



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

SPEED POST

B-29016/04/07/IPC-I/

July 10, 2018

To

The Regional Director
Central Pollution Control Board
“TUM SIR”, Lower Motinagar,
Near Fire Brigade H.Q
Shillong -793014

Sub: Request for re-inspection of M/s Indian Oil Corporation Limited, Digboi Refinery, Assam w.r.t show cause notice issued under section 5 of Environment (Protection) Act, 1986- reg.

Sir,

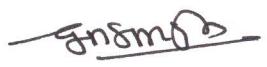
This has reference to the show cause notice issued by CPCB HO to the unit M/s Indian Oil Corporation Limited, Digboi Refinery, Assam u/s 5 of E (P) Act, 1986 dated June 11, 2018.

In this regard, the unit has submitted the compliance report vide letter dated June 28, 2018 through e-mail dated July 10, 2018. The copy of letter is enclosed.

You are therefore requested to conduct the monitoring where it was found non-compliance in the previous visit and submit the report by July 30, 2018.

Yours faithfully,

Encl: as above


(Gurnam Singh)
AD & I/C IPC-I

Copy to:

1. In-charge, IPC-VI


(Gurnam Singh)



इंडियन ऑयल कॉर्पोरेशन लिमिटेड
एओडि - डिगबोई रिफाइनरी १२३
पी.ओ. डिगबोई, पिन-७८६१७१, असम
Indian Oil Corporation Limited
AOD - Digboi Refinery
P.O. Digboi - 786171 (Assam)
Tel : 03751-262000
Fax : 03751-269015
Website : www.iocl.com
E-mail : aoddigboi@indianoil.com



असम ऑयल डिवीजन
Assam Oil Division

Ref. NO : GM I/C /HSE/DR/04-08

June 28, 2018

To

The Chairman,

Central Pollution Control Board

Ministry of Environment , Forest & Climate Change Govt. of India

New Delhi

Sub: Directions under Section 5 of (Environment) Protection Act, 1986- Notice Threreof

Sir,

With Reference to your letter No. B 29016/04/06/IPC-I/, dated June 11, 2018 on the subject "Directions under Section 5 of (Environment) Protection Act, 1986- Notice Threreof " (enclosed as **Annexure I**).

While acknowledging your letter, we would like to inform you that our action taken report, against each of your observation during Inspection of Digboi Refinery by CPCB Shillong , dated 20th April 2018, is enclosed in **Annexures II** for your kind perusal.

Thanking you,


28/6/18
(M.C Saikia)

GM I/C (TS&HSE)
Indian Oil Corporation Limited
(Assam Oil Division)
Digboi Refinery, Assam

SPEED POST

B-29016/04/06/IPC-I/

June 11, 2018

To,

M/s Indian Oil Corporation Limited,
Digboi Refinery, P.O. Digboi
Dist.- Tinsukia, Assam- 7861711

Sub: Directions under Section 5 of the Environment (Protection) Act, 1986 – Notice Thereof

WHEREAS, the Oil Refineries industries are identified as one of the 17 categories of highly polluting industries which have been discharging environmental pollutants directly or indirectly into the ambient air and water, having potential threat to cause adverse effect on the water and air quality; and

WHEREAS, there is need to inculcate habit of self-monitoring within the industries for complying with the prescribed standards and this can be achieved by the methods like installing online effluent and emission monitoring devices; and

WHEREAS, the M/s Indian Oil Corporation Limited, Digboi Refinery, Tinsukia, Assam (herein after referred as the Unit) has shortlisted for inspection based on SMS alerts found exceedance under OCEMS surveillance programme during February 15th to March 15th, 2018; and

WHEREAS, Central Pollution Control Board, Regional Directorate, Shillong inspected the unit April 20, 2018 and observed that the effluent discharged from ETP outlet w.r.t. TSS (85 mg/l > 20 mg/l), Phosphates (8.3 mg/l > 3.0 mg/l) & Sulphides (4.2 mg/l > 0.5 mg/l); and

WHEREAS, the Unit has not provided online data connectivity for Flow parameter at Effluent treatment plant (ETP) in effluent monitoring system as per the IT Division, CPCB report dated June 04, 2018; and

WHEREAS, the Unit has not provided online data connectivity for CO, NO_x & SO₂ parameter at CPP_HRSG1; CPP_HRSG2; CPP_HRSG3 & CPP_HRSG4 in emission monitoring system as per the IT Division, CPCB report dated June 04, 2018; and

WHEREAS, the Unit has not provided online data connectivity for PM parameter at CPP in emission monitoring system as per the IT Division, CPCB report dated June 04, 2018; and

WHEREAS, the Unit has not provided online data connectivity for PM & CO parameter at CDU & VDU in emission monitoring system as per the IT Division, CPCB report dated June 04, 2018; and

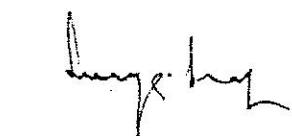
WHEREAS, the Ministry of Environment & Forests, Government of India, vide Notifications No. S. O. 157 (E) of 27.02.1996 and S. O. 730 (E) dated 10.07.2002, has delegated the powers vested under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) to the Chairman, Central

Pollution Control Board, to issue directions to any industry or any local body or any other authority for violations of the standards and rules notified under the Environment (Protection) Rules, 1986 and amendment thereof.

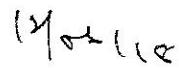
NOW, THEREFORE, under section 5 of the Environment (Protection) Act, 1986, notice is hereby issued to M/s Indian Oil Corporation Limited, Digboi Refinery, Tinsukia, Assam to show cause as to why your unit be not directed to close down all operational activities with immediate effect until following directions are complied:

1. The unit shall upgrade/ maintain the Water Pollution Control System attached to ETP so that discharged effluent may conform to prescribed standards.
2. The unit shall provide connectivity for Flow parameter at Effluent treatment plant (ETP) in effluent monitoring system.
3. The unit shall provide connectivity for CO, NO_x & SO₂ parameter at CPP_HRSG1; CPP_HRSG2; CPP_HRSG3 & CPP_HRSG4 in emission monitoring system.
4. The unit shall provide connectivity for PM parameter at CPP in emission monitoring system.
5. The unit shall provide connectivity for PM & CO parameter at CDU & VDU in emission monitoring system.

The time bound action plan for compliance of above directions shall be submitted to Central Pollution Control Board within 15 days of the receipt of the direction. In case of failure to comply with the said directions necessary action as deemed fit under the provision of the Environment (Protection) Act, 1986 will be taken by Central Pollution Control Board.



(S.P.Singh Parihar)
Chairman



12/01/18

Annexure II

Sr. No.	Remarks by CPCB	Action taken Report
1	<p>Observation by CPCB</p> <p>Effluent discharged from ETP outlet w.r.t</p> <ol style="list-style-type: none"> 1. TSS: 85 mg/ lit against limit 20 mg/ lit 2. Phosphate : 8.3 mg/ lit against limit of 3 mg/ lit 3. Sulphide : 4.2 against 0.5 mg/ lit <p>Recommendation of CPCB :</p> <p>The unit shall up grade /water pollution Control system attached to ETP so that discharged effluent may conform to prescribed standards.</p>	<p>Monitoring and Testing of Effluent from Effluent Treatment Plant is regularly done by following agencies:</p> <ol style="list-style-type: none"> 1. Daily routine sampling and testing of the following parameters is done by our in-house QC Laboratory on the following parameters. <ul style="list-style-type: none"> ➤ pH ➤ Oil and Grease ➤ BOD ➤ COD ➤ TSS ➤ Phenol ➤ Sulphide ➤ Cyanide <ul style="list-style-type: none"> • Test report of all the eight parameters for last six months are enclosed as Annexure-III for your purview. 2. Sampling and Testing of treated effluent quality by Pollution Control Board of Assam approved 3rd party agency as per gazette notification GSR 186 (E) for all the 21 parameters of treated effluent once in a month. • Test reports of last two months in April and May 2018 are enclosed as Annexure-IV. 3. Random and surprise sampling and testing of effluent quality from Effluent Treatment Plant by representative of Regional Pollution Control Board, Assam. 4. Further, Digboi Refinery has online connectivity to Cloud Server of CPCB for pH, BOD, COD and TSS. 5. CPCB, Shillong during their visit from

Page

P 4158

		<p>02 Jan 2018 to 12 Jan 2018 for sampling and testing of effluent quality, ground water quality, storm water quality at different sources from ETP and nearby locations of Digboi (Reports Awaited)</p> <p>It is evident from the above that there has been no instances of non-compliance of CPCB norms on the effluent parameters from ETP of Digboi Refinery .</p> <p>Therefore, we would like to request you for joint sampling of the treated effluent for testing once again.</p>
	<p>Observation by CPCB</p> <p>Digboi Refinery has not provided on line data connectivity for Flow parameter at Effluent Treatment Plant (ETP) in effluent monitoring system as per the I T Division CPCB report Dated June 04, 2018.</p> <p>Recommendation of CPCB :</p> <p>The unit shall provide connectivity for Flow meter at Effluent Treatment Plant (ETP) in Effluent monitoring system</p>	<p>As per Gazette Notification, online connectivity for ETP Effluent is required for the following parameters : pH, BOD,COD and TSS and there is no mention of "Flow Parameter" to have direct linking to CPCB server.</p> <p>As per the circular no-B-29016/04/06/PCI-I/5401 dated 5th Feb 2014 issued by The Chairman, CPCB to the Chairman of all SPCBs' /PCCs' Oil Refineries should have connectivity of pH, BOD,COD and TSS (Please refer to Annexure-V (A) and the Gazette Notification (enclosed as Annexure V(B), (Page 21/58) of our report.</p> <p>As per your directives, Reference No PCI-SSI/CETPs-CEMS/2015, Dated 23rd September 2015 "Flow meter and web camera to be installed in case of units with Zero Liquid Discharge (ZLD) by 31st March 2015". Kindly refer to the attached document in Annexure V (C) (Page 31/58) of our report.</p>
3	<p>Observation by CPCB</p> <p>Digboi Refinery has not provided on line data connectivity for CO, NOx and SO₂ parameters at CPP- HRSG 1, CPP- HRSG 2 , CPP- HRSG 3 and CPP- HRSG 4 in emission monitoring system as per the I T Division CPCB report Dated June 04, 2018.</p>	<p>Digboi Refinery is already having online data connectivity for CO,NOx,SO₂ parameters at CPP- HRSG 1, CPP- HRSG 2 , CPP- HRSG 3 and CPP- HRSG 4 in emission monitoring system as per Gazette Notification since April 2016 and we are receiving clarifications posted by CPCB and subsequently replied regarding online</p>

	<p>Recommendation of CPCB ;</p> <p>The unit shall provide connectivity for CO, NOx and SO₂ Parameters at CPP- HRSG 1, CPP- HRSG 2 , CPP- HRSG 3 and CPP- HRSG 4 in emission monitoring system.</p>	<p>exceedance of above parameters. One E mail copy received from CPCB on exceedance of parameter from CPP along with on line data to CPCB Server for the period 1st January to 23rd June 2018 are attached herewith as Annexure-VI.</p> <p>Complied</p>
3	<p>Observation by CPCB</p> <p>Digboi Refinery has not provided on line data connectivity for PM parameters at CPP in emission monitoring system as per the I T Division CPCB.</p> <p>Recommendation of CPCB :</p> <p>The unit shall provide connectivity for PM Parameter at CPP in emission monitoring system.</p>	<p>Digboi Refinery is already having online data connectivity for PM parameter at CPP in emission monitoring system as per Gazette Notification, since May 2015 and we are receiving clarifications posted by CPCB and subsequently replied regarding online exceedance of above parameter. Reports of on line connectivity of the parameter and Communications received from CPCB attached herewith as Annexure-VI.</p> <p>Complied</p>
4	<p>Observation by CPCB</p> <p>Digboi Refinery has not provided on line data connectivity for CO and PM at CDU and VDU in emission monitoring system as per the I T Division CPCB.</p> <p>Recommendation of CPCB :</p> <p>The unit shall provide connectivity for PM and CO Parameter at CDU and VDU in emission monitoring system.</p>	<p>As per Gazette Notification online connectivity for CO and PM at CDU and VDU in Emission monitoring system is not required to CPCB Server (Refer Annexure V (B)).</p>

इंडियन ऑयल कार्पोरेशन लिमिटेड

ASSAM OIL DIVISION
QUALITY CONTROL DEPARTMENT

07.06.2018

REF. DR:QC/126.0/05

MIS FOR THE MONTH OF MAY 2018

DATE	PH	Oil & Gr	Phenol	Sulphide	COD	BOD	TDS	TSS	CYANIDE	
Limit		6.5-8.5	5.0 mg/L	0.35mg/l	0.50mg/l	125.0mg/l	15.0mg/l	mg/l	20.0mg/l	0.20mg/l
			Max	Max	Max	Max	Max	Max	Max	Max
01.05.2018	7.3	5.0	0.32	0.04	116.0	10.0	540.0	18.0	0.012	
02.05.2018	7.3	4.8	0.30	0.02	90.0	8.0	430.0	16.5	0.024	
03.05.2018	7.2	4.0	0.32	0.04	108.0	ND	430.0	16.0	0.016	
04.05.2018	7.3	4.8	0.28	0.04	112.0	12.0	470.0	18.5	0.020	
05.05.2018	7.3	5.0	0.32	0.05	116.0	8.0	530.0	19.0	0.018	
06.05.2018	7.1	4.6	0.24	0.02	96.0	ND	410.0	17.0	0.006	
07.05.2018	7.1	4.0	0.28	0.06	90.0	6.8	470.0	16.5	0.018	
08.05.2018	7.2	4.2	0.30	0.05	84.0	8.0	460.0	18.0	0.012	
09.05.2018	7.3	5.0	0.32	0.05	112.0	6.0	430.0	19.0	0.016	
10.05.2018	7.3	4.0	0.28	0.05	74.0	ND	370.0	19.0	0.008	
11.05.2018	7.3	5.0	0.30	0.01	80.0	10.0	460.0	18.0	0.024	
12.05.2018	7.1	4.0	0.32	0.04	70.0	8.0	430.0	16.5	0.022	
13.05.2018				SUNDAY						
14.05.2018	7.1	4.6	0.32	0.03	76.0	10.0	480.0	19.0	0.008	
15.05.2018	7.2	4.0	0.26	0.03	82.0	8.0	430.0	18.0	0.013	
16.05.2018	7.1	4.0	0.30	0.02	76.0	8.0	430.0	19.0	0.010	
17.05.2017	7.2	4.8	0.24	0.02	84.0	ND	380.0	16.5	0.026	
18.05.2018	7.3	5.0	0.30	0.05	74.0	6.0	480.0	18.0	0.012	
19.05.2018	7.1	4.6	0.28	0.03	70.0	10.0	430.0	16.0	0.008	
20.05.2018				SUNDAY						
21.05.2018	7.2	4.0	0.22	0.04	70.0	8.0	460.0	18.5	0.012	
22.05.2018	7.3	5.0	0.30	0.05	104.0	6.0	450.0	19.0	0.012	
23.05.2018	7.1	4.6	0.28	0.04	82.0	10.0	510.0	17.5	0.022	
24.05.2018	7.2	5.0	0.30	0.04	68.0	ND	460.0	19.0	0.018	
25.05.2018	7.1	4.0	0.26	0.02	76.0	8.0	410.0	17.5	0.014	
26.05.2018	7.2	4.6	0.30	0.05	68.0	10.0	480.0	18.5	0.012	
27.05.2018				SUNDAY						
28.05.2018	7.1	5.0	0.28	0.03	82.0	10.0	530.0	16.0	0.024	
29.05.2018	6.9	4.2	0.28	0.02	70.0	6.0	460.0	19.0	0.012	
30.05.2018	7.2	4.0	0.30	0.05	84.0	10.0	430.0	18.5	0.018	
31.05.2018	7.3	3.8	0.22	0.04	68.0	NA	480.0	19.5	0.008	
Maximum	7.3	5.0	0.32	0.06	116.0	12.0	540.0	19.50	0.026	
Minimum	6.9	3.8	0.22	0.01	68.0	6.0	370.0	16.00	0.01	
Average	7.19	4.49	0.29	0.04	85.07	8.49	454.64	17.91	0.015	
Std. Dev	0.10	0.44	0.03	0.01	15.81	1.69	41.50	1.11	0.006	

(D.DEKA)
CQCM

इंडियन ऑयल कार्पोरेशन लिमिटेड

ASSAM OIL DIVISION
QUALITY CONTROL DEPARTMENT

05.05.2018

REF. DR:QC/126.0/04

MIS FOR THE MONTH OF APRIL,2018

DATE	PH	Oil & Gr	Phenol	Sulphide	COD	BOD	TDS	TSS	CYANIDE
Limit	6.5-8.5	5.0 mg/L	0.35mg/l	0.50mg/l	125.0mg/l	15.0mg/l	mg/l	20.0mg/l	0.20mg/l
			Max	Max	Max	Max	Max	Max	Max
01.04.2018	7.1	4.6	0.26	0.04	76.0	ND	430.0	19.0	0.008
02.04.2018				STRIKE					
03.04.2018	7.1	4.0	0.30	0.06	92.0	10.0	540.0	17.5	0.014
04.04.2018	7.2	4.8	0.32	0.04	106.0	6.0	480.0	16.0	0.014
05.04.2018	7.1	4.2	0.26	0.01	112.0	ND	430.0	17.5	0.016
06.04.2018	7.2	4.6	0.32	0.04	94.0	12.0	560.0	19.5	0.014
07.04.2018	7.1	4.0	0.22	0.01	88.0	8.0	380.0	16.5	0.026
08.04.2018	7.1	5.0	0.32	0.04	80.0	ND	340.0	17.0	0.016
09.04.2018	7.3	4.4	0.28	0.01	88.0	10.0	430.0	16.0	0.010
10.04.2018	7.3	5.0	0.30	0.02	110.0	12.0	380.0	19.0	0.008
11.04.2018	7.1	4.8	0.26	0.04	96.0	8.0	460.0	18.0	0.014
12.04.2018	7.3	4.0	0.28	0.05	84.0	ND	430.0	18.0	0.004
13.04.2018	7.2	4.8	0.32	0.04	106.0	10.0	370.0	16.0	0.012
14.04.2018	7.4	4.4	0.34	0.05	108.0	ND	480.0	19.0	0.018
15.04.2018	7.3	5.0	0.34	0.06	112.0	ND	520.0	18.0	0.014
16.04.2018	7.1	4.8	0.32	0.05	106.0	ND	460.0	19.0	0.012
17.04.2017	7.1	4.5	0.30	0.04	94.0	10.0	380.0	17.0	0.016
18.04.2018	7.1	4.8	0.34	0.06	106.0	12.0	440.0	19.0	0.012
19.04.2018	7.2	5.0	0.32	0.04	98.0	ND	420.0	17.0	0.010
20.04.2018	7.3	4.6	0.30	0.04	104.0	10.0	360.0	18.0	0.008
21.04.2018	7.4	4.8	0.32	0.06	108.0	8.0	380.0	19.0	0.012
22.04.2018			SUNDAY						
23.04.2018	7.5	4.6	0.30	0.05	112.0	8.0	420.0	18.0	0.014
24.04.2018	7.2	4.2	0.30	0.03	108.0	12.0	380.0	16.5	0.006
25.04.2018	7.3	4.4	0.28	0.03	90.0	10.0	410.0	18.0	0.018
26.04.2018	7.4	4.8	0.32	0.04	104.0	ND	560.0	16.0	0.010
27.04.2018	7.1	4.0	0.30	0.04	86.0	8.0	470.0	19.0	0.018
28.04.2018	7.3	5.0	0.30	0.04	94.0	11.0	410.0	16.5	0.008
29.04.2018	7.3	4.6	0.24	0.03	88.0	ND	480.0	17.5	0.012
30.04.2018	7.1	3.8	0.34	0.03	102.0	12.0	370.0	18.5	0.024
Maximum	7.5	5.0	0.34	0.06	112.0	12.0	560.0	19.00	0.026
Minimum	7.1	3.8	0.22	0.01	76.0	6.0	340.0	16.00	0.004
Average	7.22	4.55	0.30	0.04	98.29	9.83	434.64	17.71	0.013
Std. Dev	0.12	0.36	0.03	0.01	10.49	1.82	60.28	1.12	0.005

(D.DEKA)
CQCM

इंडियन ऑयल कार्पोरेशन लिमिटेड

ASSAM OIL DIVISION
QUALITY CONTROL DEPARTMENT

05.04.2018

REF. DR:QC/126.0/03

MIS FOR THE MONTH OF MARCH 2018

DATE	PH	Oil & Gr	Phenol	Sulphide	COD	BOD	TDS	TSS	CYANIDE
Limit	6.5-8.5	5.0 mg/L	0.35mg/l	0.50mg/l	125.0mg/l	15.0mg/l	mg/l	20.0mg/l	0.20mg/l
		Max	Max	Max	Max	Max		Max	Max
01.03.2018	7.2	5.0	0.34	0.05	110.0	ND	380.0	14.5	0.008
02.03.2018	7.3	4.6	0.32	0.04	84.0	ND	410.0	18.0	0.016
03.03.2018	7.1	4.2	0.30	0.02	108.0	8.0	380.0	19.0	0.010
04.03.2018	7.3	5.0	0.32	0.02	88.0	ND	360.0	17.5	0.010
05.03.2018	7.2	4.8	0.28	0.01	106.0	10.0	480.0	19.0	0.012
06.03.2018	7.1	5.0	0.30	0.05	98.0	11.0	430.0	16.0	0.010
07.03.2018	7.2	4.6	0.22	0.04	106.0	10.0	430.0	18.5	0.016
08.03.2018	7.3	5.0	0.30	0.05	120.0	ND	460.0	19.0	0.022
09.03.2018	7.3	4.0	0.22	0.04	90.0	8.0	340.0	17.0	0.024
10.03.2018	7.1	4.8	0.32	0.04	106.0	11.0	430.0	18.5	0.012
11.03.2018	7.2	4.6	0.30	0.01	94.0	ND	380.0	16.0	0.022
12.03.2018	7.2	4.8	0.32	0.05	108.0	8.0	460.0	18.5	0.016
13.03.2018	7.1	4.0	0.30	0.04	94.0	12.0	540.0	19.0	0.010
14.03.2018	7.1	4.8	0.28	0.05	110.0	10.0	480.0	18.5	0.014
15.03.2018	7.2	5.0	0.34	0.05	90.0	ND	410.0	18.5	0.012
16.03.2018	7.2	4.8	0.28	0.03	112.0	10.0	370.0	16.0	0.008
17.03.2017	7.3	5.0	0.28	0.01	86.0	12.0	390.0	15.5	0.026
18.03.2018	7.1	4.6	0.30	0.04	98.0	ND	480.0	19.0	0.022
19.03.2018	7.2	5.0	0.30	0.01	108.0	12.0	360.0	18.0	0.014
20.03.2018	7.2	4.2	0.28	0.04	110.0	8.0	430.0	19.0	0.020
21.03.2018	7.2	5.0	0.30	0.03	104.0	8.0	540.0	18.5	0.008
22.03.2018	7.1	4.6	0.28	0.05	112.0	ND	460.0	18.0	0.014
23.03.2018	7.2	4.2	0.24	0.03	98.0	12.0	560.0	17.5	0.018
24.03.2018	7.2	4.6	0.30	0.04	108.0	6.8	480.0	16.0	0.012
25.03.2018	7.1	5.0	0.34	0.05	82.0	ND	460.0	15.5	0.010
26.03.2018	7.2	4.0	0.20	0.04	76.0	8.0	360.0	18.5	0.020
27.03.2018	7.1	5.0	0.26	0.03	90.0	10.0	450.0	16.5	0.012
28.03.2018	7.2	4.0	0.30	0.02	84.0	11.0	410.0	16.0	0.008
29.03.2018	7.3	5.0	0.32	0.04	96.0	ND	430.0	19.0	0.012
30.03.2018	7.2	4.8	0.30	0.04	106.0	8.0	460.0	18.0	0.014
31.03.2018	7.3	4.8	0.30	0.04	80.0	10.0	480.0	16.5	0.010
Maximum	7.3	5.0	0.34	0.05	120.0	12.0	560.0	19.00	0.026
Minimum	7.1	4.0	0.20	0.01	76.0	6.8	340.0	14.50	0.008
Average	7.19	4.67	0.29	0.04	98.77	9.70	435.16	17.58	0.014
Std. Dev	0.07	0.36	0.03	0.01	11.42	1.66	56.09	1.34	0.005

(D.DEKA)

CQCM

इंडियन ऑयल कार्पोरेशन लिमिटेड

ASSAM OIL DIVISION
QUALITY CONTROL DEPARTMENT

06.03.2018

REF. DR:QC/126.0/02

MIS FOR THE MONTH OF FEBRUARY, 2018

DATE Limit	PH 6.5-8.5	Oil & Gr 5.0 mg/L	Phenol 0.35mg/l	Sulphide 0.50mg/l	COD 125.0mg/l	BOD 15.0mg/l	TDS mg/l	TSS 20.0mg/l	CYANIDE 0.20mg/l
01.02.2018	7.2	4.0	0.30	0.04	110.0	ND	460.0	18.0	0.020
02.02.2018	7.3	5.0	0.32	0.05	114.0	8.0	410.0	19.0	0.022
03.02.2018	7.2	4.0	0.26	0.05	94.0	8.0	420.0	17.0	0.008
04.02.2018	7.4	4.6	0.34	0.06	104.0	ND	510.0	18.0	0.018
05.02.2018	7.1	4.6	0.28	0.05	108.0	10.0	470.0	17.0	0.012
06.02.2018	7.1	4.0	0.30	0.04	94.0	8.0	520.0	16.5	0.010
07.02.2018	7.1	4.0	0.28	0.05	110.0	12.0	430.0	18.5	0.006
08.02.2018	7.3	4.8	0.30	0.03	90.0	ND	460.0	17.0	0.022
09.02.2018	7.1	5.0	0.30	0.04	106.0	12.0	370.0	16.5	0.008
10.02.2018	7.2	4.6	0.22	0.04	108.0	10.0	460.0	19.0	0.012
11.02.2018	7.1	4.0	0.30	0.05	112.0	ND	410.0	17.0	0.008
12.02.2018	7.2	4.8	0.26	0.04	96.0	8.0	430.0	18.5	0.014
13.02.2018	7.2	5.0	0.32	0.05	110.0	8.0	440.0	18.0	0.020
14.02.2018	7.1	4.0	0.28	0.04	98.0	10.0	370.0	16.5	0.016
15.02.2018	7.1	4.6	0.30	0.05	112.0	ND	430.0	19.0	0.014
16.02.2018	7.3	4.8	0.32	0.05	88.0	10.0	470.0	17.0	0.010
17.02.2017	7.2	4.0	0.28	0.04	102.0	13.0	510.0	18.0	0.008
18.02.2018	7.1	4.4	0.30	0.04	104.0	ND	480.0	16.0	0.016
19.02.2018	7.3	3.6	0.30	0.03	106.0	8.0	430.0	18.0	0.020
20.02.2018	7.2	4.0	0.32	0.04	90.0	10.0	480.0	16.5	0.022
21.02.2018	7.2	5.0	0.30	0.03	108.0	12.0	410.0	19.0	0.012
22.02.2018	7.2	4.8	0.32	0.05	90.0	ND	560.0	17.0	0.008
23.02.2018	7.3	4.8	0.30	0.05	108.0	10.0	460.0	18.0	0.020
24.02.2018	7.1	5.0	0.26	0.04	92.0	12.0	370.0	18.0	0.012
25.02.2018	7.3	5.0	0.28	0.06	86.0	ND	430.0	16.0	0.014
26.02.2018	7.2	4.2	0.32	0.02	104.0	8.0	380.0	16.0	0.008
27.02.2018	7.1	4.6	0.32	0.01	116.0	10.0	480.0	15.5	0.014
28.02.2018	7.3	4.0	0.30	0.03	94.0	8.0	530.0	18.5	0.016

Maximum	7.4	5.0	0.34	0.06	116.0	13.0	560.0	19.00	0.022
Minimum	7.1	3.6	0.22	0.01	86.0	8.00	370.0	15.50	0.006
Average	7.20	4.47	0.30	0.04	101.93	9.75	449.29	17.46	0.014
Std. Dev	0.09	0.44	0.03	0.01	8.92	1.71	49.59	1.05	0.005

(D.DEKA)
CQCM

इंडियन ऑयल कार्पोरेशन लिमिटेड

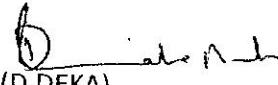
ASSAM OIL DIVISION
QUALITY CONTROL DEPARTMENT

06.02.2018

REF. DR:QC/126.0/01

MIS FOR THE MONTH OF JANUARY 2018

DATE Limit	PH 6.5-8.5	Oil&Gr 5.0 mg/L	Phenol 0.35mg/l	Sulphide 0.50mg/l	COD 125.0mg/l	BOD 15.0mg/l	TDS mg/l	TSS 20.0mg/l	CYANIDE 0.20mg/l
		Max	Max	Max	Max	Max		Max	Max
01.01.2018	7.1	4.2	0.22	0.01	106.0	10.0	460.0	14.5	0.020
02.01.2018	7.0	4.6	0.20	0.03	110.0	12.0	480.0	18.0	0.012
03.01.2018	7.2	4.8	0.26	0.04	94.0	10.0	430.0	16.5	0.020
04.01.2018	7.2	4.2	0.34	0.03	92.0	ND	380.0	18.0	0.014
05.01.2018	7.0	4.6	0.28	0.04	88.0	8.0	460.0	17.0	0.020
06.01.2018	7.2	5.0	0.30	0.04	108.0	10.0	510.0	18.5	0.026
07.01.2018	7.1	5.0	0.34	0.06	112.0	ND	480.0	18.0	0.024
08.01.2018	7.1	4.4	0.28	0.02	116.0	12.0	560.0	18.5	0.008
09.01.2018	7.1	4.0	0.32	0.07	108.0	10.0	470.0	17.0	0.014
10.01.2018	7.2	5.0	0.34	0.06	98.0	12.0	560.0	18.0	0.016
11.01.2018	7.0	4.0	0.32	0.04	106.0	ND	530.0	19.0	0.020
12.01.2018	7.1	4.8	0.30	0.04	110.0	8.0	460.0	16.5	0.008
13.01.2018	7.3	4.0	0.28	0.06	96.0	ND	580.0	17.0	0.010
14.01.2018	7.3	5.0	0.32	0.05	112.0	ND	460.0	16.5	0.024
18.01.2018	7.1	4.8	0.32	0.05	92.0	ND	386.0	17.0	0.008
19.01.2018	7.2	5.0	0.30	0.04	108.0	10.0	440.0	16.5	0.014
20.01.2018	7.2	4.0	0.28	0.04	104.0	10.0	410.0	16.0	0.012
21.01.2018	7.3	5.0	0.32	0.06	112.0	ND	380.0	19.0	0.020
22.01.2018	7.1	4.0	0.26	0.04	116.0	8.0	460.0	17.0	0.010
23.01.2018	7.0	5.0	0.32	0.06	90.0	11.0	530.0	18.5	0.008
24.01.2018	7.3	4.8	0.30	0.05	108.0	10.0	360.0	16.5	0.012
25.01.2018	7.1	4.2	0.32	0.04	112.0	ND	460.0	18.0	0.016
26.01.2018	7.3	5.0	0.34	0.05	88.0	ND	540.0	19.0	0.006
27.01.2018	7.2	4.6	0.28	0.04	116.0	10.0	410.0	17.5	0.026
28.01.2018	7.3	4.2	0.30	0.05	88.0	ND	440.0	19.5	0.010
29.01.2018	7.2	4.8	0.30	0.03	112.0	12.0	480.0	16.0	0.018
30.01.2018	7.1	4.0	0.26	0.04	106.0	10.0	480.0	16.5	0.018
31.01.2018	7.2	5.0	0.32	0.06	98.0	11.0	370.0	18.0	0.012
Maximum	7.3	5.0	0.34	0.07	116.0	12.0	580.0	19.50	0.026
Minimum	7.0	4.0	0.20	0.01	88.0	8.0	360.0	14.50	0.006
Average	7.15	4.57	0.30	0.05	103.81	10.19	464.71	17.47	0.015
Std. Dev	0.10	0.41	0.03	0.01	9.02	1.36	58.71	1.12	0.006


(D. DEKA)
CQCM

इंडियन ऑयल कार्पोरेशन लिमिटेड

ASSAM OIL DIVISION
QUALITY CONTROL DEPARTMENT

04.01.2018

REF. DR:QC/126.0/12

MIS FOR THE MONTH OF DECEMBER 2017

DATE Limit	PH 6.5-8.5	Oil & Gr 5.0 mg/L	Phenol 0.35mg/l	Sulphide 0.50mg/l	COD 125.0mg/l	BOD 15.0mg/l	TDS mg/l	TSS 20.0mg/l	CYANIDE 0.20mg/l
01.12.2017	7.1	4.6	0.30	0.03	88.0	10.0	460.0	18.0	0.020
02.12.2017	7.2	4.0	0.28	0.02	76.0	8.0	430.0	17.5	0.008
03.12.2017	7.1	4.8	0.32	0.04	106.0	ND	380.0	18.0	0.018
04.12.2017	7.1	4.0	0.20	0.03	64.0	10.0	338.0	14.0	0.022
05.12.2017	6.8	4.4	0.30	0.06	90.0	12.0	380.0	16.0	0.020
06.12.2017	7.2	3.8	0.32	0.04	102.0	14.0	360.0	18.0	0.018
07.12.2017	6.8	4.6	0.28	0.03	106.0	ND	410.0	16.0	0.020
08.12.2017	6.9	4.2	0.24	0.03	94.0	10.0	340.0	14.0	0.016
09.12.2017	7.2	4.8	0.30	0.04	112.0	8.0	380.0	17.0	0.012
10.12.2017	7.1	4.7	0.32	0.05	116.0	ND	410.0	18.0	0.022
11.12.2017	7.0	4.0	0.28	0.02	94.0	10.0	470.0	16.5	0.008
12.12.2017	7.2	4.0	0.26	0.04	88.0	12.0	530.0	18.0	0.014
13.12.2017	7.1	4.0	0.30	0.03	110.0	8.8	430.0	16.5	0.010
14.12.2017	6.9	3.8	0.28	0.02	106.0	ND	460.0	17.0	0.020
15.12.2017	7.1	4.8	0.30	0.05	94.0	10.0	530.0	18.0	0.018
16.12.2017	7.0	3.6	0.22	0.04	112.0	8.0	560.0	16.0	0.024
17.12.2017	6.9	4.8	0.26	0.03	90.0	ND	430.0	18.0	0.014
18.12.2017	7.1	5.0	0.28	0.03	86.0	10.0	520.0	15.5	0.008
19.12.2017	7.0	4.0	0.22	0.01	108.0	10.0	470.0	18.5	0.016
20.12.2017	7.1	3.4	0.20	0.03	94.0	12.0	480.0	16.0	0.008
21.12.2017	7.0	3.8	0.20	0.04	96.0	ND	480.0	17.0	0.010
22.12.2017	6.8	4.0	0.30	0.04	110.0	10.0	386.0	17.0	0.012
23.12.2017	7.1	3.6	0.28	0.03	94.0	11.0	470.0	16.0	0.008
24.12.2017	7.5	5.0	0.34	0.05	104.0	ND	440.0	18.0	0.022
25.12.2017	7.0	4.6	0.26	0.03	118.0	ND	470.0	16.5	0.014
26.12.2017	7.2	3.8	0.22	0.04	88.0	12.0	480.0	15.5	0.018
27.12.2017	7.0	4.8	0.34	0.03	112.0	10.0	410.0	18.0	0.008
28.12.2017	6.9	4.0	0.22	0.01	104.0	ND	370.0	16.0	0.014
29.12.2017	7.2	4.6	0.28	0.04	112.0	12.0	460.0	18.0	0.024
30.12.2017	7.1	5.0	0.30	0.05	86.0	8.0	470.0	17.5	0.016
31.12.2017	7.2	4.0	0.26	0.04	118.0	ND	430.0	15.0	0.006
Maximum	7.5	5.0	0.34	0.06	118.0	14.0	560.0	18.50	0.024
Minimum	6.8	3.4	0.20	0.01	64.0	8.0	338.0	14.0	0.006
Average	7.06	4.27	0.27	0.03	99.29	10.28	439.81	16.81	0.015
Std. Dev	0.15	0.48	0.04	0.01	12.86	1.63	56.57	1.22	0.005


(N.BARMAN)
SQCM

Recognised By
PCB, Assam & MSPCB, Meghalaya

Digboi Stores Building, New Market
 Digboi, Assam - 786 171
 Ph: 03751-264414, 9435008657, 8876028672
 E-mail: envirocon@rediffmail.com
 Website: www.envirocon.net.in



Report Ref. No: ENV/AOD/WW/RT/04/2018-19

ETP WATER TEST REPORT

Name Of The Organization	Indian Oil Corporation Limited (AOD)		
Address	HSE Department, Digboi Refinery, Digboi, Assam, PIN- 786171		
Work Order Number	25377446; Dt 05.02.2018		

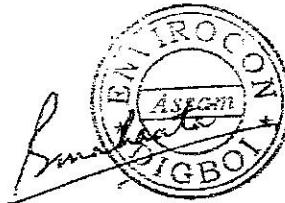
Date of Sample Collection	Analysis Start Date	Analysis End Date	Report Date
21.05.2018	21.05.2018	28.05.2018	28.05.2018

Sample Type : ETP Water	Sample Collected By : ENVIROCON
Sampling Procedure : IS 3025, Part 1 (1987, RA. 2003)	Sample Qty & Packing : 1 Litre Plastic can
Sample Ref No : ENV/AOD/WW/04/2018-19	Sample Location : ETP PP Outlet

Sr. No.	Test Parameter	Method	Unit	MDL	Result	Limit
1	pH	IS 3025, Part 11	-	0.5-13.5	7.1	6.0 to 8.5
2	Oil & Grease	IS 3025, Part 39	mg/lit	0.2	4.1	5.0
3	Biochemical Oxygen Demand, (BOD)	IS 3025, Part 44	mg/lit	4	12.5	15.0
4	Chemical Oxygen Demand, (COD)	IS 3025, Part 58	mg/lit	10	66	125.0
5	Total Suspended Solid	IS 3025, Part 17	mg/lit	5.0	18.2	20.0
6	Phenol	IS 3025, Part 43	mg/lit	0.0005	0.29	0.35
7	Cyanide	IS 3025, Part 27	mg/lit	0.01	BDL	0.20
8	Sulphide	IS 3025 Part 29	mg/lit	0.05	BDL	0.50
9	Ammonical Nitrogen	IS 3025 Part 34	mg/lit	0.5	4.23	15.0
10	TKN	IS 3025 Part 34	mg/lit	1	29.6	40.0
11	Total Chromium	IS 3025, Part 52	mg/lit	0.01	BDL	2.0
12	Hexavalent Chromium	IS 3025, Part 52	mg/lit	0.01	BDL	0.1
13	Total Phosphorus	IS 3025, Part 31	mg/lit	0.02	0.8	3.0
14	Lead	IS 3025, Part 47	mg/lit	0.01	BDL	0.1
15	Zinc	IS 3025, Part 49	mg/lit	0.01	BDL	5.0
16	Nickel	IS 3025, Part 54	mg/lit	0.01	BDL	1.0
17	Copper	IS 3025, Part 42	mg/lit	0.01	BDL	1.0
18	Mercury	IS 3025, Part 48	mg/lit	0.001	BDL	0.01
19	Vanadium	APHA 3030-F, APHA 3111 D, 22 nd Edition	mg/lit	0.2	BDL	0.20
20	Benzene	APHA 6200-C, 22 nd Edition	mg/lit	0.1	BDL	0.10
21	Benzo (a) Pyrene	APHA 6440-B, 22 nd Edition	mg/lit	0.1	BDL	0.2

MDL : Minimum Detectable Limit

BDL : Below Detection Limit



Checked By: Bivash Mahanta, ENVIROCON

Ref. No: ENV/AOD/WW/RT/01/2018-19

ETP WATER TEST REPORT

Name Of The Organization	Indian Oil Corporation Limited (AOD)		
Address	HSE Department, Digboi Refinery, Digboi, Assam, PIN- 786171		
Work Order Number	25377446; Dt. 05.02.2018		

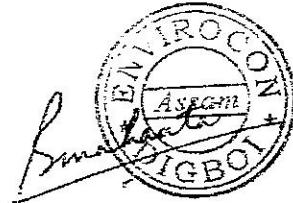
Date of Sample Collection	Analysis Start Date	Analysis End Date	Report Date
06.04.2018	06.04.2018	18.04.2018	18.04.2018

Sample Type : ETP Water	Sample Collected By : ENVIROCON
Sampling Procedure : IS 3025, Part 1 (1987, RA. 2003)	Sample Qty & Packing : 1 Litre Plastic can
Sample Ref No : ENV/AOD/WW/01/2018-19	Sample Location : ETP PP Outlet

Sr. No.	Test Parameter	Method	Unit	MDL	Result	Limit
1	pH	IS 3025, Part 11	--	0.5-13.5	7.30	6.0 to 8.5
2	Oil & Grease	IS 3025, Part 39	mg/lit	0.2	3.2	5.0
3	Biochemical Oxygen Demand, (BOD)	IS 3025, Part 44	mg/lit	4	10.2	15.0
4	Chemical Oxygen Demand, (COD)	IS 3025, Part 58	mg/lit	10	90.5	125.0
5	Total Suspended Solid	IS 3025, Part 17	mg/lit	5.0	15.2	20.0
6	Phenol	IS 3025, Part 43	mg/lit	0.0005	0.31	0.35
7	Cyanide	IS 3025, Part 27	mg/lit	0.01	BDL	0.20
8	Sulphide	IS 3025 Part 29	mg/lit	0.05	BDL	0.50
9	Ammonical Nitrogen	IS 3025 Part 34	mg/lit	0.5	3.66	15.0
10	TKN	IS 3025 Part 34	mg/lit	1	26.4	40.0
11	Total Chromium	IS 3025, Part 52	mg/lit	0.01	BDL	2.0
12	Hexavalent Chromium	IS 3025, Part 52	mg/lit	0.01	BDL	0.1
13	Total Phosphorus	IS 3025, Part 31	mg/lit	0.02	0.6	3.0
14	Lead	IS 3025, Part 47	mg/lit	0.01	BDL	0.1
15	Zinc	IS 3025, Part 49	mg/lit	0.01	BDL	5.0
16	Nickel	IS 3025, Part 54	mg/lit	0.01	BDL	1.0
17	Copper	IS 3025, Part 42	mg/lit	0.01	BDL	1.0
18	Mercury	IS 3025, Part 48	mg/lit	0.001	BDL	0.01
19	Vanadium	APHA 3030-F, APHA 3111 D, 22 nd Edition	mg/lit	0.2	BDL	0.20
20	Benzene	APHA 6200-C, 22 nd Edition	mg/lit	0.1	BDL	0.10
21	Benzo (a) Pyrene	APHA 6440-B, 22 nd Edition	mg/lit	0.1	BDL	0.2

MDL : Minimum Detectable Limit

BDL : Below Detection Limit



Checked By: Bivash Mahanta, ENVIROCON