



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

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

SPEED POST

June 11, 2018

To

The Regional Director  
Central Pollution Control Board  
3rd Floor, Sahkar Bhawan  
North TT Nagar  
Bhopal- 462 003

Sub: Request for re-inspection of M/s Bharat Oman Refineries Limited, Bina, Dist. Sagar, Madhya Pradesh 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 Bharat Oman Refineries Limited, Bina, Dist. Sagar, Madhya Pradesh u/s 5 of E (P) Act, 1986 dated May 18, 2018.

In this regard, the unit has submitted the compliance report vide letter dated June 01, 2018. The copy of letter is enclosed.

Unit has provided the connectivity w.r.t PM parameter at stack\_ CPP Boiler 1, 2, and 3 as per IT Division report dated June 07, 2018.

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

Encl: as above

Yours faithfully,

(Dinabandhu Gouda)  
AD & I/C IPC-I

Copy to:

1. Incharge, IPC-VI

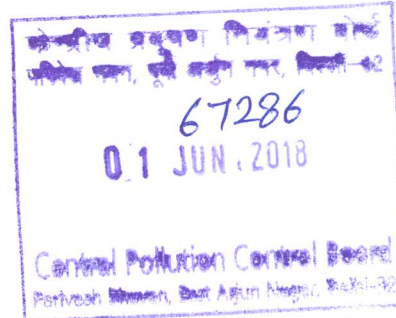
(Dinabandhu Gouda)

BORL/CPCB/2018/03

01/06/2018

To

The Chairman  
Central Pollution Control Board  
Parivesh Bhawan, East Arjun Nagar,  
Delhi-110032



MS  
IPC-1  
5/6

Sub: Reply of Show Cause Notice of the CPCB, under Section 5 of Environment (Protection) Act, 1986

Ref: Your office letter no. B-29016/04/06/IPC-1 dated 18<sup>th</sup> May 2018

We are in receipt of a Show Cause Notice dated 18<sup>th</sup> May 2018 with some observations and directions based on visit of CPCB team during 26-29 March 2018. We have gone through the contents of said Show Cause Notice and submit the explanation as follows:

1. We clarify that emissions from HOH stack w.r.t NOx and CFBC Boiler-2 stack w.r.t. SO2 are not exceeding the prescribed norms of 350 mg/Nm3 and 600 mg/Nm3 respectively and the same can be verified from the CEMS data transferred to CPCB server. Historical daily average data from CPCB server for two months starting from the day of CPCB visit to refinery is attached as **Annexure I & II** for ready reference. You may note that the daily average value is significantly less than the limits.
2. We also clarify that the Hazardous Waste display board is available at the Main Gate / Entry-Exit point of the refinery as per requirement.

As regards the action plan for compliance of directions issued in the said notice, we explain as under:

**Direction No. 1.** The unit shall upgrade/maintain the Air pollution control system attached to Hot Oil Heater stack and CFBC boiler 2 stack so that the discharged emission may conform to prescribed standards.

- a. BORL has installed air pollution control systems such as 12 nos of Low Nox burners in Hot Oil Heater (HOH) to maintain emission levels from the HOH stack within prescribed standards. You may note that the daily average value of Nox emission data for two months is well within limit (Please refer **Annexure-I**). Also 15 minutes average data for the duration of CPCB site monitoring is included, which is also significantly within limit.
- b. CFBC boilers installed at refinery captive power plant has capability of low SO2 emissions than conventional technology as the low combustion temperature allows SO2 capture via limestone injection. Please refer **Annexure-II** for continuous emission monitoring data. You may note that daily average value is significantly less than the limit. However, CPP operation is dynamic in nature involving solid material handling. On the day during the time of emission

parameters measurement by CPCB, because of lime feeder problem SOx level temporarily crossed the limit and the same was explained to the CPCB visiting team.

**Direction No. 2. The unit shall provide Hazardous Waste Display Board with quantity at the front gate of storage yard.**

We clarify that the Hazardous Waste display board is available at the Main Gate / Entry-Exit point of the refinery as per requirement. However, as stated in your letter, we have installed additional hazardous waste display board at the front of storage yard. (Please refer **Annexure- III**)

**Direction No. 3. The Unit shall provide connectivity for PM parameter at Stack CPP Boiler 1; Stack CPP Boiler 2 & Stack CPP Boiler 3 in emission monitoring system.**

Captive Power Plant (CPP) consists of 3 nos of solid fuel based CFBC type boilers. As directed, PM parameters for Stack\_CPP\_Boiler\_1; Stack\_CPP\_Boiler\_2 & Stack\_CPP\_Boiler\_3 are connected to CPCB emission monitoring system.

Further, would like to bring to your kind attention that refinery has already made financial commitments of approximately Rs. 480 lakhs for retrofitting to meet emission norms in CFBC boilers, towards compliance of the CPCB directions.

We submit that as a responsible corporate, BORL has incorporated state of the art environmental protection measures in the design of facilities and we accord highest priority to preservation of environment through strict monitoring and control.

We would be grateful to you if an opportunity of personal hearing is accorded to us to explain the facts of the case.

Thanking you,

Yours Faithfully,

For Bharat Oman Refineries Limited



(Samarendu Chatterjee)

Joint Senior Vice President – Fire Safety & Environment

Encl: Annexure-I, Two months NOx data for HOH  
Annexure-II, Two months' SOx data for CFBC-2  
Annexure-III, Display board Photo



NOx Reading in CPCB Portal	
Industry	BHARAT OMAN REFINERIES LTD
Station	Stack_2_MSB/HOH
Parameter	(NOX)
Avg Period	Daily Avg
Period	From: 26-Mar-2018 To: 25-May-2018
Date	NOX(mg/Nm3)
26-MAR-18	98.76
27-MAR-18	102.09
28-MAR-18	106.58
29-MAR-18	106.1
30-MAR-18	105.16
31-MAR-18	100.08
01-APR-18	88.76
02-APR-18	84.02
03-APR-18	85.92
04-APR-18	92.86
05-APR-18	85.02
06-APR-18	86.8
07-APR-18	78.92
08-APR-18	50.95
09-APR-18	82.46
10-APR-18	84.75
11-APR-18	75.39
12-APR-18	77.52
13-APR-18	95.64
14-APR-18	105.87
15-APR-18	103.36
16-APR-18	109.22
17-APR-18	115.51
18-APR-18	114.99
19-APR-18	135.35
20-APR-18	151.63
21-APR-18	157.12
22-APR-18	126.65
23-APR-18	118.81
24-APR-18	196.33
25-APR-18	248.8
26-APR-18	249.57
27-APR-18	218.79
28-APR-18	210.12
29-APR-18	213.66
30-APR-18	217.98
01-MAY-18	212.83
02-MAY-18	221.55
03-MAY-18	196.79
04-MAY-18	161.66
05-MAY-18	118.13
06-MAY-18	126.05
07-MAY-18	140.81
08-MAY-18	130.26
09-MAY-18	139.73
10-MAY-18	141.56
11-MAY-18	138.39
12-MAY-18	126.52
13-MAY-18	134.45
14-MAY-18	131.41
15-MAY-18	131.45
16-MAY-18	136.23
17-MAY-18	129.41
18-MAY-18	139.24
19-MAY-18	137.34
20-MAY-18	146.31
21-MAY-18	152.48
22-MAY-18	155.08
23-MAY-18	142.05
24-MAY-18	140.39
25-MAY-18	138.33
Limit	350

NOx Reading in CPCB Portal	
Industry	BHARAT OMAN REFINERIES LTD
Station	Stack_2_MSB/HOH
Parameter	(NOX)
Avg Period	15 min Avg
Date	27-Mar-2018
Date & Time	NOX(mg/Nm3)
27-MAR-18 10:00	104.32
27-MAR-18 10:15	105.05
27-MAR-18 10:30	105.24
27-MAR-18 10:45	104.9
27-MAR-18 11:00	105.75
27-MAR-18 11:15	106.57
27-MAR-18 11:30	106.55
27-MAR-18 11:45	107.05
27-MAR-18 12:00	106.93
27-MAR-18 12:15	107.44
27-MAR-18 12:30	106.77
27-MAR-18 12:45	106.56
27-MAR-18 13:00	106.13
Limit	350

CPCB Monitoring  
time on the day

CPCB Monitoring time at BORL Site from 11:45 am to  
12:30 pm

SO <sub>2</sub> reading in CPCB Portal		
Industry	BHARAT OMAN REFINERIES LTD	
Station	Stack CPP Boiler_2	
Parameter	(SO <sub>2</sub> )	
Avg Period	Daily Avg	
Period	From: 26-Mar-2018 To: 25-May-2018	
Date	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	Remarks
26-MAR-18	338.72	
27-MAR-18	269.18	
28-MAR-18	286.11	
29-MAR-18	0	Boiler Under Shut Down
30-MAR-18	0	
31-MAR-18	0	
01-APR-18	0	
02-APR-18	0	
03-APR-18	0	
04-APR-18	0	
05-APR-18	11.37	
06-APR-18	80.56	
07-APR-18	416.44	
08-APR-18	250.23	
09-APR-18	274.39	
10-APR-18	342.62	
11-APR-18	266.83	
12-APR-18	430.02	
13-APR-18	390.74	
14-APR-18	349.7	
15-APR-18	343.05	
16-APR-18	345.5	
17-APR-18	321.27	
18-APR-18	365.05	
19-APR-18	321.87	
20-APR-18	279.14	
21-APR-18	263.11	
22-APR-18	305.59	
23-APR-18	307.32	
24-APR-18	359.15	
25-APR-18	391.74	
26-APR-18	366.52	
27-APR-18	350.98	
28-APR-18	332.48	
29-APR-18	347.36	
30-APR-18	405.47	
01-MAY-18	169.89	
02-MAY-18	2.48	Boiler Under Shut Down
03-MAY-18	2.34	
04-MAY-18	2.19	
05-MAY-18	2.16	
06-MAY-18	2.17	
07-MAY-18	2.08	
08-MAY-18	2.08	
09-MAY-18	2.11	
10-MAY-18	2.11	
11-MAY-18	2.05	
12-MAY-18	1.98	
13-MAY-18	1.93	
14-MAY-18	30.28	
15-MAY-18	294.22	
16-MAY-18	368	
17-MAY-18	347.99	
18-MAY-18	353.34	
19-MAY-18	281.91	
20-MAY-18	357.91	
21-MAY-18	306.91	
22-MAY-18	308.24	
23-MAY-18	305.25	
24-MAY-18	348.59	
25-MAY-18	348.34	
Limit	600	

**HAZARDOUS WASTE DISPLAY BOARD INSTALLED INFRONT OF STORAGE SHED**

