mg/l	2.0	IS 3025 (P-62) : 2006	1.22
14	Ammonical Nitrogen as N	mg/l	50	IS 3025 (P-34) : 1998	18.5
15	Total Kjeldahl Nitrogen as N	mg/l	100.0	IS 3025 (P-35) : 1998	32.9
16	Phosphate as P	mg/l	5.0	IS 3025 (P-31) : 1998	2.1
17	Hexavalent Chromium as Cr <sup>6+</sup>	mg/l	0.1	IS 3025 (P-65) : 2003	< 0.05
18	Total Chromium as Cr	mg/l	0.05	IS 3025 (P-2) : 2004	< 0.05
19	Lead as Pb	mg/l	0.1	IS 3025 (P-2) : 1994	< 0.02
20	Mercury as Hg	mg/l	0.01	IS 3025 (P-46) : 1994	< 0.002
21	Zinc as Zn	mg/l	5.0	IS 3025 (P-2) : 1994	< 0.2
22	Nickel as Ni	mg/l	2.0	IS 3025 (P-2) : 2004	< 0.2
23	Copper as Cu	mg/l	2.0	IS 3025 (P-2) : 1993	< 0.2
24	Vanadium as V	mg/l	0.2	By ICP	< 0.2
25	Arsenic as As	mg/l	0.2	IS 3025 (P-2) : 1998	< 0.2
26	Cadmium as Cd	mg/l	2.0	IS 3025 (P-2) : 1993	< 0.2
27	Manganese as Mn	mg/l	-	IS 3025 (P-2) : 2006	< 0.2
28	Iron as Fe	mg/l	3.0	IS 3025 (P-2) : 2003	< 0.2
29	Nitrate Nitrogen as NO <sub>3</sub>	mg/l	10.0	IS 3025 (P-34) : 1998	0.1

Dr. Chandra / Mr. (SAB)

Authorized Signature

# **LDAR (BENZENE) Monitoring Report**

for

Month of October, 2020

at



**IndianOil**

**IOCL, Panipat Refinery**

Prepared by

**NETEL (INDIA) LIMITED**



W-408, MIDC Rabale,

TTC Industrial Area, Navi Mumbai – 400 701

Phone : 022 27606016

Email : [ems@netel-india.com](mailto:ems@netel-india.com)

## LDAR BENZENE MONITORING REPORT FOR IOCL , PANIPAT

**LDAR Benzene Monitoring Report for IOCL , Panipat**

**Name of client** M/s Indian Oil 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** October, 2020

**For NETEL (INDIA) LIMITED**

  
**Jayant Meshram**  
**Sr. Manager-EMS Operation**



Report for the Month of October, 2020.





BENZENE MONITORING REPORT FOR IOCL, PANIPAT

LEAK DETECTION AND REPAIR (LDAR) PROGRAM

BENZENE QUARTERLY REPORT : OCTOBER, 2020.

PLANTWISE SUMMARY

Sl. No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	CCRU	06/10/2020	230	1 to 7	0	0.035
2	MSQ	08/10/2020	32	7 to 8	0	0.007
Total kg/day						0.042
Total MT/Annum						0.015

Verified by

Surekha Jamdar  
Technical Manager




Checked by

Shraddha Kere  
Technical Manager

**LDAR Monitoring Report for IOCL, Panipat**

Name of client	M/s Indian Oil 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 OPREATION**





## LEAK DETECTION AND REPAIR (LDAR) PROGRAM

VOC REPORT MONTH OF OCTOBER, 2020.

## PLANTWISE SUMMARY

Sr. No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	AVU-I	05/10/2020	438	1 to 14	6	4.303
2	DHDS	06/10/2020	269	14 to 23	1	0.732
3	CCRU	06/10/2020	191	23 to 29	7	4.971
4	HGU (PR)	06/10/2020	124	29 to 33	2	0.618
5	OHCU	06/10/2020	287	33 to 42	5	3.235
6	VBU	06/10/2020	89	42 to 44	0	0.059
7	RFCC	07/10/2020	251	45 to 52	9	6.278
8	AVU-II	07/10/2020	300	52 to 62	7	3.973
9	HGU(76&77)	07/10/2020	245	62 to 69	2	1.435
10	HCU	07/10/2020	394	70 to 82	4	2.318
11	DHDT	08/10/2020	263	82 to 90	2	1.137
12	MSQ	08/10/2020	225	90 to 97	3	2.010
13	DCU	08/10/2020	333	97 to 108	4	1.541
14	SRU-NEW	08/10/2020	58	108 to 109	0	0.009
15	ETP-1	09/10/2020	57	109 to 111	0	0.078
16	ETP-2	09/10/2020	58	111 to 113	0	0.055
17	OM&S	09/10/2020	477	113 to 128	11	7.108
18	SRU-OLD	10/10/2020	46	128 to 129	0	0.008
Total in Kg/day			4105		63	39.87
Total in MT/Annum						14.552

Verified by

*Surekha Jamdar*  
 Surekha Jamdar  
 Dy. Technical Manager



Checked by

*Shraddha Kere*  
 Shraddha Kere  
 Technical Manager



# **LDAR (VOC) Monitoring Report**

for

Month of October, 2020

at



**IndianOil**

**IOCL, Panipat Refinery**  
**(PX-PTA)**

Prepared by

**NETEL (INDIA) LIMITED**



W-408, MIDC Rabale,

TTC Industrial Area, Navi Mumbai – 400 701

*Phone : 022 27606016*

**Email : [ems@netel-india.com](mailto:ems@netel-india.com)**



LDAR VOC MONITORING REPORT FOR IOCL PX-PTA, PANIPAT

**LDAR Monitoring Report for IOCL PX-PTA, Panipat**


**Name of client** M/s Indian Oil 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 PX-PTA, Panipat

**Report Period** Month of October, 2020.

**For NETEL (INDIA) LIMITED**

  
**Jayant Meshram**  
**Sr. Manager - EMS Operation**





LDAR VOC MONITORING REPORT FOR IDCL PX-PTA, PANIPAT

LEAK DETECTION AND REPAIR (LDAR) PROGRAM

VOC QUARTERLY REPORT : OCTOBER, 2020

PLANTWISE SUMMARY

No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	PX-I	09/10/2020	260	1 to 9	5	3.345
2	PX-II	09/10/2020	257	9 to 17	3	1.403
3	PTA	10/10/2020	200	17 to 23	0	0.168
4	PTA-ETP	10/10/2020	45	23 to 24	0	0.048
Total in Kg/day			762		8	4.964
Total in MT/Annum						1.812

Verified by

Suresha Jamdar  
Technical Manager



Checked by

Shraddha Kere  
Technical Manager





## LDAR Benzene Monitoring Report for IOCL PX-PTA, 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 PX-PTA, Panipat

**Report Period** Month of October, 2020.

**For NETEL (INDIA) LIMITED**

  
**Jayant Meshram**  
**Sr. Manager - EMS Operation**



Report for the month of October, 2020.



LEAK DETECTION AND REPAIR (LDAR) PROGRAM

BENZENE MONITORING REPORT FOR IOCLPX-PTA, PANIPAT


LEAK DETECTION AND REPAIR (LDAR) PROGRAM

BENZENE QUARTERLY REPORT : OCTOBER, 2020

PLANTWISE SUMMARY


Sr.No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	PX-1	09/10/2020	198	1 to 6	0	0.029
2	PX-2	09/10/2020	80	6 to 8	0	0.009
3	PTA	10/10/2020	64	8 to 10	0	0.010
Total in Kg/day						0.048
Total in MT/Annum						0.018

Verified by

  
Surekha Jamdar  
Dy. Technical Manager



Checked by

  
Shraddha Kere  
Technical Manager

IS-GDN-169, First Edition, July, 1997)

Exposure Time (in hours)	TLV (in dB)
8	90
4	95
2	100
1	105
1/2 hrs.	110

METER MODEL NO. :- RT-5001

SER. NO.:- 111102404

TECHNOLOGY

DATE OF CALIBRATION:- 10.12.2020

DATE OF CALIBRATION:- 09.12.2021

Units of PR & PREP December-2020

S.NO	Plant/Unit	Area	Source	Sound Level (dB)	DATE
1	MSQ	301-PM-206-B	PUMP	78.3	29.12.2020
2	MSQ	301-PM-215-A	PUMP	83.4	29.12.2020
3	MSQ	301-PM-203-A	PUMP	83.7	29.12.2020
4	MSQ	301-PM-212-A	PUMP	89.2	29.12.2020
5	MSQ	301-PM-214-A	PUMP	89.9	29.12.2020
6	MSQ	301-PM-213-A	PUMP	86.8	29.12.2020
7	MSQ	301-PM-211-A	PUMP	86.3	29.12.2020
8	MSQ	301-PM-210-A	PUMP	86.4	29.12.2020
9	MSQ	303-PM-101-A	PUMP	87.4	29.12.2020
10	MSQ	303-PM-201-A	PUMP	85.6	29.12.2020
11	MSQ	303-PM-204-B	PUMP	85.5	29.12.2020
12	MSQ	303-PM-202-A	PUMP	81.7	29.12.2020
13	MSQ	303-PM-206-A	PUMP	78.9	29.12.2020
14	MSQ	301-PM-102	PUMP	82.6	29.12.2020
15	MSQ	303-PM-101-A	PUMP	86.6	29.12.2020
16	MSQ	301-PM-103-B	PUMP	81	29.12.2020
17	MSQ	301-KM-101-B	COMPRESSOR	80.9	29.12.2020
18	MSQ	301-KM-201-A	COMPRESSOR	78.4	29.12.2020
19	MSQ	301-PM-201-A	PUMP	86.7	29.12.2020
1	DHDT	72-K-04-A	FD FAN	82	30.12.2020
2	DHDT	72-PM-005-A	PUMP	87.3	30.12.2020
3	DHDT	72-PM-004-A	PUMP	86.6	30.12.2020
4	DHDT	72-PM-001-A	PUMP	88.3	30.12.2020
5	DHDT	NEAR 72-KM-002-A	COMPRESSOR	83.1	30.12.2020
6	DHDT	72-KM-002-A	COMPRESSOR	86.4	30.12.2020
7	DHDT	72-KM-002-C	COMPRESSOR	85.8	30.12.2020
8	DHDT	UNDER COMPRESSOR	COMPRESSOR	82.4	30.12.2020
9	DHDT	72-PM-003-A	PUMP	91.3	30.12.2020
1	HGU-II	76-P-401-B	PUMP	84.8	30.12.2020
2	HGU-II	76-P-402-A	PUMP	83.6	30.12.2020
3	HGU-II	76-P-301-A	PUMP	86.2	30.12.2020
4	HGU-II	UNDER COMPRESSOR	COMPRESSOR	80.8	30.12.2020
5	HGU-II	76-KM-103-A	COMPRESSOR	84.8	30.12.2020
6	HGU-II	76-KM-103-B	COMPRESSOR	83.7	30.12.2020



7	HGU-II	76-K-01-B	COMPRESSOR	82.5	30.12.2020
8	HGU-II	76-K-105	COMPRESSOR	89.8	30.12.2020
9	HGU-II	77-P-203-A	PUMP	86.7	30.12.2020
10	HGU-II	NEAR 77-K-205	COMPRESSOR	84.6	30.12.2020

OH Physician			Ind. Hyginest		
GDN-186, First Edition, July, 1997)					
ure Time (In hours)			TLV (In dB)		
8			90		
4			95		
2			100		
1			105		
1/2 hrs.			110		
ETER MODEL NO. :- RT-5001					
SR. NO.- 111102404					
YTHON TECHNOLOGY					
TION ON:- 06.12.2019					
OF CLIBRATION:-05.12.2020					
t units of PR & PREP November-2020					
S.NO	Plant/Unit	Area	Source	Sound Level(dB)	DATE
1	AVU-I	03-PM-CF-103-C	PUMP	84.5	20.11.2020
2	AVU-I	03-P-103-B	PUMP	84.6	20.11.2020
3	AVU-I	03-P-22-B	PUMP	85.7	20.11.2020
4	AVU-I	03-PM-CF-21-A	PUMP	91.5	20.11.2020
5	AVU-I	03-P-102-C	PUMP	87.1	20.11.2020
6	AVU-I	03-PM-CF-61-B	PUMP	89.9	20.11.2020
7	AVU-I	03-PM-CF-16-B	PUMP	91.4	20.11.2020
8	AVU-I	03-PM-CF-15-B	PUMP	91.8	20.11.2020
9	AVU-I	03-PM-CF-5-A	PUMP	96.1	20.11.2020
10	AVU-I	03-PM-CF-04-A	PUMP	95.7	20.11.2020
11	AVU-I	03-P-13-B	PUMP	92.3	20.11.2020
12	AVU-I	04-P-4-A	PUMP	94.1	20.11.2020
13	AVU-I	03-PM-CF-07-B	PUMP	93	20.11.2020
14	AVU-I	03-PM-CF-7-A	PUMP	93.3	20.11.2020
15	AVU-I	04-P-02-B	PUMP	92.7	20.11.2020
16	AVU-I	04-PM-CF-3-D	PUMP	88.3	20.11.2020
17	AVU-I	03-PM-CF-52-B	PUMP	89.8	20.11.2020
18	AVU-I	04-FF-FN-04	FD FAN	87	21.11.2020
19	AVU-I	03-P-9-C	PUMP	91.5	21.11.2020
20	AVU-I	03-PM-CF-14-A	PUMP	92.7	21.11.2020
21	AVU-I	03-PM-CF-14-D	PUMP	89.3	21.11.2020
22	AVU-I	03-PM-CF-8-A	PUMP	90.9	21.11.2020
23	AVU-I	03-PM-CF-8-C	PUMP	92.4	21.11.2020
24	AVU-I	03-PM-CF-6-A	PUMP	92.5	21.11.2020
25	AVU-I	03-PM-CF-17-B	PUMP	91.9	21.11.2020
26	AVU-I	03-PM-CF-35-B	PUMP	90.7	21.11.2020
27	AVU-I	03-PM-CF-36-A	PUMP	90.2	21.11.2020

28	AVU-I	03-PM-CF-11-A	PUMP	89.5	21.11.2020
29	AVU-I	03-PM-CF-01-B	PUMP	91.5	21.11.2020
30	AVU-I	03-PM-CF-01-C	PUMP	91.6	21.11.2020
1	CCRU	KA-RP-301-A	COMPRESSOR	86.6	20.11.2020
2	CCRU	08-PM-CF-201-A	PUMP	87.5	20.11.2020
3	CCRU	08-PM-CF-105-A	PUMP	87.9	20.11.2020
4	CCRU	08-PM-CF-203-B	PUMP	89.7	20.11.2020
5	CCRU	PA-CF-102-A	PUMP	86	20.11.2020
6	CCRU	08-PM-CF-202-C	PUMP	85.1	20.11.2020
7	CCRU	UNDER COMPRESSOR	COMPRESSOR	84.7	20.11.2020
8	CCRU	06-LC-KM-01-D	COMPRESSOR	86.6	20.11.2020
1	Fccu	07-PM-CF-302-B	PUMP	87.5	23.11.2020
2	Fccu	07-PM-CF-212-A	PUMP	84.1	23.11.2020
3	Fccu	07-P-202-A	PUMP	91.2	23.11.2020
4	Fccu	07-P-207-A	PUMP	88.5	23.11.2020
5	Fccu	07-P-202-B	PUMP	89.4	23.11.2020
6	Fccu	07-P-303-A	PUMP	86.5	23.11.2020
7	Fccu	07-P-204-A	PUMP	86.8	23.11.2020
8	Fccu	07-P-205-B	PUMP	88.8	23.11.2020
9	Fccu	07-P-304-A	PUMP	85.9	23.11.2020
10	Fccu	07-P-203-A	PUMP	89.7	23.11.2020
11	Fccu	07-P-311-A	PUMP	86.4	23.11.2020
12	Fccu	07-P-305-A	PUMP	86.3	23.11.2020
13	Fccu	07-P-210-B	PUMP	92.1	23.11.2020
14	Fccu	07-P-210-C	PUMP	83.6	23.11.2020

OH Physician

Ind. Hyginest

(GDN-166, First Edition, July, 1997)

Exposure Time (In hours)	TLV (in dB)
8	90
4	95
2	100
1	105
1/2 hrs.	110

GENERATOR MODEL NO. :- RT-5001

SER. NO.:- 111102404

BY: YTHON TECHNOLOGY

DATE OF CALIBRATION:- 08.12.2019

DATE OF CALIBRATION:- 05.12.2020

Next units of PR & PREP Nov-2020

S.NO	Plant/Unit	Area	Source	Sound Level(dB)	DATE
1	CPP/TPS	Inside old control room	STG Generator	63.7	09.11.2020
2	CPP/TPS	Inner side STG Cabin	STG Generator	60.9	09.11.2020
3	CPP/TPS	Outer side STG Cabin	STG Generator	83.9	09.11.2020



4	CPP/TPS	Far 39-TG-102 Generator	STG Generator	91.9	09.11.2020
5	CPP/TPS	39-TG-102	STG Generator	94.2	09.11.2020
6	CPP/TPS	rounding STG Genera	STG Generator	89.8	09.11.2020
7	CPP/TPS	New Control Room	STG Generator	63.2	09.11.2020
8	CPP/TPS	Inside VHP Cabin	E.A. Cabin	69.1	09.11.2020
9	CPP/TPS	Outside VHP Cabin	E.A. Cabin	49.5	09.11.2020
10	CPP/TPS	Old Pump House Cabin	U.B. Cabin	57.1	09.11.2020
11	CPP/TPS	near Pump House Cabin	U.B. Cabin	78.3	09.11.2020
12	CPP/TPS	le New Pump House C	U.B. Cabin	62.3	09.11.2020
13	CPP/TPS	near Pump House Cabin	U.B. Cabin	78.2	09.11.2020
14	CPP/TPS	Near HRSG/BOP Cabin	HRSG/BOP Cabin	75.5	09.11.2020
15	CPP/TPS	Inside HRSG/BOP Cabin	HRSG/BOP Cabin	57.5	09.11.2020

OH Physician

Ind. Hyginest

-GDN-166,First Edition, July,1997)

ure Time (In hours)	TLV (in dB)
8	90
4	95
2	100
1	105
1/2 hrs.	110

ETER MODEL NO. :- RT-5001

SR. NO.:- 111102404

YTHON TECHNOLOGY

.TION ON:- 06.12.2019

. OF CLIBRATION:-05.12.2020

at units of PR & PREP October-2020

S.NO	Plant/Unit	Area	Source	Sound Level(dB)	DATE
1	DHDS	52-PA-MT-109	PUMP	84.3	20.10.2020
2	DHDS	52-PA-CF-101-B	PUMP	92.2	20.10.2020
3	DHDS	52-PM-CF-107-B	PUMP	79.4	20.10.2020
4	DHDS	52-PA-CF-104-A	PUMP	87.5	20.10.2020
5	DHDS	52-PA-CF-103-B	PUMP	82.3	20.10.2020
6	DHDS	52-PA-CD-02-B	SURFACECONDENSOR	84.9	20.10.2020
7	DHDS	52-KM-RP-101-A	COMPRESSOR	88.3	20.10.2020
1	HGU-I	06-KA-202	ID FAN	85	21.10.2020
2	HGU-I	06-P-202-A	PUMP	91.9	21.10.2020
3	HGU-I	06-P-203-A	PUMP	89	21.10.2020
4	HGU-I	06-P-203-B	PUMP	89.5	21.10.2020
5	HGU-I	06-KA-203-B	COMPRESSOR	81.9	21.10.2020
1	OHCU	05-PM-RC-007-C	PUMP	88.9	21.10.2020
2	OHCU	05-PM-LM-004-A	PUMP	86.1	21.10.2021
3	OHCU	05-PM-CF-503-A	PUMP	89.8	21.10.2022
4	OHCU	05-PM-CF-513-B	PUMP	89.4	21.10.2023



5	OHCU	05-PM-CF-511-B	PUMP	95/95	22.10.2020
6	OHCU	05-PM-CF-301-A	PUMP	95.4/94.3	22.10.2020
7	OHCU	05-PM-CF-501-B	PUMP	93.7/92.9	22.10.2020
8	OHCU	05-PM-CF-504-B	PUMP	91.3	22.10.2020
9	OHCU	05-PM-CF-505-B	PUMP	90.5	22.10.2020
10	OHCU	05-PM-CF-508-A	PUMP	90.3	22.10.2020
11	OHCU	05-PM-CF-502-C	PUMP	89.9	22.10.2020
12	OHCU	05-PM-CF-506-B	PUMP	88.9	22.10.2020
13	OHCU	05-PA-CF-502-A	PUMP	88.6	22.10.2020
14	OHCU	05-PM-CF-510-A	PUMP	88.8	22.10.2020
15	OHCU	FF-FN-505	ID FAN	83.9	22.10.2020
16	OHCU	FF-FN-504-B	FD FAN	84	22.10.2020
17	OHCU	FF-FN-504-B	FD FAN	82.7	22.10.2020
18	OHCU	05-PM-CF-516-B	PUMP	85.8	22.10.2020
19	OHCU	05-KM-RP-001-A	COMPRESSOR	84.7	22.10.2020
20	OHCU	05-KM-RP-001-C	COMPRESSOR	85.2	22.10.2020
21	OHCU	05-KM-RP-001-D	COMPRESSOR	88.4	22.10.2020

OH Physician

Ind. Hyginest

-GDN-186,First Edition, July,1997)

ure Time (in hours)	TLV (in dB)
8	90
4	95
2	100
1	105
1/2 hrs.	110

ETER MODEL NO. :- RT-5001

SR. NO.:- 111102404

YTHON TECHNOLOGY

ATION ON:- 06.12.2019

OF CLIBRATION:-05.12.2020

units of PR & PREP September-2020

S.NO	Plant/Unit	Area	Source	Sound Level(dB)	DATE
1	CPP/TPS	89-PM-CF-9906-A	PUMP	83	21.09.2020
2	CPP/TPS	89-PA-CF-9901-C	PUMP	88	21.09.2020
3	CPP/TPS	39-PM-CF-457-B	TURBINE+STEAM	82.1	21.09.2020
4	CPP/TPS	AIR BLOWER	BLOWER	86.7	21.09.2020
5	CPP/TPS	89-BM-CF-613-A	PUMP+BOILER	90	21.09.2020
6	CPP/TPS	39-FD-FM-301-A	FD FAN	82.3	21.09.2020
7	CPP/TPS	39-FD-FM-301-B	FD FAN	83.4	21.09.2020
8	CPP/TPS	39-ID-FM-201-B	ID FAN	81.7	21.09.2020
9	CPP/TPS	39-ID-FM-201-A	ID FAN	86.4	21.09.2020
10	CPP/TPS	89-PM-CF-1203-A	FD FAN	88	21.09.2020
11	CPP/TPS	89-PM-CF-1203-B	FD FAN	88.7	21.09.2020
12	CPP/TPS	39-ID-FM-101-A	ID FAN	85.3	22.09.2020

13	CPP/TPS	39-ID-FM-101-B	ID FAN	84.2	22.09.2020
14	CPP/TPS	GT-5	GENERATOR	91.6	22.09.2020
15	CPP/TPS	GT-2	GENERATOR	91.2	22.09.2020
16	CPP/TPS	GT-4	GENERATOR	90	22.09.2020
17	CPP/TPS	HRSB-BOP-EA CABIN	CABIN	68	22.09.2020
18	CT TPS	29-PM-CF-201-F	CT PUMP	81.2	22.09.2020
19	CT TPS	29-PM-CF-201-C	CT PUMP	81.7	22.09.2020
20	CT TPS	29-PM-CF-201-A	CT PUMP	85	22.09.2020
21	CT TPS	29-PM-CF-201-B	CT PUMP	88.1	22.09.2020
1	SRU-I	17-PM-CF-03-A	PUMP	88.6	29.09.2020
2	SRU-I	17-PM-CF-002-A	PUMP	84.9	29.09.2020
3	SRU-I	17-PM-CF-001-B	PUMP	92.3	29.09.2020
4	SRU-I	17-PM-CF-008-A	PUMP	86.9	29.09.2020
5	SRU-I	18-PM-CF-009-A	PUMP	88.3	29.09.2020
6	SRU-I	18-PM-CF-005-B	PUMP	89.5	29.09.2020
7	SRU-I	18-PM-CF-006-A	PUMP	90.1	29.09.2020
8	SRU-I	21-PM-CF-002-B	PUMP	88.7	29.09.2020
9	SRU-I	21-PM-001-C	PUMP	90.7	29.09.2020
10	SRU-I	21-PM-CF-003-B	PUMP	94.1	29.09.2020
11	SRU-I	21-PM-CF-003-A	PUMP	94.2	29.09.2020
12	SRU-I	21-PM-CF-007-B	PUMP	90.6	29.09.2020
13	SRU-I	21-PM-CF-003-C	PUMP	92	29.09.2020
1	SRU-II	51-PM-104-B	PUMP	89.4	30.09.2020
2	SRU-II	51-PM-109-B	PUMP	89.9	30.09.2020
3	SRU-II	53-PM-103-A	PUMP	88.6	30.09.2020
4	SRU-II	53-PM-102-B	PUMP	90.5	30.09.2020
5	SRU-II	57-PM-102-B	PUMP	96.8/90.8	30.09.2020
6	SRU-II	57-PM-103-B	PUMP	94.4/89	30.09.2020
7	SRU-II	26-K-101-A	Incinerator Fan	89.3	30.09.2020
8	SRU-II	20-PM-102-B	PUMP	89.6	30.09.2020
9	SRU-II	20-PM-101-B	PUMP	83.8	30.09.2020
10	SRU-II	26-PM-101-B	PUMP	88.3	30.09.2020
11	SRU-II	26-PM-103-A	PUMP	90.3	30.09.2020
12	SRU-II	26-PM-102-B	PUMP	91.1	30.09.2020
13	SRU-II	25-K-101	AIR BLOWER	95.3/91.3	30.09.2020
14	SRU-II	57-PM-101-B	PUMP	86	30.09.2020
15	SRU-II	54-PM-102-B	PUMP	84.6	30.09.2020
16	SRU-II	53-PM-101-B	PUMP	85.7	30.09.2020

OH Physician

Ind. Hygienist

-GDN-166, First Edition, July, 1997)

ure Time (in hours)

TLV (in dB)

8

90

4

95



2 100  
1 105  
1/2 hrs 110

ETER MODEL NO. :- RT-5001

SR. NO. :- 111102404

YTHON TECHNOLOGY

ATION ON:- 05.12.2019

OF CLIBRATION:-05.12.2020

et units of PR & PREP August-2020

S.NO	Plant/Unit	Area	Source	Sound Level(dB)	DATE
1	PX-I	203-P-2-A	PUMP	84.2	20.08.2020
2	PX-I	202-PM-05-A	PUMP	85.5	20.08.2020
3	PX-I	201-P-02-B	PUMP	85.9	20.08.2020
4	PX-I	201-PM-08-A	PUMP	86.6	20.08.2020
5	PX-I	201-PM-01-A	PUMP	89.4	20.08.2020
6	PX-I	202-PM-03-A	PUMP	89.9	20.08.2020
7	PX-I	202-P-01-A	PUMP	85.8	20.08.2020
8	PX-I	202-P-02-A	PUMP	85	20.08.2020
9	PX-I	202-P-010-A	PUMP	82.5	20.08.2020
10	PX-I	201-P-10-B	PUMP	90.8	20.08.2020
11	PX-I	201-K-1-A	COMPRESSOR	89.2	20.08.2020
12	PX-I	202-KM-4	COMPRESSOR	84.4	20.08.2020
13	PX-I	202-KM-2-B	COMPRESSOR	85.7	20.08.2020
1	PX-II	209-P-05-B	PUMP	83.1	21.08.2020
2	PX-II	209-PM-06-B	PUMP	87.4	21.08.2020
3	PX-II	204-P-06-B	PUMP	83.8	21.08.2020
4	PX-II	204-P-07-A	PUMP	88	21.08.2020
5	PX-II	204-P-10-A	PUMP	80.1	21.08.2020
6	PX-II	206-FM-03	ID FAN	84.8	21.08.2020
7	PX-II	206-FM-01	FD FAN	84.9	21.08.2020
8	PX-II	206-FM-02	FD FAN	86.3	21.08.2020
9	PX-II	206-PM-02-A	PUMP	88.1	21.08.2020
10	PX-II	206-PM-04-A	PUMP	90	21.08.2020
11	PX-II	206-PM-04-C	PUMP	91.7	21.08.2020
12	PX-II	206-PM-06-A	PUMP	88.2	21.08.2020
13	PX-II	205-PM-05-B	PUMP	88.1	21.08.2020
14	PX-II	205-PM-06-B	PUMP	87.5	21.08.2020
15	PX-II	206-PM-07-A	PUMP	88.1	21.08.2020
16	PX-II	205-P-08-B	PUMP	86.1	21.08.2020
17	PX-II	205-PM-101-A	PUMP	89.3	21.08.2020
18	PX-II	206-P-013-B	PUMP	85.6	21.08.2020
19	PX-II	205-PM-02-A	PUMP	90.3	21.08.2020
20	PX-II	205-PM-02-B	PUMP	87.8	21.08.2020
21	PX-II	205-P-04-B	PUMP	85.7	21.08.2020
22	PX-II	207-PM-01-A	PUMP	92.2	21.08.2020
23	PX-II	205-P-03-A	PUMP	90.9	21.08.2020
24	PX-II	207-PM-03-A	PUMP	86.5	21.08.2020
25	PX-II	207-PM-04-B	PUMP	90.1	21.08.2020
26	PX-II	207-PM-02-B	PUMP	86.5	21.08.2020



27	PX-II	208-P-03-A	PUMP	87.1	21.08.2020
28	PX-II	208-PM-02-A	PUMP	86.6	21.08.2020
29	PX-II	208-P-01-A	PUMP	89.8	21.08.2020
1	PTA	P-125-A	PUMP	82.5	27.08.2020
2	PTA	21-K1-133	COMPRESSOR	85.4	27.08.2020
3	PTA	21-K1-830-A	COMPRESSOR	86.9	27.08.2020
4	PTA	21-P1-1606-B	PUMP	91.7	27.08.2020
5	PTA	21-P1-615-B	PUMP	87.7	27.08.2020
6	PTA	21-P1-606-A	PUMP	91.4	27.08.2020
7	PTA	21-P1-607-B	PUMP	94.9	27.08.2020
8	PTA	P1-507-A	PUMP	87.3	27.08.2020
9	PTA	21-P1-702-B	PUMP	88.7	27.08.2020
10	PTA	21-P1-2203-A	PUMP	90	27.08.2020
11	PTA	21-P1-2202-A	PUMP	86.9	27.08.2020
12	PTA	21-P1-2210-A	PUMP	92.2	27.08.2020
13	PTA	P1-1410-B	PUMP	85.7	27.08.2020
14	PTA	P1-1816-B	PUMP	84.2	27.08.2020
15	PTA	21-P1-1420-B	PUMP	86.5	27.08.2020
16	PTA	P1-855-B	PUMP	81.3	27.08.2020
17	PTA	21-P1-1251-A	PUMP	88.5	27.08.2020
18	PTA	21-P1-1251-C	PUMP	89.5	27.08.2020
19	PTA	K1-1260	COMPRESSOR	87.8	27.08.2020
20	PTA	P1-1209-C	PUMP	89.1	27.08.2020
21	PTA	P1-1209-B	PUMP	92.1	27.08.2020
22	PTA	P1-1209-A	PUMP	91.5	27.08.2020
23	PTA	P1-1207-A	PUMP	92.3	27.08.2020
24	PTA	FN-1259-A	FD FAN	83.1	27.08.2020
25	PTA	FN-1259-B	FD FAN	84.6	27.08.2020
26	PTA	FN-104-A	FD FAN	84.3	27.08.2020
27	PTA	FN-164-B	FD FAN	85.8	27.08.2020
28	PTA	COMPRESSOR AREA	UNDERCOMPRESSOR	Above 100	27.08.2020

OH Physician

Ind. Hyginest

-GDN-188, First Edition, July, 1997)

ure Time (In hours)	TLV (In dB)
8	90
4	95
2	100
1	105
1/2 hrs.	110

ETER MODEL NO. :- RT-5001

SR. NO.:- 111102404

YTHON TECHNOLOGY

.TION ON:- 06.12.2019

.OF CLIBRATION:-05.12.2020

arget units of PR & PREP July-2020.

S.NO	Plant/Unit	Area	Source	Sound Level(dB)	DATE
------	------------	------	--------	-----------------	------

1	DCU	78-PM-135-A	PUMP	88.9	20.07.2020
2	DCU	78-PM-148-B	PUMP	89	20.07.2020
3	DCU	78-PM-131-B	PUMP	86.8	20.07.2020
4	DCU	78-PM-112-B	PUMP	95.6	20.07.2020
5	DCU	78-PM-105-B	PUMP	89.5	20.07.2020
6	DCU	78-PM-113-A	PUMP	95.5	20.07.2020
7	DCU	78-PM-124-B	PUMP	89.7	20.07.2020
8	DCU	78-PM-111-A	PUMP	97.2	20.07.2020
9	DCU	78-PM-161-B	PUMP	89.1	20.07.2020
10	DCU	78-PM-103-B	PUMP	94	20.07.2020
11	DCU	78-PM-125-A	PUMP	90.5	20.07.2020
12	DCU	78-PM-104-A	PUMP	88.2	20.07.2020
13	DCU	78-PM-116-A	PUMP	88.8	20.07.2020
14	DCU	78-PM-122-B	PUMP	92.8	20.07.2020
15	DCU	78-PM-109-B	PUMP	89.3	20.07.2020
16	DCU	78-PM-108-B	PUMP	91.3	20.07.2020
17	DCU	78-PM-107-A	PUMP	92.5	20.07.2020
18	DCU	78-PM-110-A	PUMP	94.6	20.07.2020
19	DCU	78-FD-101-B	FD FAN	82	20.07.2020
20	DCU	78-FD-101-A	FD FAN	82.8	20.07.2020
21	DCU	78-FD-102-B	FD FAN	79.6	20.07.2020
22	DCU	78-FD-102-A	ID FAN	81.3	20.07.2020
23	DCU	78-ID-102	ID FAN	82.5	20.07.2020
24	DCU	78-ID-101	ID FAN	83	20.07.2020
1	AVU-II	73-PM-024-A	PUMP	85.8	22.07.2020
2	AVU-II	73-PM-025	PUMP	86.3	22.07.2020
3	AVU-II	73-PM-032-B	PUMP	90.2	22.07.2020
4	AVU-II	73-PM-03-B	PUMP	85.9	22.07.2020
5	AVU-II	73-PM-02-B	PUMP	86.6	22.07.2020
6	AVU-II	73-PM-02-C	PUMP	87.6	22.07.2020
7	AVU-II	73-PM-02-D	PUMP	87.3	22.07.2020
8	AVU-II	73-P-14-A	PUMP	88.2	22.07.2020
9	AVU-II	73-PM-09-B	PUMP	86.8	22.07.2020
10	AVU-II	73-PM-13-A	PUMP	89.4	22.07.2020
11	AVU-II	73-PM-13-C	PUMP	88.2	22.07.2020
12	AVU-II	74-PM-02-B	PUMP	87.8	23.07.2020
13	AVU-II	74-PM-01-A	PUMP	86.7	23.07.2020
14	AVU-II	74-PM-03-B	PUMP	85.8	23.07.2020
15	AVU-II	74-PM-03-A	PUMP	84.3	23.07.2020
16	AVU-II	74-PM-07-A	PUMP	85.9	23.07.2020
17	AVU-II	74-PM-010-A	PUMP	88.5	23.07.2020
18	AVU-II	73-PM-07-B	PUMP	89.1	23.07.2020
19	AVU-II	73-PM-036-B	PUMP	87.7	23.07.2020
20	AVU-II	73-PM-036-A	PUMP	89.8	23.07.2020
21	AVU-II	73-PM-06-B	PUMP	89.1	23.07.2020
22	AVU-II	73-PM-12-A	PUMP	84.9	23.07.2020
23	AVU-II	73-PM-015-B	PUMP	92.2	23.07.2020
24	AVU-II	73-PM-015-A	PUMP	89.4	23.07.2020
25	AVU-II	73-PM-04-B	PUMP	87.1	23.07.2020



26	AVU-II	73-PM-01-D	PUMP	89.9	23.07.2020
27	AVU-II	73-PM-01-C	PUMP	90	23.07.2020
28	AVU-II	73-PM-10-B	PUMP	91.6	23.07.2020
29	AVU-II	73-PM-10-C	PUMP	90.2	23.07.2020
30	AVU-II	73-FN-001-A	FD FAN	83.7	23.07.2020
31	AVU-II	73-FN-001-B	FD FAN	91.8	23.07.2020
1	HCU	75-PM-106-B	PUMP	80.5	27.07.2020
2	HCU	75-PM-101	PUMP	83	27.07.2020
3	HCU	75-PM-106-B	PUMP	89.6	27.07.2020
4	HCU	75-PM-107-B	PUMP	91.9	27.07.2020
5	HCU	75-PM-111-B	PUMP	94.4	27.07.2020
6	HCU	75-PM-104-B	PUMP	95.5	27.07.2020
7	HCU	75-PM-103-B	PUMP	92.2	27.07.2020
8	HCU	75-PM-113-B	PUMP	90.7	27.07.2020
9	HCU	75-PM-114-B	PUMP	94.6	27.07.2020
10	HCU	75-PM-112-B	PUMP	90.8	27.07.2020
11	HCU	75-PM-116-B	PUMP	90.6	27.07.2020
12	HCU	75-PM-115-B	PUMP	88.5	27.07.2020
13	HCU	75-PM-201-B	PUMP	92.3	27.07.2020
14	HCU	75-K-002-A	COMPRESOR	91.8	27.07.2020
15	HCU	75-K-002-C	COMPRESOR	91.2	27.07.2020

OH Physician

Ind. Hyginest



**Mock Drill/Emergency Drill Details**

SN	Date of Mock Drill	Type of Mock Drill	Location	Scenario
1.	16.06.2020	L-2	RFCCU	Leakage of HC & H <sub>2</sub> S from bottom line of stripper column C-301.
2.	30.06.2020	L-1	OM&S, P/H-4	Gland leak from MS pump 48-PA-CF-02A.
3.	29.07.2020	L-1	NRPL	RLNG leakage from 30" header of scrapper receiver barrel, followed by fire.
4.	28.08.2020	L-1	Fabrication Yard	Short circuit in LT cable during excavation resulted in fire on nearby dumped flammable scrap material.
5.	15.09.2020	L-2	PX-1	Instrument tapping failure in Debutaniser Column bottom product (Reformate) header leading to vapour cloud formation and subsequent fire and explosion.
6.	29.10.2020	L-1	ETP-2	Chlorine leakage from Cl <sub>2</sub> tonner valve assembly in Cl <sub>2</sub> dosing area.
7.	27.11.2020	L-1	AVU-2	Jet fire in FT installed on heavy naphtha header near V-22.
8.	05.12.2020	L-2	OM&S, Tank-602	Rim seal fire followed by Full surface fire in Tank 602" on 05.12.2020.
9.	30.01.2021	L-1	LPG Pump House	LPG leakage from pump drain flange.
10.	22.02.2021	L-1	RO-TTP	Chlorine leakage from Cl <sub>2</sub> tonner valve assembly in RO-TTP Chlorinator Room.
11.	27.02.2021	L-3	PTA Tank Farm	Acetic acid leak from acetic acid tank outlet header at PTA tank farm area.
12.	22.03.2021	L-1	NRPL	Strainer flange leakage in naphtha line.

**Unit-wise Gas Detector Details**

<b>Gas Detectors</b>	<b>Quantity</b>
MCR	300
CR11	485
DCU	28
CPP	15
UCR	17
PX	123
PTA	69
SRU	121
OMS	152
BS-VI	200
<b>TOTAL</b>	<b>1510</b>

# **LDAR (VOC) Monitoring Report**

for

Month of October, 2020

at



**IndianOil**

**IOCL, Panipat Refinery  
(PX-PTA)**

**Prepared by**

**NETEL (INDIA) LIMITED**



W-408, MIDC Rabale,

TTC Industrial Area, Navi Mumbai – 400 701

**Phone :** 022 27606016

**Email :** [ems@netel-india.com](mailto:ems@netel-india.com)



**LDAR VOC MONITORING REPORT FOR IOCL PX-PTA, PANIPAT****LDAR Monitoring Report for IOCL PX-PTA, 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 PX-PTA, Panipat

**Report Period** Month of October, 2020.

**For NETEL (INDIA) LIMITED**

  
**Jayant Meshram**  
**Sr. Manager - EMS Operation**



LEAK DETECTION AND REPAIR (LDAR) PROGRAM

VOC QUARTERLY REPORT : OCTOBER,2020

PLANTWISE SUMMARY

Sr.No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	PX-I	09/10/2020	260	1 to 9	5	3.345
2	PX-II	09/10/2020	257	9 to 17	3	1.403
3	PTA	10/10/2020	200	17 to 23	0	0.168
4	PTA-ETP	10/10/2020	45	23 to 24	0	0.048
Total in Kg/day			762		8	4.964
Total in MT/Annum						1.812

Verified by



Surekha Jamdar

Technical Manager



Checked by



Shraddha Kere

Technical Manager

## LDAR Benzene Monitoring Report for IOCL PX-PTA, 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 PX-PTA, Panipat

**Report Period** Month of October,2020.

**For NETEL (INDIA) LIMITED**



**Jayant Meshram**  
**Sr.Manager - EMS Operation**





## LEAK DETECTION AND REPAIR (LDAR) PROGRAM


## BENZENE QUARTERLY REPORT : OCTOBER,2020

## PLANTWISE SUMMARY

Sr.No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	PX-1	09/10/2020	198	1 to 6	0	0.029
2	PX-2	09/10/2020	80	6 to 8	0	0.009
3	PTA	10/10/2020	64	8 to 10	0	0.010
Total in Kg/day						0.048
Total in MT/Annum						0.018

Verified by

Checked by

  
Surekha Jamdar

Dy.Technical Manager


  
Shraddha Kere

Technical Manager

# **LDAR (BENZENE) Monitoring Report**

for

Month of October, 2020

at



**IndianOil**

**IOCL, Panipat Refinery**

**Prepared by**

**NETEL (INDIA) LIMITED**



W-408, MIDC Rabale,

TTC Industrial Area, Navi Mumbai – 400 701

**Phone :** 022 27606016

**Email :** [ems@netel-india.com](mailto:ems@netel-india.com)

**LDAR BENZENE MONITORING REPORT FOR IOCL , PANIPAT****LDAR Benzene Monitoring Report for IOCL , Panipat**

**Name of client** M/s Indian Oil 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** October,2020

**For NETEL (INDIA) LIMITED**

  
**Jayant Meshram**  
**Sr.Manager-EMS Operation**





LEAK DETECTION AND REPAIR (LDAR) PROGRAM

BENZENE QUARTERLY REPORT : OCTOBER, 2020.

PLANTWISE SUMMARY

	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	CCRU	06/10/2020	230	1 to 7	0	0.035
2	MSQ	08/10/2020	32	7 to 8	0	0.007
Total in Kg/day						0.042
Total in MT/Annum						0.015

Verified by

Checked by





Surekha Jamdar  
Technical Manager

Shraddha Kere  
Technical Manager

**LDAR Monitoring Report for IOCL, Panipat**

**Name of client** M/s Indian Oil 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 MESHARAM**  
**SR.MANAGER - EMS OPREATION**




## LEAK DETECTION AND REPAIR (LDAR) PROGRAM

VOC REPORT MONTH OF OCTOBER, 2020.

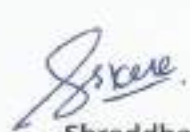
## PLANTWISE SUMMARY

Sr.No.	Name of the Unit	Date of Monitoring	Total No of Points Monitored	Page No.	No. of Points Where leaks found beyond standard limits	Total Leak (kg/day)
1	AVU-I	05/10/2020	438	1 to 14	6	4.303
2	DHDS	06/10/2020	269	14 to 23	1	0.732
3	CCRU	06/10/2020	191	23 to 29	7	4.971
4	HGU (PR)	06/10/2020	124	29 to 33	2	0.618
5	OHCU	06/10/2020	287	33 to 42	5	3.235
6	VBU	06/10/2020	89	42 to 44	0	0.059
7	RFCC	07/10/2020	251	45 to 52	9	6.278
8	AVU-II	07/10/2020	300	52 to 62	7	3.973
9	HGU(76&77)	07/10/2020	245	62 to 69	2	1.435
10	HCU	07/10/2020	394	70 to 82	4	2.318
11	DHDT	08/10/2020	263	82 to 90	2	1.137
12	MSQ	08/10/2020	225	90 to 97	3	2.010
13	DCU	08/10/2020	333	97 to 108	4	1.541
14	SRU-NEW	08/10/2020	58	108 to 109	0	0.009
15	ETP-1	09/10/2020	57	109 to 111	0	0.078
16	ETP-2	09/10/2020	58	111 to 113	0	0.055
17	OM&S	09/10/2020	477	113 to 128	11	7.108
17	SRU-OLD	10/10/2020	46	128 to 129	0	0.008
Total in Kg/day			4105		63	39.87
Total in MT/Annum						14.552

Verified by

  
 Surekha Jamdar  
 Dy. Technical Manager


Checked by

  
 Shraddha Kere  
 Technical Manager



S. No.	Description	Cost in INR (~Lakhs)		
		2020-21	2019-20	2018-19
1	Waste Water & Effluent including O&M of plant	3911.88	2797.896	1240.46218
2	Ambient Air Quality Monitoring & Stack Monitoring	147.9	246.354	41.868
3	Waste Management	58.0	331.1	546.4
4	Greenbelt Development	117.4	13.7	1.5
5	Rain Water Harvesting	83.3	0.0	15.2
6	Other Environment Related Activities (LED Light Installation, EIA/RRA Study/WED Celebration etc)	376.3	223.0	277.3
	Total	4694.8	3612.0	2122.8

**PHAND, A.B. (ए.बी.फंड)**

---

**From:** PHAND, A.B. (ए.बी.फंड)  
**Sent:** 09 April 2018 13:16  
**To:** vk.hatwal@gov.in; chdmoeenv@gmail.com  
**Cc:** ajaymehrotra13@gmail.com; hspcbropr@gmail.com; PANJIAR VANDANA( पंजियार वंदना );  
 DAS, M.K. (एम.के. दास); FARKYA, H.V. (फरक्या, एच.वी.); NAGPAL, PRAVEEN. (नागपाल, प्रवीण)  
**Subject:** Environmental Clearance -Public notice in two newspaper -BS-VI Fuel Quality up-gradation  
 and expansion of PX/PTA plant at Panipat Refinery & Petrochemical Complex (PRPC),  
 Panipat (Haryana)  
**Attachments:** Envoronmental Clearance Public notice.pdf; EC BS- VI , PX PTA Expansion 26.03.2018.PDF

Kind Attn: Vimal ji

Sir,

With reference to today's telecommunication held with you in this regard:

MoEFCC has accorded environmental clearance to the project for **BS-VI Fuel Quality up-gradation and expansion of PX/PTA plant at Panipat Refinery & Petrochemical Complex** (in supersession of the environmental clearance granted vide Ministry's letter dated 28<sup>th</sup> November ,2017.)

As mentioned in EC vide point no 11.1 (xv) (on page no. 6 of attached EC copy) , IOCL has published public notice (mentioning EC granted) in the two newspaper on **06.04.18**.

Copy of same attached for your information please.

Regards,

A B PHAND

Manager (HS&E)

I.com:0180-252-2557

---

**From:** PHAND, A.B. (ए.बी.फंड)  
**Sent:** 05 December 2017 17:53  
**To:** 'vk.hatwal@gov.in'; 'chdmoeenv@gmail.com'  
**Cc:** 'ajaymehrotra13@gmail.com'; 'hspcbropr@gmail.com'  
**Subject:** Environmental Clearance Notice

Sir/madam,

As mentioned in EC condition (of BS VI Quality Up-gradation Project at Panipat Refinery & Petrochemical complex dated 28.11.17), IOCL has published public notice (mentioning EC granted) in the two newspaper on 05.12.17.

Copy of same also attached for your information please.

Regards,

A B PHAND

Manager (HS&E)

I.com:0180-252-2557

दैनिक जागरण - 6/4/18

81 मार्च में कंपनी ने 12,721 टैन्करों की टैन्करों विक्री का लक्ष्य तय किया था।



## इंडियन ऑयल



**पानीपत रिफाइनरी एवं  
पेट्रोकेमिकल कॉम्प्लेक्स, पानीपत**

**पर्यावरण मंजूरी हेतु सार्वजनिक सूचना**

पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स, पानीपत की परियोजना "मैसर्स इंडियन ऑयल कॉर्पोरेशन लिमिटेड द्वारा पानीपत रिफाइनरी एवं पेट्रोकेमिकल कॉम्प्लेक्स (पीआरपीसी), पानीपत (हरियाणा) में बीएस-VI फ्यूल क्वालिटी अपग्रेडेशन और पीएस / पीटीए प्लांट के विस्तार" हेतु पर्यावरण की मंजूरी प्राप्त करने के लिए पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार, नई दिल्ली की पत्र सं. F. No. J-11011/177/2016-IA-II(I) दिनांक 28 मार्च, 2018 के तहत प्राप्त हो गई है। इस मंजूरी की एक प्रति हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड के पास उपलब्ध है और इसे मंत्रालय की वेबसाइट <http://moef.nic.in> या <http://environmentclearance.nic.in> पर भी देखा जा सकता है।

CC-01

The Tribune - 6/4/18

DO NOT REWASH OR RINSE SOMEONE.



## IndianOil



**Panipat Refinery &  
Petrochemical Complex, Panipat**

**Public Notice for Environmental Clearance**

Environmental Clearance for the project "BS-VI Fuel Quality up-gradation and expansion of PX/PTA plant at Panipat Refinery & Petrochemical Complex (PRPC), Panipat (Haryana) by M/s Indian Oil Corporation Limited" of Panipat Refinery & Petrochemical Complex, Panipat has been received as per letter no F. No. J-11011/177/2016-IA-II(I) dated 28<sup>th</sup> March, 2018 of Ministry of Environment, Forest & Climate Change, Government of India, New Delhi. A copy of Clearance is available with Haryana State Pollution Control Board and may also be seen at Ministry website <http://moef.nic.in> or <http://environmentclearance.nic.in>

CC-01



**EMP Expenditure Details (Annually)**

S. No.	Description	Cost in INR (~Lakhs)		
		2020-21	2019-20	2018-19
1	Waste Water & Effluent including O&M of plant	3911.88	2797.896	1240.46218
2	Ambient Air Quality Monitoring & Stack Monitoring	147.9	246.354	41.868
3	Waste Management	58.0	331.1	546.4
4	Greenbelt Development	117.4	13.7	1.5
5	Rain Water Harvesting	83.3	0.0	15.2
6	Other Environment Related Activities (LED Light Installation, EIA/RRA Study/WED Celebration etc)	376.3	223.0	277.3
	Total	4694.8	3612.0	2122.8

**Due to file size restriction the ERDMP(Annexure no.11 of Action taken report(ATR)) is attached in Additional Annexure of EIA report which is uploaded in section 39(a)- Copy of EIA/EMP (Plan/Figures) in Form-2**

No. J-11011/27/91-IA.II(I)  
Government of India  
Ministry of Environment and Forests

Paryavaran Bhavan,  
CGO Complex, Lodi Road,  
New Delhi-110003.

July 16, 1992

OFFICE MEMORANDUM

Subject:- Setting up of a grassroot refinery at Karnal  
District by Indian Oil Corporation Ltd.

....

This has reference to IOC's letter No. KRP/P/3 dated 8th May, 1992 and subsequent D.O. letter No. R-31011/4/92-OR.I dated 9th June, 1992 from Secretary, Ministry of Petroleum and Natural Gas.

The undersigned is directed to refer to the above proposal and to state that the environmental aspects of the proposal have been examined and the project is accorded environmental clearance subject to implementation of the following stipulations and environmental safeguards :

- ✓ i. The project authorities must strictly adhere to the stipulations laid down by the State Pollution Control Board and the State Govt.
- ✓ ii. Any expansion of the plant, either with the existing product mix or new products can be taken up only with the prior approval of this Ministry.
- iii. Sulphur recovery unit with more than 90% sulphur recovery should be installed and commissioned before the project is completed, and measures for its continuous operation must be taken. Techno-economic feasibility study for additional standby sulphur recovery system may be initiated after the installation of first unit.
- iv. Low sulphur fuel (sulphur content not exceeding 1%) should be used in the boilers/furnaces.
- v. Low NO<sub>x</sub> burners should be used to avoid excessive formation of NO<sub>x</sub>.

....2/-



- vi. Total emission of  $\text{SO}_2$  from the refinery should not exceed 1 tonne/hr.
- vii. The gaseous emissions ( $\text{SO}_2$ ,  $\text{NO}_x$  etc.) from various process units should conform to the standards prescribed by the concerned authorities, from time to time. At no time the emission levels should go beyond the stipulated standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.
- viii. Adequate number (a minimum of 7) of air quality monitoring stations should be set up in the down-wind direction as well as where maximum ground level concentration is anticipated. Stack emission should be monitored by setting up of an automatic continuous stack monitoring unit. The data on stack emission should be submitted to the State Pollution Control Board once in three months and to this Ministry once in six months along with the statistical analysis. The air quality monitoring station should be selected on the basis of modelling exercise to represent the short-term ground level concentrations. 7+1
- ix. Fugitive emissions of hydro-carbons from storage tanks<sup>etc.</sup> should be minimized by adopting necessary measures. before now.
- x. Fugitive emissions should be regularly monitored and record maintained. 11 (Contd.)
- xi. There should be no change in the stack design without the approval of the State Pollution Control Board. Alternate pollution control system and proper design in the stack should be provided to take care of excess emissions due to failure in any system of the plant. ✓
- xii. The height of stacks attached to AVU, FCCU and TPS etc. should not be less than 100 m. ✓

...3/-



xiii. Total fresh water consumption (industrial as well as township) should not exceed 8 MGD. Ground water should not be tapped for this purpose. ~ 6.490

xiv. The project authorities must recycle waste water to the maximum extent possible (atleast 25% to 30% to start with). The treated effluent coming out of the plant must meet MINAS, ✓

xv. Adequate number of effluent quality (oil & grease, COD, BOD, suspended solids, phenols, sulphides, pH and flow) monitoring stations must be set up in consultation with State Pollution Control Board. Groundwater  
✓

xvi. Maximum recovery of oil from the sludge should be done / and residual oily sludge should be incinerated. waste pit

xvii. The project authorities must prepare a scheme for solid and hazardous waste disposal. The plan for disposal duly approved from the State Pollution Control Board should be submitted to this Ministry within one year and adequate space should be provided for it within the plant premises. Sludge pit  
incinerator  
✓

xviii. A green belt of atleast 500 m width and adequate density should be developed and maintained. Selection of the species should be done in consultation with the State Forest Department. ✓

A detailed green belt development plan taking into account attenuation factors, soil characteristics etc. should be prepared and submitted to this Ministry within six months.

xix. A detailed risk analysis study based on Maximum Credible Accident (MCA) analysis should be done and submitted to this Ministry once the process design/technology and lay-out is finalised. Based on this, a Disaster Management Plan has to be prepared and after approval by the concerned Nodal Agency, should be submitted to this Ministry within six months. ✓

The impact zone under no circumstances should cross the plant premises.

....4/-



- xx. A 'no development zone' of minimum 5 km radius in between the refinery and the Panipat town should be provided, where only restricted growth of non-polluting industries may be allowed (Action - State Govt.). Govt.
- xxi. No tree should be cut from the site without prior written order of the competent authority.
- xxii. The industrial township should be located on the northern side of the refinery i.e., in the up-wind direction. ✓
- xxiii. A detailed Rehabilitation Plan for the affected people should be prepared and submitted to this Ministry within 3 months. ✓
- xxiv. Contractor's labourers must leave place after the construction work is over to avoid creation of slum in the adjoining areas of the refinery and township.
- xxv. A comprehensive EIA must be prepared and submitted to this Ministry by September, 1993 covering regional implications and 'no development zone' aspects. ✓
- xxvi. Feasibility of using 20 tonner truck may be studied/assessed wherever road transport is being envisaged and report submitted to this Ministry within three months. ✓
- xxvii. Necessary approval may be obtained from the Regulatory Authority as per Section 5(2) and 5(3) of the Hazardous Wastes (Management and Handling) Rules, 1989 of the Environment (Protection) Act, 1986. ✓
- xxviii. The State Govt. should prepare a Master Plan for the region to avoid haphazard growth of industries and human settlements in the area. Govt.
- xxix. The project authority must set up laboratory facilities for collection and analysis of samples under the supervision of competent technical personnel, who will directly report to the Chief Executive. ✓

...5/-



xxx. A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of Sr. Executive, who will report directly to the Head of the organisation.

xxxi. The funds earmarked for the environmental protection measures should not be diverted for other purposes and yearwise expenditure should be reported to this Ministry.

The Ministry or any other competent authority may stipulate any further condition after reviewing the comprehensive impact assessment report or any other reports prepared by the project authorities.

The Ministry may revoke clearance, if implementation of the conditions is not satisfactory.

The above conditions will enforce inter-alia along with the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1990 along with their amendments.

(K.K. Jain)  
Jt. Director

The Secretary,  
Ministry of Petroleum & Natural Gas,  
Shastri Bhavan, New Delhi.


Copy to :

1. Chairman-cum-Managing Director, Indian Oil Corpn. Ltd., Scope Complex, Core-2, 7-Institutional Areas, Lodi Road, New Delhi.
2. Chief Secretary, Govt. of Haryana, Chandigarh.
3. Chairman, Haryana Pollution Control Board, Kothi No. 661, Sector 8-B, Chandigarh.
4. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi.
5. Chief Conservator of Forests, Regional Office, SCO, 132-133 Sector-34-A, Chandigarh.
6. Director, Regional Offices, Ministry of Environment and Forests, Paryavaran Bhavan, New Delhi.

....6/-

- 6 -

7. Adviser (P&E), Planning Commission, Yojana Bhavan, New Delhi.
8. Adviser (PAD), Planning Commission, Yojana Bhavan, New Delhi.
9. Joint Secretary(Plan Finance), Department of Expenditure, North Block, New Delhi.
10. Guard file.
11. Monitoring file.
12. Record file.

  
(K.K. Jain)  
Jt. Director



No.J.11011/60/2000-IA II  
Government of India  
Ministry of Environment & Forests  
I.A.Division

Paryavaran Bhavan, CGO Complex,  
Lodi Road, New Delhi-110003

Tele No 4363964

Dated 9<sup>th</sup> April, 2001

To,

The Chairman & Managing Director  
M/s Indian Oil Corporation Ltd.,  
Refineries Division, Scope Complex,  
Core-2, 7, Institutional Area,  
Lodi Road, New Delhi-110003.

**Subject:- Expansion of Panipat Refinery from 6 MMTPA to 12 MMTPA by M/s IOCL- Environmental Clearance.**

Sir,

This has reference to your communication No.EP/EC-APPI, dated 14th September, 2000 along with project documents including FIA/FMP, Risk Analysis and subsequent clarifications furnished vide letters dated 8<sup>th</sup> November, 2000, 7<sup>th</sup> December, 2000, 19<sup>th</sup> December, 2000 and 15<sup>th</sup> January, 2001 on the above mentioned project. Ministry of Environment and Forests has carefully examined your application. It is noted that NOC from the Haryana State Pollution Control Board has been obtained and the proposal has been recommended by the Public Hearing Panel in the meeting held on 23<sup>rd</sup> July, 2000.

The Ministry of Environment and Forests hereby accords environmental clearance under EIA Notification dated 27<sup>th</sup> January, 1994 subject to strict compliance of the following conditions.

**SPECIFIC CONDITIONS:-**

- i. The company should strictly adhere to the stipulations made by MOE&F vide O.M No. J.11011/76/96-IA II dated 5<sup>th</sup> March, 1997.
- ii. The total SO<sub>2</sub> emission from the entire refinery complex should not exceed 1000 kg/hr even after the proposed expansion. The gaseous emissions ( SO<sub>2</sub>, NO<sub>x</sub>, HC, CO ) and particulate matters , from various process units should conform to the standards prescribed under Environmental (Protection) Rules, 1986 or norms stipulated by the SPCB whichever is most stringent. At no time, the emission level should go beyond the stipulated standards. In the event of failure of pollution control systems(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.
- iii. Sulphur recovery units with more than 99% efficiency shall be provided.
- iv. Adequate ambient air quality monitoring stations SO<sub>2</sub>, NO<sub>x</sub>, HC should be set up in the refinery area in consultation with SPCB, based on occurrence of maximum



ground level concentration and down-wind direction of wind. The monitoring network must be decided based on making exercise to represent short term GILC's. In addition, a mobile van with adequate facilities to monitor ambient air quality outside the refinery premises should be provided. Continuous on-line stack monitoring equipment should be installed for measurement of SO<sub>2</sub>, NO<sub>x</sub>, HC.

- v. Fugitive emission of HC from product storage tank yard, crude oil tanks etc. must be regularly monitored. Sensors for detecting HC leakage should also be provided at strategic locations.
- vi. As per the commitment given, there will be no discharge of treated effluent into Thirana drain. The Liquid effluent generated from the refinery should be treated comprehensively to conform to the load based standards and concentration limits prescribed under EPA rules. The entire treated waste water should be recycled for reuse in the plant operation and green belt development so as to maintain zero discharge.
- vii. Guard ponds of sufficient holding capacity should be provided to contain the effluent during process disturbances and or FTP failure. The concerned units must be shut down in case of effluent quality exceeding the prescribed limits.
- viii. The company should adopt mounded storage for LPG. The recommendations made in the Rapid Risk Assessment Report must be incorporated while firming up the plant layout and equipment design. The company must prepare a comprehensive risk assessment/Analysis of the Refinery and associated facilities once the engineering design and lay out is frozen. Based on this, on-site and off-site emergency preparedness plan must be prepared. Approval from the nodal agency must be obtained before commissioning the project.
- ix. The drawl of water from the Munak Head-works should not exceed 30 cusecs even after the proposed expansion.

#### GENERAL CONDITIONS :

- i. The project authorities must strictly adhere to the stipulations made by the Haryana State Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
- iii. In case of deviations or alterations in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iv. Data on ambient air quality, stack emission as well as fugitive emissions of HC must be regularly monitored and submitted to CPCB once in 3 months and to Ministry's Regional Office once in 6 months.
- v. Influent and effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for the MINAS parameters.



- vi. The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous chemicals Rules, 1989 as amended on 3<sup>rd</sup> October, 1994. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained.
- vii. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 1989. Authorisation from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.
- viii. Occupational health surveillance programme should be undertaken as regular exercise for all the employees, specifically for those engaged in handling hazardous substances.
- ix. The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- x. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA and risk analysis report.
- ✓ xi. The project proponent should have a scheme for social upliftment in the nearby village with reference to contribution in road construction, education of children, festivals, health centres, sanitation facilities, drinking water supply, community awareness and employment to local people whenever possible both for technical and non technical jobs.
- xii. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- xiii. The project authorities will provide adequate funds both recurring and non recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
- xiv. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Chandigarh /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.
- xv. The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing 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>. The advertisement

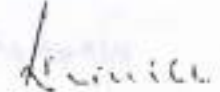
should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office.

- xvi. 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.

The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

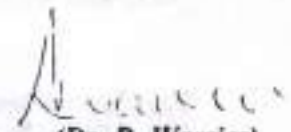
The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.



(Dr. R. Warriar)  
Additional Director

Copy to:-

1. Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. Chairman, Haryana Pollution Control Board, P.B.No. 712 Sec-19, (1st & IInd Floors), Chandigarh-160011.
4. The Secretary (Environment), Haryana Civil Secretariat, Government of Haryana, Chandigarh.
5. Chief Conservator of Forests, Regional Office (NZ), SCO 132-133, Sector 34-A, Chandigarh-160022.
6. Adviser (EI division), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
8. Guard File.
9. Monitoring File.
10. Record File.



(Dr. R. Warriar)  
Additional Director



Annexure-1  
P- 1/4

No.J.11011/52/2000-IA II  
Government of India  
Ministry of Environment & Forests  
I.A.Division

Paryavaran Bhavan, CGO Complex,  
Lodi Road, New Delhi-110003

Tele No 4363964

Dated 30<sup>th</sup> April, 2001

To,

The Chairman & Managing Director  
M/s Indian Oil Corporation Ltd.,  
Refineries Division, Scope Complex,  
Core-2, 7, Institutional Area,  
Lodi Road, New Delhi-110003.

**Subject:- Integrated Paraxylene and Purified Terephthalic Acid Projects at Panipat  
by M/s IOCL - Environmental Clearance.**

Sir,

This has reference to your communication No.EP/EC-APPL dated 21<sup>st</sup> August, 2000 along with project documents including EIA/EMP, Risk Analysis and subsequent clarifications furnished vide letters dated 3<sup>rd</sup> October, 2000, 13<sup>th</sup> November, 2000, 7<sup>th</sup> December, 2000, 19<sup>th</sup> December, 2000 and 15<sup>th</sup> January, 2001 on the above mentioned project. Ministry of Environment and Forests has carefully examined your application. It is noted that the proposal is for setting up a petrochemical complex for production of Paraxylene (350,000 TPA) and PTA ( 525,000 TPA) at Panipat, Haryana. It is also noted that NOC from the Haryana State Pollution Control Board has been obtained and the proposal has been recommended by the Public Hearing Panel in the meeting held on 22<sup>nd</sup> July, 2000.

The Ministry of Environment and Forests hereby accords environmental clearance under EIA Notification dated 27<sup>th</sup> January, 1994 subject to strict compliance of the following conditions.

**SPECIFIC CONDITIONS:-**

1. The gaseous emission (SO<sub>2</sub>, NO<sub>x</sub> 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.
2. Adequate ambient air quality monitoring stations [SPM, SO<sub>2</sub>, NO<sub>x</sub> and HC, Benzene] should be set up in the petrochemical complex in consultation with SPCB, based on occurrence of maximum ground level concentration and down-wind direction of wind. 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<sub>2</sub> and NO<sub>x</sub>.

3. Fugitive emission of HC from product storage tank yard, crude oil tanks etc. must be regularly monitored. Sensors for detecting HC leakage should also be provided at strategic locations.
4. Liquid effluent generated from the petrochemical complex should be treated comprehensively to conform to the load based standards and concentration limits prescribed under EPA rules [MINAS Standards]. The BOD of the treated effluent should not exceed 30 mg/l at any point of time. The Company must undertake maximum recycling/reusing of the treated effluent for process purposes in addition to green belt development and also adopt adequate water conservation measures. As per the commitment given the total quantity of treated effluent discharged into Thirana drain should not exceed 255 m<sup>3</sup>/hr. The effluent quality at the discharge point must also be monitored periodically by an independent agency authorized by CPCB and report of the independent agency should be submitted to Ministry's Regional office at Chandigarh/CPCB/ HSPCB. The company shall fully abide by the Hon'able supreme Court orders on regulation of industrial discharge to River Yamuna and its canals /drains.
5. Guard ponds of sufficient holding capacity should be provided to contain the effluent during process disturbances and or ETP failure. The concerned units must be shut down in cases of effluent quality exceeding the prescribed limits.

#### General Conditions:-

1. The project authority must adhere to the stipulations made by Haryana State Pollution Control Board and State Government.
2. No expansion or modification of the plant should be carried out without prior approval of this Ministry.
3. Data on ambient air quality and stack emissions as well as fugitive emissions of HC and Benzene from product storage tank yard, naphtha tanks etc. must be regularly monitored and submitted to CPCB/SPCB once in 3-months and to Ministry [Regional Office, Chandigarh] once in 6-months.
4. The effluent quality before and after treatment should be regularly monitored. The frequency of monitoring and number of influent and effluent quality monitoring stations should be set up in consultation with the State PCB. The monitored data should be submitted to CPCB/SPCB once in 3-months and to Ministry [Regional Office, Chandigarh] once in 6-months.
5. Handling, manufacturing, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacture, Storage & Import of Hazardous chemicals Rules, 1989, as amended in 1991. Permissions from State and Central nodal agencies in this regard must be obtained.



Hazardous wastes, if any, must be handled and disposed as per Hazardous waste (Management and Handling) Rules, 1989. Authorization from State Pollution Control Board in this regard must be obtained.

7. Adequate provisions for infrastructure facilities such as water supply, fire, sanitation etc. should be ensured for construction workers during the construction phase so as to avoid felling of trees and pollution of water and the surroundings.
8. 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].
9. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained.
10. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP and risk analysis report.
11. The project proponent should have a scheme for social upliftment in the surrounding villages with reference to contribution in road construction, education of Children, festivals, health centres, sanitation facilities, drinking water supply, community awareness and employment to local people especially the displaced people whenever and wherever possible both for technical and non-technical jobs.
12. A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions should be set up under the control of Senior Executive.
13. The Company must obtain ISO-14000 certification within a time frame of 5-years or so after the commissioning of the plant.
14. The funds earmarked for the environmental protection measures should not be diverted for any other purpose and year-wise expenditure should be reported to this Ministry and SPCB.
15. Six monthly status report on the project vis-a-vis implementation of environmental measures should be submitted to this Ministry (Regional Office, Chandigarh /CPCB/SPCB).
16. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Chandigarh /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.
17. The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded



4/4

Amicus

P-4/1

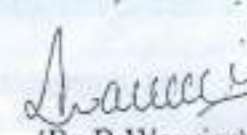
environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry and Forests at <http://WWW.envfor.nic.in>.

18. 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.

The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

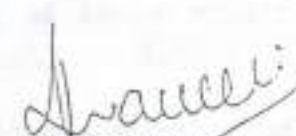


(Dr. R. Warriar)

Additional Director

Copy to:-

1. Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. Chairman, Haryana Pollution Control Board, P.B.No. 712 Sec-19, (1st & 11nd Floors), Chandigarh- 160011.
4. The Secretary (Environment), Haryana Civil Secretariat, Governemnt of Haryana, Chandigarh.
5. Chief Conservator of Forests, Regional Office (NZ), SCO 132-133, Sector 34-A, Chandigarh-160022.
6. Adviser (EI division), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Director (Monitoring Cell) , Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
8. Guard File.
9. Monitoring File.
10. Record File.



(Dr. R. Warriar)

Additional Director

No. J-11011/9/2001-IA. II (I)  
Government of India  
Ministry of Environment & Forests  
I.A.Division

Telfax: 436 3964  
Email: [warrier@menf.delhi.nic.in](mailto:warrier@menf.delhi.nic.in)  
Paryavaran Bhawan,  
CGO Complex, Lodi Road,  
New Delhi - 110 003

December 6, 2001

To

**The Chairman & Managing Director**  
M/s Indian Oil Corporation Ltd.,  
Refineries Division, Scope Complex,  
Core-2, 7, Institutional Area,  
Lodi Road, New Delhi-110003.

**Subject: MS Quality Upgradation Project at Panipat Refinery by M/s IOCL  
- Environmental Clearance.**

Sir,

This has reference to your communication No.EP/EC-APPL dated 29<sup>th</sup> January, 2001 and 12<sup>th</sup> March, 2001 seeking environmental clearance for the above project and subsequent letter dated 27<sup>th</sup> March, 2001 forwarding a copy of the Minutes of Public Hearing held on 6<sup>th</sup> September, 2001. Ministry of Environment and Forests has carefully examined your application. It is noted that the above proposal is for upgrading the MS Quality at Panipat Refinery in order to comply with the Court directives to manufacture total MS with 1% vol. max Benzene, the refinery requires providing additional facilities.

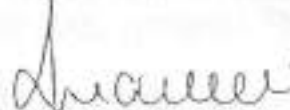
The above project will be implemented within the existing refinery premises. No additional land is required for the above project. The total water requirement will increase by 13 m<sup>3</sup>/hr and will be met from the existing water supply facilities. There will be no generation of solid waste from the above unit. The total cost of the project is about Rs. 467.0 crores. It is also noted that NOC from the Haryana State Pollution Control Board and approval of the Public Hearing Panel has been obtained on 24<sup>th</sup> January, 2001 and 6<sup>th</sup> September, 2001 respectively for the above project.

3. The Ministry of Environment & Forests hereby accords environmental clearance under the EIA Notification, 1994 as amended on 04.05.1994 and 10.04.1997 subject to the following:

- i. The company shall ensure strict implementations / compliance of the terms and conditions mentioned vide Ministry's letter No. J.11011/60/2000-IA II dated 9<sup>th</sup> April, 2001.



- ii. The company shall also ensure that the total SO<sub>2</sub> emission from the Panipat refinery (including expansion and MS Quality Improvement Project) will not exceed 1000 Kg/hr. *will be complied*
- iii. The Company shall comply with all recommendations made by Haryana SPCB vide Consent order dated 24.01.2001. *will be complied*
- iv. The company shall implement all recommendations made in the EMP and risk Analysis reports. *will be co*
- v. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Chandigarh /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies. *complied*
- vi. The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing 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://envfor.nic.in>. The advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Ministry's Regional Office at Bangalore. *complied*
- vii. 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. *will be complied*
4. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
5. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.
6. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

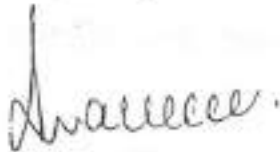
  
(Dr. R. Warriar)  
Additional Director

Copy to:

1. Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi.



2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. Chairman, Haryana Pollution Control Board, P. B. No. 712 Sec-19, (I<sup>st</sup> & II<sup>nd</sup> Floors), Chandigarh- 160011.
4. The Secretary (Environment), Haryana Civil Secretariat, Government of Haryana, Chandigarh.
5. Chief Conservator of Forests, Regional Office (NZ), SCO 132-133, Sector 34-A, Chandigarh-160022.
6. Adviser (EI division), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
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(Dr. R. Warrier)  
Additional Director

No. J-11011/52/2000 - IA-II (I)  
Government of India  
Ministry of Environment & Forests

Email: [plabhuara@yashwan.com](mailto:plabhuara@yashwan.com)

Tel No. 2436 5973  
Parvathan Chawari, CGO Complex,  
Lodi Road, New Delhi - 110 003  
Dated: January 23, 2003

To  
The Chairman & Managing Director,  
Indian Oil Corporation Limited  
Refineries Division, SCOPE complex, core-2  
7, Institutional Area, Lodi Road,  
New Delhi-110003

Sub: Modification in plant layout of Paraxylene and Purified Terephthalic acid (PX/PTA) project within Panipat refinery complex and integration with Panipat Refinery (PR) and Panipat Refinery Expansion project (PREP) by M/s IOCL- reg. Environmental clearance

Sir,

This has reference to your letter no. EP/G-47 dated January 2, 2003 on the above mentioned subject along with risk analysis report and NOC obtained from the HSPCB for captive power plant and subsequent clarification vide your letter no. EP/G-47 dated 10<sup>th</sup> January, 2003. The Ministry has examined the proposal. It is noted that M/s IOCL proposes modification in plant lay out of PX/PTA project at Panipat Refinery complex and integration with PREP. Power and steam requirement would be met from a 60MW (2x30MW) gas turbine) captive power plant. NOC from the HSPCB for the CPP has been obtained on 15<sup>th</sup> November, 2002. Further, there would be equal reduction in project cost by the modification in plant lay out and integration of PX/PTA project with Panipat refinery.

It is also noted that SO<sub>2</sub> emission and liquid effluent generation will not exceed the limits stipulated for the projects i.e. PREP and PX/PTA projects while according environmental clearance by this Ministry. Since there is no change in the process configuration, solid waste generation would also remain the same as earlier. Risk analysis assessment study carried out by M/S K&S-TNO-Safety Technology LTD for the integrated complex of PR, PREP, MSQ-upgradation and associated facilities indicates that individual risk is within the tolerable limit and there is no change in the societal risk. Therefore, societal risk falls within ALARP region.

2.0 In view of the above, the Ministry conveys its concurrence to the above proposed modification in plant lay out of PX/PTA project within Panipat Refinery complex and integration with PREP project subject to the following terms and conditions:

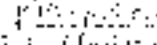
- i. The company shall ensure strict implementation/ compliance to the stipulations made by MOEF vide OM no. J-11011/60/2000-IA-II dated 9<sup>th</sup> April, 2001 for expansion of Panipat Refinery from 6 MTPA to 12 MTPA and J-11011/52/2000 IA-II dated 30<sup>th</sup> April, 2001 for integrated Paraxylene and Purified Terephthalic acid project at Panipat by M/s IOCL.

Copies to:

OTSM (P) (P) Sh. K. P.  
CM (S&P) (P) Sh. A. K. Singh  
C. P. (P) (P)


DCM (P) Sh. K. P.  
DCM (P) Sh. K. P.  
Sh. K. P.

- i. Total SO<sub>2</sub> emission after integration of PX/PTA project with PR/PRP shall not exceed 1275kg/hr (i.e. 1000kg/hr. for PRP and 275kg/hr from the proposed PX/PTA/CPP project).
- ii. As per the commitment given, the total quantity of treated effluent shall not exceed 255m<sup>3</sup>/hr from the proposed integration project.
- iii. The company shall develop green belt in an area of 75 acres as per the original plan in the PX/PTA project area.
- iv. The project authorities shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP and risk analysis report submitted while seeking environmental clearance for the PRP and PX/PTA and PX/PTA /PR project.
- v. As per the recommendations made in the Risk assessment study for the composite facility i.e. PX/PTA/PRP and associated facilities carried out by M/s KLG-THQ Safety Technology Ltd., the various elements of safety management system should be reviewed and updated keeping in view the new facilities added to the Refinery complex. These include: Process and facilities information and documentation ; Process Hazard analysis ; Operation Procedures ; Inspection and maintenance and On-site Emergency Management Plan.
- vi. The project authorities must adhere to the stipulations made by the WSPCB for the PRP, PX/PTA projects and NOC granted for the installation of captive power plant.

Yours faithfully,  
  
(Dr. P. L. Ahuja)  
Additional Director

Copy to:

1. The Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi-110021.
2. The Secretary (Environment) Haryana Civil Secretariat, Government of Haryana, Secretariat, Chandigarh.
3. The Chairman, Central Pollution Control Board, Parvash Bhavan, CSO-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. Chairman, Haryana Pollution Control Board, P.H. no. 712, SEC-19 (1<sup>st</sup> and 2<sup>nd</sup> floor) - Chandigarh-160011.
5. Chief Conservator of Forests, Regional Office (NZ), Boys No.24-25, Sector 31-A, Dakshtin Marg, Chandigarh-160047.
6. Advisor (G), Ministry of Environment and Forests , Parvash Bhavan, CSO Complex, Lodi Road, New Delhi-110003
7. Monitoring Cell, Ministry of Environment & Forests, New Delhi.
8. Monitoring file.
9. Copy file.
10. Record file.

  
(Dr. P. L. Ahuja)  
Additional Director



No. J-110117/2004 - IA II (I)  
Government of India  
Ministry of Environment & Forests

E mail: [plahuiarai@yahoo.com](mailto:plahuiarai@yahoo.com)

Tel No. 2436 3973  
Paryavaran Bhawan,  
CGO Complex, Lodi Road,  
New Delhi - 110 003  
Dated: 9<sup>th</sup> August, 2004

To

The Chairman  
Indian Oil Corporation Limited  
SCOPE complex, core-2  
7, Institutional Area, Lodi Road,  
New Delhi- 110003

**Sub: Expansion of Panipat Refinery (from 12 MMTPA to 15 MMTPA) and setting up of Indalin unit at Panipat Refinery complex of Indian Oil Corporation Limited, Panipat, Haryana - reg. environmental clearance**

Sir,

This has reference to your communication No. EP/APPL dated 13.02.2004 along with questionnaire, Environmental Impact Assessment/Environmental Management Plan report and subsequent information furnished by you vide letters dated 06.04.2004, 16.04.2004 and 29.05.2004 on the above-mentioned project. The Ministry of Environment and Forests has examined your application. It is observed that the proposal envisages expansion of Refinery at Panipat from 12 MMTPA to 15 MMTPA and setting up of Indalin+ unit with capacity of 0.75 MMTPA. It is also noted that the project involves marginal modifications in the existing as well as under construction Crude Distillation Units and Vacuum Distillation Units, revamps of Hydrocracker (from 1.7 MMTPA to 2.4 MMTPA), Diesel Hydrotreater (3.5 to 4.2 MMTPA) and Delayed Coker unit (from 2.4 to 3.0 MMTPA). Further, an additional Sulphur Recovery unit of 225 tonnes/day will be installed. The cost of the expansion project is 1183 crores.

2.0 The units will be installed within the existing refinery complex. Water requirement of 4900 M3/hr would be met from the Western Yamuna Canal. The project does not involve displacement of people. About 375 MT PA of Bio-sludge would be generated which would be used for green belt development. Oily sludge (1225 MTPA) would be generated and sent to the melting to recover the residual oil and disposed off in the secure land fill site. NOC from the Haryana State Pollution Control Board has been obtained on 11th February, 2004. The public hearing panel has considered the expansion proposal in its meeting held on 16th January, 2004.



3.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 27th January, 1994 as amended subsequently subject to strict compliance of the following specific and general conditions.

**SPECIFIC CONDITIONS:**

- i. The company shall ensure strict implementation/ compliance to the stipulations made by MOEF vide OM no. J-11011/60/2000-IA-II dated 9<sup>th</sup> April, 2001 for expansion of Panipat Refinery from 6 MMTPA to 12 MMTPA.
- ii. The gaseous emissions ( $\text{SO}_2$ ,  $\text{NO}_x$  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.
- iii. Adequate ambient air quality monitoring stations, [SPM,  $\text{SO}_2$ ,  $\text{NO}_x$  and HC, Benzene] should be set up in the refinery complex in consultation with SPCB, 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. Continuous on-line stack monitoring equipment should be installed for measurement of  $\text{SO}_2$  and  $\text{NO}_x$ . Data on VOC should be monitored and submitted to the SPCB / Ministry.
- iv. Fugitive emissions of HC from product storage tank yard, crude oil tanks etc. must be regularly monitored. Sensors for detecting HC leakage should also be provided at strategic locations.
- v. The company shall also ensure that the total  $\text{SO}_2$  emissions from the Panipat Refinery after expansion shall not exceed i.e. 1000kg/hr. The company shall install an additional Sulphur Recovery Unit (225 MT/day capacity) with 99.9% efficiency and the entire gas generated should be amine treated to reduce the  $\text{SO}_2$  emissions level from the Refinery.
- vi. As per the commitment given, there should be zero effluent discharge due to the proposed expansion. The company should ensure that there will be no discharge of treated effluent into Thirana drain and the treated effluent from the refinery is not discharged along with the treated effluent from PX-PTA plant. The entire treated waste water should be recycled for reuse in the plant operation and green belt development so as to maintain zero discharge. Further, the liquid effluent generated from the refinery should be treated comprehensively to conform to the load based standards and concentration limits prescribed under Environment (Protection) Act, 1986 rules.



- vii. The IOCL shall ensure installation of continuous flow measurement devices so that only the permitted quantity of treated effluent from PX-PTA plant (255 m<sup>3</sup>/hr) is discharged. Further, IOCL shall make all efforts to recycle and reuse the treated effluent from PX-PTA plant after commencing of the unit.
- viii. Additional water requirement shall not exceed 400m<sup>3</sup>/hr. The total quantity of effluent generation should not exceed 1280 m<sup>3</sup>/hr as indicated in the Environmental Management Plan. The treated effluent should be reused / recycled to achieve zero discharge.
- ix. Green belt of adequate width and density should be provided to mitigate the effects of fugitive emissions all around the plant. The bio-sludge from the ETP should be used as manure in the green belt development. Company shall develop green belt in consultation with DFO as per CPCB guidelines.
- x. The IOCL shall make efforts to sell petroleum coke (0.9 MMTPA) to organised industries having consent from the concerned State Pollution Control Board. Further, the Pet-coke from the Delayed Coker Unit should be conveyed to storage area by pipe conveyer system. The company should ensure to prevent seepage in Pet-coke stockpile / storage area to prevent soil and ground water pollution.
- xi. The oily sludge generated from the refinery operation should be subjected to melting pit treatment for recovery of oil. The recovered oil should be recycled. The residual oily sludge should be disposed off in the HDPE lined pits.
- xii. The company should adopt mounded storage for LPG. The project authorities shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP and risk analysis report.
- xiii. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.

#### GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Haryana State Pollution Control Board and the State Government.
- ii. No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
- 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.
- iv. The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic



hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- v. The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the project.
- vi. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.
- vii. The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.
- viii. The stipulated conditions will be monitored by the Regional of this Ministry at Chandigarh/Central Pollution Control Board/State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly.
- ix. 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 of Environment and Forests at <http://www.envfor.nic.in>. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.
- x. The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

3.0. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

4.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.

5.0. The above conditions will be enforced, Inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

*P. Ahujara*  
(Dr. P. L. Ahujara)  
Addl. Director

Copy to:

1. The Secretary, Ministry of Petroleum and Natural Gas, Shastri Bhavan, New Delhi- 110001.
2. The Secretary (Environment) Haryana Civil Secretariat, Government of Haryana, Secretariat, Chandigarh.
3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. Chairman, Haryana Pollution Control Board, C-11, Sector-6, Panchkula
5. Chief Conservator of Forests, Regional Office (NZ), Bays No.24-25, Sector 31-A, Dakshin Marg, Chandigarh-160047.
6. JS (CCI), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi-110003
7. Monitoring Cell, Ministry of Environment & Forests, New Delhi.
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*1*  
(Dr. P. L. Ahujara)  
Additional Director



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आम निलामों से निम्न दंग से बेचा जाने वाला निःशुल्क सम्पत्तियों के सम्बन्ध में  
 निम्नलिखित किया जाने वाला निम्नलिखित ।

यह कारनामा एक पक्ष से भारत के राष्ट्रपति एमरचात विन्हे "विज्ञा" इत शब्द से, यदि प्रत्यक्ष तथा अर्थ के प्रतिफल न हो, उन्हे उत्तराधिकारियों तथा सम्पत्तिधारियों का भी बोध होगा हुआ जायेगा तथा दूसरे पक्ष से भी इंडियन ऑपन कारपोरेशन लि. भारत में सम्पत्ति अधिनियम, 1956 के अन्तर्गत पंजीकृत सम्पत्ति जिसका पंजीकृत जायतन नं-9, उत्तीर्णार्थ जंग मार्ग, बांद्रा पूर्व, बम्बई 400051 में है, के निम्नलिखित मुद्दायक यथागत उप महापुञ्ज्य, पानापत रिफाइनरी परियोजना, जिसका जायतन 25/08, जं. टी. रोड, किंगला पैलेट होटल के सामने पानापत हृदयवागा है उन्हे "खरीदार" इत शब्द से, यदि प्रत्यक्ष तथा अर्थ के प्रतिफल न हो उन्हे उत्तराधिकारियों, निष्पादकों तथा पुञ्ज्यकों का भी बोध होगा हुआ जायेगा, जो कि तत्काल तत्पक्ष हृदयवागा सरकार पुनर्वात विभाग पंडीगढ़ के पत्र संख्या 2/4548/98/जी-4 दिनांक 2-1-1986 को सम्पन्न हुआ ।

यदि विज्ञा अपीलित पक्षों अनुसूची में निम्नलिखित वार्षिक दशाप्त भूमि और पारस्पर पर पूर्ण रूप से कायम है ।

और भूमि विज्ञा खरीदार को एक द्वारा विज्ञा के लिए अर्जित उक्त भूमि इंडियन ऑपन कारपोरेशन को 1,46,20,898/75 एक करोड़ छपाना लाख बीस हजार आठ सौ अठान्ने रुपये पच पच्चाहत्तर पैसे कीमत पर पूर्ण रूप से बेचने के लिए सहमत है, और यह एक खरीदार द्वारा विज्ञा को एक संख्या जो डेड 84-213037 दिनांक 29-3-85 के द्वारा उक्त मुद्दायक में तर्जिम द्वारा दी गई है जो तत्कालीन व्यक्ति (मुद्दायक तथा पुनर्वात) अधिनियम, 1956 के अन्तर्गत या उन्हे उन तत्कालीनों को देय है विन्हे नाम अपीलित दूसरी अनुसूची में दिये गये हैं और विज्ञा प्राप्त अधिकार करता है तथा रतोक देता है और खरीदार को अर्जित मुका करता है ।

WITNESSED BY  
 P. O. KARNAL

Ashwani Kumar Sharma  
 COMMANDANT (S.G.)  
 Central Reserve Police Force



कीप्राप्ति तथा वर्ष पर उक्त भूमि दायाँपन तथा परिवार तथा उक्त हर भाग  
छाँदार को और उक्त प्रयोग के लिए उपयुक्त दंग ते जला भी ज्योतिषा हो या  
होना, माव्य में अधिक पुर्का ते तुर्का रक्ते के लिए करेंगे, निष्पादित करेंगे,  
या करने तथा निष्पादन करने का प्रयत्न करेंगे।

इतके साथ में ज्योतिषा ने उपरोक्त दिन तथा वर्ष को अपने हस्ताक्षर  
किए। 19 7 1974

अनुषांग।

भूमि तथा भवन को जग या लक्ष को ग्राम कौली स्थान पर स्थित  
है तथा जितनी भूमि 1200 रु. 1 काला तथा 5 रु. है, इसके लगभग है तथा  
जितनी को तां:-

भूमि करत 18  
4(7-11), 5(7-4), 6(7-12), 7(8-0), 14(8-0), 15(7-12)

18  
16(7-12), 17(8-0), 24(8-0), 25(8-0).

19  
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19  
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23  
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23  
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24  
17(8-0), 24(8-0), 25(7-12)

36  
17/1 (1-9), 24/2 (2-4), 25(7-8)

SHARMA  
SHARMA (S. L. S. CUM)  
P. M. O. C. R. N. A. L.

ASHWANI KUMAR SHARMA  
COMMANDANT  
Central Reserve Police Force  
NEW DELHI

37 21(7-11), 22(5-4), 23/1(2-18) , 41 4(8-0), 5(8-0), 6(8-0), 7(8-0)

41 14(8-0), 15(8-0), 16(8-0), 17(8-0), 24(8-0), 25/1(1-0), 25/2(1-4)

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42 8(8-0), 7(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(4-18)

42 15(9-10), 16(8-0), 17(7-0), 18(7-8), 19(8-0), 20(8-0), 21(3-13),

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47 10(8-0), 11(8-0), 12(8-0), 13(1-14), 18(3-16), 19(8-0), 20(8-0),

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48 12(8-0), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0),

48 19(8-0), 20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(8-0), 25(8-0)

50 1/1(0-17), 1/2(0-10), 2/1(1-19), 2/2(2-1), 3(7-19), 4(8-0),

50 5(4-0), 6(7-19), 7(7-7), 8(2-19), 13(3-4), 14(8-0), 15(8-0),

50 16(8-0), 17(8-0), 18(3-4), 23(1-7), 25(4-0)

51 4(8-0) , 52 20/2(1-16), 21(8-0), 22(6-13), 23(3-9)

53 12(4-13), 16(4-13), 17(7-7), 18(8-0), 19(8-0), 20(8-0), 21(8-0)

*Nishant*  
NISHANT DARSALE CUM  
C.M.O. KAROL

*Ashwari*  
Ashwari Kumar Sharma  
COMMANDANT  
Central Reserve Police Force.  
NEW DELHI

53 54  
22(8-0), 23(8-0), 24(8-0), 25(8-0) 21/1(1-12), 25/2(4-18)

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64  
22(8-0), 23(4-5), 25(5-19),

*Vaibhava*  
TEHSILDAR (SALES) CUM  
S.M.O. KARNAUL

*Ashwari Puri*  
Ashwari Puri Sharma  
COMMANDANT (G)  
Central Police Force.  
NEW DELHI



65

1(7-15), 2/1(3-4), 2/2(3-0), 3(9-2), 4(8-0), 5(8-0), 6(8-0),

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67

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*Tejinder*  
N. TEJINDER (SALES) CUM  
P.M. O. KARNAL

*Ashwini*  
Ashwini Sharma  
COMMANDANT (G)  
Central Reserve Police Force,  
NEW DELHI

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22 (8-0), 23 (9-16), 24 (3-8), 25 (8-0).

*Chakraborty*  
CHAKRABORTY  
S. O. KARNAL

*Adhwar*  
*Sharma*  
Adhwar Kumar Sharma  
COMMANDANT (G)  
Central Reserve Police Force.  
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2 (8-0), 3 (8-0), 4 (8-0), 5 (8-0), 6 (8-0), 7 (8-0),  
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16 (4-2), 17 (7-0), 18 (8-0), 19 (8-0), 20 (8-0),  
21 (8-0), 22 (8-0), 23 (8-0), 24 (8-0), 25 (8-0).

*[Signature]*  
TEHSIL DAR, SALEM CUM  
EM. O. KARNAL.

*[Signature]*  
Ashwani Kumar Sharma  
COMMANDANT (G)  
Central Force of Police Force.



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1 (8-0), 2 (8-0), 3 (8-0), 4(5-15), 5(0-4), 6(8-7), 7( - )  
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85

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21(8-0), 22(8-0), 23(8-0), 24(8-0), 25(8-0)

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NEW DELHI

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1(8-0), 2(8-0), 3(8-0), 4(8-0), 5(8-0), 6(8-0), 7(8-0),  
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1(2-9), 3 (2-15), 4 (5-0), 5/1 (0-16), 5/2 (0-1), 5/3 (1-17),  
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1(8-0), 2(8-0), 3(8-0), 4(8-0), 5(8-0), 6(8-0), 7(7-0),  
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 14 (8-0), 15 (8-0), 16 (8-0), 17 (8-0), 18 (9-4),  
 19 (5-18), 20 (2-11), 24 (4-9), 25 (7-8).

N. T. SHARMA  
 J. M. O. A. J. R. N. A. L.

Arjun Kumar Sharma  
 CCE M. I. G. A. N. T. (C. C.)  
 Central Reserve Police Force.  
 J. M. O. A. J. R. N. A. L.

96

1 (8-0), 2 (8-0), 3 (8-0), 4 (7-8), 5 (6-9), 6 (5-2),  
7 (8-0), 8 (8-0), 9 (8-0), 10 (8-0), 11/1 (1-16), 12 (8-0),  
13 (8-0), 14 (8-0), 15 (8-0).

97

1 (8-0), 2 (8-0), 3 (8-0), 4 (8-0), 5 (8-0), 6 (8-0), 7 (8-0), 8 (8-0),  
9 (8-0), 10 (7-5), 11/1 (2-18), 11/2 (2-3), 12 (7-19), 13 (8-0),  
14 (8-0), 15 (8-0), 16 (8-0), 17 (8-0), 18 (8-0), 19 (4-10), 23 (6-16).

109

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110

1 (8-0), 2 (8-0), 3 (8-0), 8 (8-0), 9 (8-0), 10 (8-0), 11 (7-8),  
12 (8-0), 13 (8-0), 18 (8-0), 19 (8-0), 20 (8-0),  
21 (8-0), 22 (8-0), 23 (8-0), 26 (0-12).

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5 (8-10), 6 (8-14), 15 (8-18), 16 (9-2), 25 (9-6).

112

1 (8-0), 2 (8-0), 3 (8-0), 4 (7-8), 7 (7-8), 8 (8-0), 9 (8-0),  
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19 (8-0), 20 (8-0), 21 (8-0), 22 (8-0), 23 (8-0).

113

1 (8-0), 2 (8-0), 3 (8-0), 4 (8-0), 5 (8-0), 6 (8-0), 7 (8-0),  
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20 (7-9), 22 (4-17), 23 (7-16), 24 (8-0), 25 (8-0).

114

1 (4-0), 2 (7-19), 3 (8-0), 4 (8-0), 5 (8-0), 6 (8-0), 7 (8-0),  
8 (7-7), 9 (2-0), 14 (4-16), 15 (8-0), 16 (2-5), 21 (0-2).

Dr. T. H. S. D. S. (GAL) CUM  
M. O. GARNAL  
A. S. Wani Kumar Sharma  
M. O. GARNAL  
M. O. GARNAL



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1(2-12), 5(0-2), 9(2-16), 10(7-16), 11(4-2), 12(7-11), 13(3-9),  
17(4-4), 18(5-5), 19(1-8), 23(1-14), 24(8-0), 25(5-0).

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117

3 (0-10), 4 (5-15), 5 (7-11), 6 (1-13).

118

1 (5-12), 8 (2-4), 9 (6-15), 10 (4-4), 12 (3-19),  
13 (8-0), 14 (7-4), 15 (5-7), 16 (8-0), 17 (8-0),  
18 (8-0), 19 (1-16), 23 (8-6), 24 (8-0), 25 (8-0).

119

3 (0-18), 4 (4-13), 5 (8-13).

120

1(8-0), 2(8-0), 3(8-0), 8(8-0), 9(8-11), 10(4-13), 13(4-7).

121

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122

3(7-7), 21(8-0), 22(8-0), 23 (8-), 24 (8-0), 25 (8-0).

123

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138

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139

1(8-0), 2(8-0), 3(8-0), 4(8-0), 5(8-0), 6(8-0), 7(8-0),  
8(8-0), 9(7-7), 10(3-7), 13(3-7), 14(7-7), 15(8-0), 16(3-4).

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5 (6-8).

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CH. DAR (SAFECU)  
KARNAL

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Ashwini Kumar Sharma  
COMMANDANT (S.G.)  
Karnal Reserve Police Force.

143

3 (5-1), 4 (8-0), 7 (4-7).

145

14/2/1 (1-8).

146

10/20 (0-10).

149

21 (7-16), 22 (3-16), 23 (0-8).

154

20 (0-8), 21 (4-0).

155

10(4-2), 11(8-0), 12(8-0), 13(3-18), 16(3-16), 17(7-16),  
18 (8-0), 19 (8-0), 20 (8-0), 21 (8-0), 22 (8-0),  
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156

1 (8-0), 2 (8-0), 3 (7-11), 4 (4-4), 6 (8-4), 7 (8-0),  
8 (8-0), 9 (8-0), 10 (8-0), 11 (8-0), 12 (8-0), 13 (8-0),  
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157

8 (8-0), 9 (8-0), 12 (8-0), 13 (8-0), 16 (8-0)  
17 (8-0), 18 (8-0), 19 (8-0), 20 (7-8), 21 (6-16),  
22/1 (6-4), 22/1 (1-16), 23 (8-0), 24 (8-0), 25 (8-0).

158

1(8-0), 2(3-12), 9(5-8), 10(8-0), 11(8-0), 12(7-6), 16/1(2-0),  
16/2 (0-5), 19(9-2), 20(8-0), 21(8-0), 22(8-0), 23(3-0).

0-1 TEHSILDAR (SALES) CUM  
R.M.O. KARNAL.

Ashwani Kumar Sharma  
COL MANDAL (S.)  
Central Reserve Police Force,  
FEROZKOT

159

1(8-0), 2(8-0), 3(8-0), 4(7-0), 6/3 (5-16), 7(7-0),  
8(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(7-0),  
15 (8-0), 17 (7-11), 18 (8-0), 19 (8-0), 20 (8-0),  
21 (8-0), 22 (8-0), 23 (8-0), 24 (7-12), 25 (8-0).

160

1(8-0), 2(8-0), 3(8-0), 4 (8-0), 5 (8-0), 6 (8-0), 7(8-0),  
8 (8-0), 9 (8-0), 10 (6-17), 11 (1-11), 12 (7-17),  
13 (8-0), 14 (8-0), 15 (8-0), 16 (8-0), 17 (8-0),  
18 (8-0), 19 (3-18), 23 (5-14), 24 (8-0), 25 (8-0).

161

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162

4 (7-7), 5 (8-0), 6 (8-0), 7 (5-12), 14 (5-0),  
15 (8-0), 16 (8-0), 17 (4-0), 24 (2-2), 25 (8-0).

163

1(7-11), 2(7-11), 3(7-11), 4(7-4), 5(7-11), 6(8-0), 7(7-12),  
8(8-0), 9 (8-0), 10 (8-0), 11 (8-0), 12 (8-0), 13 (8-0),  
14 (7-12), 15 (8-0), 16 (8-0), 17 (7-12), 18 (8-0), 19(8-0),  
20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(7-12), 25(8-0).

164

1 (8-0), 2 (8-0), 3 (4-16), 8 (6-8), 9 (8-0), 10 (8-0),  
11 (8-0), 12 (8-0), 13 (8-0), 15 (5-16), 16 (4-4),  
17 (3-1), 18 (6-6), 19 (8-0), 20 (8-0), 21 (8-0), 22(8-0),  
23/1 (2-2), 23/2(5-8), 24 (3-14), 25 (2-12).

N. KISHOR (SALES) CUM  
V.M. O. KARNAL.

Ashwari K. K. K. K. K.  
C. K. K. K. K. K. K.  
C. K. K. K. K. K. K.  
C. K. K. K. K. K. K.



165

11(7-8), 12(8-0), 13(8-0), 14(8-0), 16(7-12), 17(8-0), 18(8-0),  
19(8-0), 20(7-8), 21(7-8), 22(8-0), 23(8-0), 24(8-0), 25(7-12).

166

2(7-11), 3(7-11), 4(7-11), 5(7-11), 6(8-0), 7(8-0), 9(8-0),  
11/2 (8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 16(8-0),  
17(8-0), 18(8-0), 19(8-0), 20(8-0), 21 (8-0), 22 (8-0),  
23 (8-0), 24 (8-0), 25 (8-0), 8 (8-0).

167

1 (7-11), 2 (7-11), 3 (7-11), 4 (7-11), 5 (7-11), 6 (6-14),  
7(8-0), 8 (8-0), 9 (8-0), 10 (8-0), 11 (8-0), 12 (8-0),  
13 (8-0), 14 (8-0), 15 (4-4), 16 (1-16), 17 (8-0), 18(8-0),  
19 (8-0), 20 (8-0), 21 (8-0), 22 (8-0), 23(8-0), 24(7-7).

168

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169

1 (8-0), 2 (8-0), 3 (8-0), 4 (2-13), 8 (4-4), 9 (8-0),  
10 (8-0), 11 (8-0), 12 (6-4), 20 (8-6), 21 (2-1).

170

1 (7-11), 2 (7-11), 3 (7-11), 4 (7-11), 5 (7-11), 6(8-0),  
7 (8-0), 8 (8-0), 9 (8-0), 10 (8-0), 11 (8-0), 12 (8-0),  
13 (8-0), 14 (8-0), 15 (8-0), 16 (8-0), 17 (8-0), 18 (8-0),  
19 (8-0), 22 (4-8), 23 (7-11), 24 (7-19), 25 (6-9).

171

1/1 (4-2), 2 (8-0), 3 (8-0), 4 (8-0), 5 (7-12).

172

1(7-11), 2(7-11), 3(8-0), 4(5-8), 5/1 (0-17), 7(6-16), 8(8-0),  
9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(7-16), 17(8-12),  
18(8-0), 19(8-0), 20(4-16), 23(3-16), 24(7-10), 25(1-8).

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Akhil Kumar Sharma  
ADJUTANT (SG)  
Police Force

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N. TEHSILDAR (SALES) CUM  
R. No. Kurnool

173

1 (7-11), 2 (7-11), 3 (7-11), 4 (7-4), 5 (7-11), 6 (7-11),  
7 (7-19), 8 (9-2), 9 (5-8), 10 (5-0), 14 (5-9), 15 (9-7).

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175

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5(1-2), 180 (24-2), 181 (38-1), 182(16-0), 199(34-2), 200(21-12),  
202(127-4), 207(7-18), 208(11-17), 210(10-18), 211(0-13),  
212(16-13), 213(14-3), 217(2-9), 220(4-0), 221(4-0), 245(7-1),  
251(1-1), 252(4-7), 253(9-1), 254(7-2), 255(0-9), 256(1-15),  
257(0-9), 258(4-11), 259(0-17), 260(4-0), 261(2-4), 262(6-14),  
263(4-0), 264(2-4), 340(0-1), 341(0-1), 342(0-1), 343(0-1),  
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102164/-

1827627-  
 Reservation for twenty seven times  
 Tehnlokar Dab, Karnal  
 The Deputy, Manager, P.W.D. & S.R. & S. & S.  
 of Junction Road, Rohini at Bahli  
 six months twenty seven

Civil Supply  
 1,46,20,898-75

2-15-94

3426

XXIV  
 परिशिष्ट रोड्स  
 अधिनियम 1988



आम निलामों से निम्न दंग से बेचा जाने वाला निःशुल्क सम्पत्तियों के सम्बन्ध में  
 निम्नोक्त किया जाने वाला निम्न ।

यह कारनामा एक पक्ष से भारत के राष्ट्रपति एमरचात विन्ने "विज्ञा" इत शब्द से, यदि प्रत्यक्ष तथा अर्थ के प्रतिकूल न हो, उसके उत्तराधिकारियों तथा सम्पत्तिधारियों का भी बोध होगा हुआ जायेगा तथा दूसरे पक्ष से भी इंडियन ऑपन कारपोरेशन लि. भारत में सम्पत्ति अधिनियम, 1956 के अन्तर्गत पंजीकृत सम्पत्ति जिसका पंजीकृत जायतन नं-9, उत्तीर्णार्थ जंग मार्ग, बांद्रा पूर्व, बम्बई 400051 में है, के विपरीत निम्नानुसार यथागत उप महापुञ्ज्य, पानापत रिफाइनरी परियोजना, जिसका जायतन 25/08, ज.टी. रोड, किंगला पैलेट होटल के सामने पानापत हृदयवागा है इन्ने "खरीदार" इत शब्द से, यदि प्रत्यक्ष तथा अर्थ के प्रतिकूल न हो उसके उत्तराधिकारियों, निष्पादकों तथा पुञ्ज्यकों का भी बोध होगा हुआ जायेगा, जो कि निम्नानुसार हृदयवागा सरकार पुनर्वात विभाग पंडीगढ़ के पत्र संख्या 2/4548/98/जी-4 दिनांक 2-1-1986 को सम्पन्न हुआ ।

यदि विज्ञा अधोनिहित पक्षों अनुवृत्ति में निम्नोक्त वार्धित दध्याप्त भूमि और पारस्पर पर पूर्ण रूप से कायम है ।

और पुनिक विज्ञा खरीदार को एक द्वारा विषय के लिए अभिमत उक्त भूमि इंडियन ऑपन कारपोरेशन को 1,46,20,898/75 एक करोड़ छपाना लाख बीस हजार आठ सौ अठान्ने रुपये पच पच्चाहतर पैसे कीमत पर पूर्ण रूप से बेचने के लिए सहमत है, और यह एक खरीदार द्वारा विज्ञा को एक संख्या जो डेड 84-213037 दिनांक 29-3-85 के द्वारा उक्त मुआवजे में सम्पन्न द्वारा की गई है जो यथार्थागत व्यक्ति (मुआवजा तथा पुनर्वात) अधिनियम, 1956 के अन्तर्गत या उसके उन अधिकारियों को देय है जिनके नाम अधोनिहित दूसरी अनुवृत्ति में दिये गये हैं और विज्ञा प्राप्त अधिकार करता है तथा रतोक देता है और खरीदार को अनेक मुका करता है ।

निम्नोक्त  
 NITESH DAB (S.N. D. CUM  
 P.W. D. KARNAL

Ashwani Kumar Sharma  
 COMMANDANT (S.G.)  
 Central Reserve Police Force



-17-

451 (1-11), 452 (0-8), 455 (4-7), 456 (6-5), 459 (13-1)  
460 (14-14), 461 (9-10), 462 (2-8), 463 (6-4), 464 (7-16)  
464/1 (0-11), 464/2 (3-12), 464/3 (0-4), 464/4 (0-4), 465(3-11).

Total:  $\begin{matrix} A & K & M \\ 1247 & - & 1 & - & 5 \end{matrix}$

कुल रकबा = एकड़ कनाल मरले = 9977 कनाल 5 मरला  
1247 1 5 गांव बाहोली तहसील व जिला पानीपत

उक्त 18-8-84 द्वारा की उपस्थिति

में भारत के राष्ट्रपति के लिए तथा उनकी ओर से हस्ताक्षरित

*Mailin*  
MEHSHDAR (SALES) CUM  
P.M. O. KARNAL  
19/9/84

11/11/85

*Prakashan*  
(P. P. PRASHAN)  
Sr. Personnel & Admin Manager  
100, Panipat Refinery

*attest*

*Sharma*  
A. L. WENDI Kumar Sharma  
COM-MANDANT (C)  
Central Reserve Police Force.  
NEW DELHI

श्री. गोहोली एरवत संस्था

12 नवम्बर

द

श्री. पानिपत

क. ठर

उपरोक्त संस्थान, पानिपत या पिछली मालाही का प्रत्यक्ष विम में संग्रहित कर दिया है

नया इन्वेंटरी की सब कायम किया जाएगा

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वि. सं.	वि. सं.	मालिक का नाम और विवरण	कारणों का नाम और विवरण	किसी भी संख्या और नाम और विवरण	मालिक का नाम	वि. सं.	वि. सं.	वि. सं.
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	2112		44022		1	7-11		711/147	
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					100	8		711/147	



3. माह 01/12/19 हफ्ता संख्या 12 तहसील 9 जिला 51/1/19 को इस्तेमाल

1	2	3	4	5	6	7	8	9	10
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इसकाय में बंटेवाल, सलिल का पिछली जमाकरी का इन्दराल दिम में संशोधन क्रोडित है									
पिछली जमाकरी के	नया जमाकरी के	मासिक का नाम और विवरण	कायकार का नाम और विवरण	वैल को संख्या और नाम और जमीन का रकबा और फिल	हकिम के हकिम	हकिम के हकिम	मासिक का नाम और विवरण	कायकार का नाम और विवरण	नया जमाकरी के
157	158	मर-लिसन मर-लिस	मर-लिस	24 8-00	24 8-00	24 8-00	मर-लिस	मर-लिस	157
				14 8-00	14 8-00	14 8-00	मर-लिस	मर-लिस	158
				15 7-12	15 7-12	15 7-12	मर-लिस	मर-लिस	159
				16 7-12	16 7-12	16 7-12	मर-लिस	मर-लिस	160
				17 8-00	17 8-00	17 8-00	मर-लिस	मर-लिस	161
				24 8-00	24 8-00	24 8-00	मर-लिस	मर-लिस	162
				25 7-12	25 7-12	25 7-12	मर-लिस	मर-लिस	163
				36 1-9	36 1-9	36 1-9	मर-लिस	मर-लिस	164
				17 8-00	17 8-00	17 8-00	मर-लिस	मर-लिस	165
				24 8-00	24 8-00	24 8-00	मर-लिस	मर-लिस	166
				25 7-09	25 7-09	25 7-09	मर-लिस	मर-लिस	167
				37 7-11	37 7-11	37 7-11	मर-लिस	मर-लिस	168
				22 5-4	22 5-4	22 5-4	मर-लिस	मर-लिस	169
				23 2-18	23 2-18	23 2-18	मर-लिस	मर-लिस	170
				41 8-00	41 8-00	41 8-00	मर-लिस	मर-लिस	171
				4 8-00	4 8-00	4 8-00	मर-लिस	मर-लिस	172
				5 8-00	5 8-00	5 8-00	मर-लिस	मर-लिस	173

इसकाय में बंटेवाल, सलिल का पिछली जमाकरी का इन्दराल दिम में संशोधन क्रोडित है

1	2	3	4	5	6	7	8	9	10
	457		075215212	00441	41	8		712/12111	01900
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2	3	4	5	6	7	8	9	10	11
57		4815241	4815241	48	8		4815241		48
58		4815241	4815241	1	8		4815241		1
59		4815241	4815241	2	8		4815241		2
60		4815241	4815241	3	8		4815241		3
61		4815241	4815241	4	8		4815241		4
62		4815241	4815241	5	8		4815241		5
63		4815241	4815241	6	8		4815241		6
64		4815241	4815241	7	8		4815241		7
65		4815241	4815241	8	8		4815241		8
66		4815241	4815241	9	8		4815241		9
67		4815241	4815241	10	8		4815241		10
68		4815241	4815241	11	8		4815241		11
69		4815241	4815241	12	8		4815241		12
70		4815241	4815241	13	8		4815241		13
71		4815241	4815241	14	8		4815241		14
72		4815241	4815241	15	8		4815241		15
73		4815241	4815241	16	8		4815241		16
74		4815241	4815241	17	8		4815241		17
75		4815241	4815241	18	8		4815241		18
76		4815241	4815241	19	8		4815241		19
77		4815241	4815241	20	8		4815241		20
78		4815241	4815241	21	8		4815241		21
79		4815241	4815241	22	8		4815241		22
80		4815241	4815241	23	8		4815241		23
81		4815241	4815241	24	8		4815241		24
82		4815241	4815241	25	8		4815241		25

202

1	2	3	4	5	6	7	8	9	10
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रजवर्षा में बतैमान, एतिस या पिछरी जगहकी का इन्दराज जिस में संतोषन प्रपेटित है  
 गया इन्दराज ओ सब कायम बिना जाग्या

[illegible]

1	2	3	4	5	6	7	8	9	10
17	457		मा 21/5/21	मा 21/5/21	52	20 1-16		मिरापुरा	मा 21/5/21
	मा 21/5/21		मा 21/5/21		21 8-10			पुनः मा 21/5/21	
					22 6-13			अनुर मा 21/5/21	
					23 3-9			मा 21/5/21	
					53			Indian oil	
					12 4-13			Cooperation Ltd	
					16 4-13			Panipat Refinery	
					17 7-7				
					18 8-10				
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1	2	3	4	5	6	7	8	9	10
	457 -2114		01221547	010641	56 5 0-18 2 0-14 5 0-14 6 2-3 15 6-16 16 8-16 17 3-12 20 7-9 21 8-17 22 7-8 24 4-1 25 8-1 62 8-1 5 8-1 13 8-1 14 8-1 15 8-1 16 8-1 17 8-1 18 8-1 23 8-1 24 8-1 25 8-1 63 8-1 1 8-1 2 7-18 5 3-11		712/124 2 PWH PWH 312/124 PWH 412/124 PWH Indian oil Cooperative Ltd Parijat Refinery	010641	

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15 मास- 7/1/20 / वरधन संख्या- 12- गणनीय- 2- गिला- 9-4-7 के इतफाकों का रजिस्टर, पृष्ठ संख्या

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1610	457		01-21-547	026-41	70 20	8-8 7-9	4-20	70-11-11	01-21-547	70 20	8-8 7-9	8-8 7-9		
			01-21-547	026-41	21	8-8		01-21-547		21	8-8	8-8		
			01-21-547	026-41	22	8-8		01-21-547		22	8-8	8-8		
			01-21-547	026-41	23	8-8		01-21-547		23	8-8	8-8		
			01-21-547	026-41	24	8-8		01-21-547		24	8-8	8-8		
			01-21-547	026-41	25	8-8		01-21-547		25	8-8	8-8		
			01-21-547	026-41	71	8-8		01-21-547		71	8-8	8-8		
			01-21-547	026-41	1	8-8		01-21-547		1	8-8	8-8		
			01-21-547	026-41	2	8-8		01-21-547		2	8-8	8-8		
			01-21-547	026-41	3	8-8		01-21-547		3	8-8	8-8		
			01-21-547	026-41	4	8-8		01-21-547		4	8-8	8-8		
			01-21-547	026-41	5	8-8		01-21-547		5	8-8	8-8		
			01-21-547	026-41	6	8-8		01-21-547		6	8-8	8-8		
			01-21-547	026-41	7	8-8		01-21-547		7	8-8	8-8		
			01-21-547	026-41	8	8-8		01-21-547		8	8-8	8-8		
			01-21-547	026-41	9	8-8		01-21-547		9	8-8	8-8		
			01-21-547	026-41	10	8-8		01-21-547		10	8-8	8-8		
			01-21-547	026-41	11	8-8		01-21-547		11	8-8	8-8		
			01-21-547	026-41	12	8-8		01-21-547		12	8-8	8-8		
			01-21-547	026-41	13	8-8		01-21-547		13	8-8	8-8		
			01-21-547	026-41	14	8-8		01-21-547		14	8-8	8-8		
			01-21-547	026-41	15	8-8		01-21-547		15	8-8	8-8		
			01-21-547	026-41	16	8-8		01-21-547		16	8-8	8-8		
			01-21-547	026-41	17	8-8		01-21-547		17	8-8	8-8		
			01-21-547	026-41	18	8-8		01-21-547		18	8-8	8-8		
			01-21-547	026-41	19	8-8		01-21-547		19	8-8	8-8		
			01-21-547	026-41	20	8-8		01-21-547		20	8-8	8-8		
			01-21-547	026-41	21	8-8		01-21-547		21	8-8	8-8		
			01-21-547	026-41	22	8-8		01-21-547		22	8-8	8-8		
			01-21-547	026-41	23	8-8		01-21-547		23	8-8	8-8		
			01-21-547	026-41	24	8-8		01-21-547		24	8-8	8-8		
			01-21-547	026-41	25	8-8		01-21-547		25	8-8	8-8		

19

राशि-सिद्धि राज्यसंस्था-  
21/11/24

12-11-11

4/12/47

—को इनामालों का रजिस्टर, पुस्तक संग्रहा

上

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21  
श्री श्री श्री १५४८ संख्या  
12 - सामान्य -  
अ - शिक्षा -  
७-२/७९ - में प्रत्यक्षता का स्वीकृति, पुस्तक संख्या

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1618	457		at 215214	at 215	8-8	9-2		21114 17114	at 215	8-8	9-2			
2117	2117				9-10	5-10		21114 17114		9-9	9-2			
					10	5-10		21114 17114		9-9	9-2			
					11	2-14		21114 17114		10	5-10			
					12	4-4		21114 17114		11	2-14			
					13	8-1		21114 17114		12	8-1			
					14	8-1		21114 17114		13	8-1			
					15	7-8		21114 17114		14	8-1			
					16	7-8		21114 17114		15	7-8			
					17	8-1		21114 17114		16	7-8			
					18	8-1		21114 17114		17	8-1			
					19	8-1		21114 17114		18	8-1			
					20	7-4		21114 17114		19	8-1			
					21	8-1		21114 17114		20	7-4			
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					23	8-1		21114 17114		22	8-1			
					24	8-1		21114 17114		23	8-1			
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					27	8-1		21114 17114		26	8-1			
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					136	8-1		21114 17114		135	8-1			
					137	8-1		21114 17114		136	8-1			
					138	8-1		21114 17114		137	8-1			
					139	8-1		21114 17114		138				

25/5/12

257



1	2	3	4	5	6	7	8	9	10	11	12	13	14
16/8	457		08/21/54	04/4/54	6 2-13	05		21/11/54	04/4/54	6 2-13		04/4/54	
2					7 8-18			21/11/54		7 8-18			
					8 8-1			21/11/54		8 8-1			
					9 8-1			21/11/54		9 8-1			
					10 8-1			21/11/54		10 8-1			
					11 6-0			21/11/54		11 6-0			
					12 9-2			21/11/54		12 9-2			
					13 8-2			21/11/54		13 8-2			
					14 8-2			21/11/54		14 8-2			
					15 8-0			21/11/54		15 8-0			
					16 8-1			21/11/54		16 8-1			
					17 7-7			21/11/54		17 7-7			
					18 4-4			21/11/54		18 4-4			
					21 9-2			21/11/54		21 9-2			
					22 6-2			21/11/54		22 6-2			
					23 3-4			21/11/54		23 3-4			
					24 0-10			21/11/54		24 0-10			
					25 2-7			21/11/54		25 2-7			
					26 3-18			21/11/54		26 3-18			
					27 7-16			21/11/54		27 7-16			
					28 8-0			21/11/54		28 8-0			
					29 8-1			21/11/54		29 8-1			
					30 8-1			21/11/54		30 8-1			
					31 7-18			21/11/54		31 7-18			
					32 4-2			21/11/54		32 4-2			
					33 3-11			21/11/54		33 3-11			
					34 8-1			21/11/54		34 8-1			
					35 7-2			21/11/54		35 7-2			
					36 7-2			21/11/54		36 7-2			
					37 7-2			21/11/54		37 7-2			
					38 7-2			21/11/54		38 7-2			
					39 7-2			21/11/54		39 7-2			
					40 7-2			21/11/54		40 7-2			
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					42 7-2			21/11/54		42 7-2			
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					97 7-2			21/11/54		97 7-2			
					98 7-2			21/11/54		98 7-2			
					99 7-2			21/11/54		99 7-2			
					100 7-2			21/11/54		100 7-2			

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	457 -012		002-215474 -0112	004561	95 18-0	00		with the from families with families under oil Capeston Sta Family Registry	004561	95 18-0	00	01 -0112		
	1618				28-0	"				28-0	"			
					38-0	"				38-0	"			
					48-0	"				48-0	"			
					58-0	"				58-0	"			
					68-0	"				68-0	"			
					78-0	"				78-0	"			
					88-0	"				88-0	"			
					98-0	"				98-0	"			
					108-0	"				108-0	"			
					118-0	"				118-0	"			
					128-0	"				128-0	"			
					138-0	"				138-0	"			
					148-0	"				148-0	"			
					158-0	"				158-0	"			
					168-0	"				168-0	"			
					178-0	"				178-0	"			
					189-4	"				189-4	"			
					195-18	"				195-18	"			
					202-11	"				202-11	"			
					244-9	"				244-9	"			
					257-8	"				257-8	"			
					96	"				96	"			
					19-0	"				19-0	"			
					28-0	"				28-0	"			
					38-0	"				38-0	"			

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ನಮ್ಮ ಬಳಿ ಇರುವ ಈ ಪುಸ್ತಕವು ಹಳೆಯದಾದರೂ ಅದರ ಮೌಲ್ಯವು ಅಪಾರವಾದುದು. ಇದನ್ನು ನಾವು ಸಂರಕ್ಷಿಸಿಟ್ಟುಕೊಳ್ಳುವುದು ನಮಗೆ ಸಿದ್ಧವಾಗಿದೆ.



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1618 1112	457 1112		11215214 1112	72920 1112	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8	97 6 8 7 8 8 8 9 8 10 7-5 11 2-18 12 2-3 13 8 14 8 15 8 16 8 17 8 18 8 19 4-10 23 6-16 109 0-5 110 8
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1617 - 27/10	457 - 27/10		0221544 - 27/10	accepted	112 1 8- 2 8- 3 8- 4 7-8 7 7-8 8 8- 9 8- 10 8- 11 8- 12 8- 13 8- 14 7-8 17 7-8 18 8- 19 8- 20 8- 21 8- 22 8- 23 8- 113 1 8- 2 8- 3 8- 4 8- 5 8-			27/10/10 Pun. Poles 30/10/10 40/10/10 Indian oil Cooperative Ltd Pun. Poles	accepted ✓	112 1 8- 2 8- 3 8- 4 7-8 7 7-8 8 8- 9 8- 10 8- 11 8- 12 8- 13 8- 14 7-8 17 7-8 18 8- 19 8- 20 8- 21 8- 22 8- 23 8- 113 1 8- 2 8- 3 8- 4 8- 5 8-				

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51

1. Name of the person or persons to whom the property is being transferred

2. Name of the person or persons from whom the property is being transferred

3. Name of the person or persons who are the legal heirs of the person or persons from whom the property is being transferred

Sl. No.	Name of the person or persons to whom the property is being transferred	Name of the person or persons from whom the property is being transferred	Name of the person or persons who are the legal heirs of the person or persons from whom the property is being transferred
1	164 8-10	164 8-10	164 8-10
2	10 8-10	10 8-10	10 8-10
3	11 8-10	11 8-10	11 8-10
4	12 8-10	12 8-10	12 8-10
5	13 8-10	13 8-10	13 8-10
6	15 5-16	15 5-16	15 5-16
7	16 4-17	16 4-17	16 4-17
8	17 3-10	17 3-10	17 3-10
9	18 6-6	18 6-6	18 6-6
10	19 8-10	19 8-10	19 8-10
11	20 8-10	20 8-10	20 8-10
12	21 8-10	21 8-10	21 8-10
13	22 8-10	22 8-10	22 8-10
14	23 2-2	23 2-2	23 2-2
15	24 3-14	24 3-14	24 3-14
16	25 2-12	25 2-12	25 2-12

4. Name of the person or persons who are the legal heirs of the person or persons from whom the property is being transferred

5. Name of the person or persons who are the legal heirs of the person or persons from whom the property is being transferred





53		52		51		50		49		48		47		46		45		44		43		42		41		40		39		38		37		36		35		34		33		32		31		30		29		28		27		26		25		24		23		22		21		20		19		18		17		16		15		14		13		12		11		10		9		8		7		6		5		4		3		2		1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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	457 - dip		over - dip	over	171 7-4-2	over		over from 3000 ft upward and Cooperation Act Passat Agency	over	171 4-2	over	over		
					2 8-1	8-1				1 8-1	8-1	over		
					3 8-1	8-1				2 8-1	8-1	over		
					4 8-1	8-1				3 8-1	8-1	over		
					5 7-12	8-1				4 7-12	8-1	over		
					172 7-11	8-1				5 7-12	8-1	over		
					2 7-11	8-1				1 7-12	8-1	over		
					3 8-1	8-1				2 7-12	8-1	over		
					4 5-8	8-1				3 8-1	8-1	over		
					5 0-17	8-1				4 5-8	8-1	over		
					6 6-16	8-1				5 0-17	8-1	over		
					7 6-16	8-1				6 6-16	8-1	over		
					8 8-1	8-1				7 6-16	8-1	over		
					9 8-1	8-1				8 8-1	8-1	over		
					10 8-1	8-1				9 8-1	8-1	over		
					11 8-1	8-1				10 8-1	8-1	over		
					12 8-1	8-1				11 8-1	8-1	over		
					13 8-1	8-1				12 8-1	8-1	over		
					14 7-16	8-1				13 8-1	8-1	over		
					17 8-1	8-1				14 7-16	8-1	over		
					18 8-1	8-1				15 8-1	8-1	over		
					19 8-1	8-1				16 8-1	8-1	over		
					20 4-16	8-1				17 8-1	8-1	over		
					23 3-16	8-1				18 8-1	8-1	over		
					24 7-16	8-1				19 8-1	8-1	over		
					25 1-8	8-1				20 4-16	8-1	over		

57 4 5 6 7 8 9 10 11 12 13 14 15

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Sl. No.	Particulars	Debit	Credit	Balance	Sl. No.	Particulars	Debit	Credit	Balance
1	173	7-11	200		1	173	7-11	200	
2	2	7-11	"		2	2	7-11	"	
3	3	7-11	"		3	3	7-11	"	
4	4	7-11	"		4	4	7-11	"	
5	5	7-11	"		5	5	7-11	"	
6	6	7-11	"		6	6	7-11	"	
7	7	7-11	"		7	7	7-11	"	
8	8	7-11	"		8	8	7-11	"	
9	9	7-11	"		9	9	7-11	"	
10	10	7-11	"		10	10	7-11	"	
11	11	7-11	"		11	11	7-11	"	
12	12	7-11	"		12	12	7-11	"	
13	13	7-11	"		13	13	7-11	"	
14	14	7-11	"		14	14	7-11	"	
15	15	7-11	"		15	15	7-11	"	
16	16	7-11	"		16	16	7-11	"	
17	17	7-11	"		17	17	7-11	"	
18	18	7-11	"		18	18	7-11	"	
19	19	7-11	"		19	19	7-11	"	
20	20	7-11	"		20	20	7-11	"	
21	21	7-11	"		21	21	7-11	"	
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613	457		212 13 11 4		130 24-2	204		212 14 11 4		180 24-2	204	12		
212	204		204		151 38-1	4		204 10 12 5	204	151 38-1	11	12		
			204		152 16-0	4		204 10 12 5	204	152 16-0	11	12		
					159 34-2	4		204 10 12 5	204	159 34-2	11	12		
					200 21-12	4		204 10 12 5	204	200 21-12	11	12		
					202 127-4	3		204 10 12 5	204	202 127-4	11	12		
					207 7-18	4		204 10 12 5	204	207 7-18	11	12		
					208 11-17	4		204 10 12 5	204	208 11-17	11	12		
					210 10-18	4		204 10 12 5	204	210 10-18	11	12		
					211 0-13	4		204 10 12 5	204	211 0-13	11	12		
					212 16-13	4		204 10 12 5	204	212 16-13	11	12		
					213 14-3	4		204 10 12 5	204	213 14-3	11	12		
					217 2-9	4		204 10 12 5	204	217 2-9	11	12		
					220 4-0	4		204 10 12 5	204	220 4-0	11	12		
					221 4-0	4		204 10 12 5	204	221 4-0	11	12		
					245 7-1	4		204 10 12 5	204	221 4-0	11	12		
					257 1-1	4		204 10 12 5	204	245 7-1	11	12		
					259 4-7	4		204 10 12 5	204	251 1-1	11	12		
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