



REF: IOC/BGR/ENV/MSQ/MoEF&CC/2017-18/02

Date: 12.06.2018

The Chief Conservator of Forests
Regional Office, North East Region
Ministry of Environment & Forests & Climate Change
Law-U-SIB, Lumbatngen, Near M.T.C. Workshop,
Shillong – 793021

Subject: Half yearly Report for the period of 1st October 2017 to 31st March 2018 for MS Quality Improvement Project

Dear Sir,

With reference to above, we are enclosing the Six Monthly Report for the period of **1st October 2017 to 31st March 2018** for your kind perusal. The reports are being sent as per EIA Rules, 2006 on the “Environmental Clearances” issued by MoEF&CC to Bongaigaon Refinery, (BGR) for “**MS Quality Improvement Project**”.

Thanking you,

Yours faithfully,

(A.Basumatary)
DGM (HSE)

Copy to:

1. Member Secretary, Pollution Control Board, Assam
Bamunimaidam, Guwahati - 781 021
2. Zonal Officer, Central Pollution Control Board
Eastern Zonal Office, 'TUM-SIR', Lower Motinagar,
Near Fire Brigade H.Q., Shillong – 793014

Half yearly Report for MS Quality Improvement Project

(1st October 2017 to 31st March 2018)



Submitted by:

Indian Oil Corporation Limited

Bongaigaon Refinery

P.O: Dhaligaon District: Chirang. Assam

Compliance Status w.r.t. Env. Clearance of MS Quality Improvement Project

Six Monthly Status Report for the period (1st October 2017 to 31st March 2018)

Environmental Clearance for “MS Quality Improvement Project (Light Naphtha Isomerisation using existing Xylene Isomerisation unit)” at Dhaligaon, Chirang, Assam by M/s Bongaigaon Refinery & Petrochemicals Ltd. vide MoEF letter No. J.11011/1171/2007-IA-II (I) dated 5/02/2008.

Project was commissioned in September, 2011

Sl. No	Conditions	Status
1.	General conditions and Compliance status of MS Quality improvement Project.	Annexure- A
2.	Six monthly Stack Monitoring/ Air Quality Data	Furnished in Appendix-A1
3.	Six monthly effluent discharged Quality	Furnished in Appendix-A2
4.	Tree Plantation Data	Furnished in Appendix-A3
5.	Additional Information	Furnished in Appendix-A4
6.	Fugitive Emission Data	Furnished in Appendix-A5
7.	Annual return of hazardous waste	Furnished in Appendix-A6(a)
8.	Authorization from PCBA under Hazardous Waste (Management, Handling and Transboundary Movement Rules 2008)	Furnished in Appendix-A6(b)
9.	Details of Waste water treatment and disposal system	Furnished in Appendix-A7
10.	Quarterly Noise Survey Report.	Furnished in Appendix-A8
11.	Status of Rainwater Harvesting	Furnished in Appendix-A9
12.	Screen Shot of IOCL Website upload of report	Furnished in Appendix-A10
13.	Organ gram of HSE Department	Furnished in Appendix-A11
14.	Gazette Notification of BGR Quality Control laboratory (QC Lab) approval under Environment (Protection) Act	Furnished in Appendix-A12
15.	Employees Occupational Health Check up Status	Furnished in Appendix-A13
16.	Flare system.	Furnished in Appendix-A14

Annexure- A

SI No	Specific Conditions	Compliance Status
i	The company shall comply with new standards/norms that are being proposed by the CPCB for petrochemical plants and refineries.	Basic Design Engineering Package / Process Package have been prepared in line with the revised standards / norms for Oil Refinery and being implemented in the project.
ii	The company shall comply with all the stipulations of environmental clearance issued vide File No. – 11011/375/2006-IA.II (I) dated 22 nd March, 2007.	BGR had advertised “Public Notice” in three local news papers that are widely circulated in the region namely “The Assam Tribune” English daily, “Asomiya Pratidin” an Assamese daily & “Sanseyari Bodosa” a Bodo daily on 26 th February, 2008
iii	The process emissions (SO ₂ , NO _x , HC, VOCs and Benzene) from various units shall conform to the standards prescribed by the Assam State Pollution Control Board from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Detailed Engineering for the project was carried out considering the revised standards / norms for Oil Refinery and conditions /guidelines issued by SPCB. Environment control facilities are being installed to achieve the stipulated standards.
iv	The improvement project shall be through the retrofitting of existing xylenes fractionation, Isomerisation and parex units and within the existing land.	The improvement project is only through the retrofitting of existing Xylene Fractionation, Isomerisation and Parex units and within the existing land.
v	Quarterly monitoring of fugitive emissions shall be carried out as per the guidelines of CPCB by fugitive emission detectors (GMI Leak Surveyor) and reports shall be submitted to the Ministry's regional office at Shillong.	Quarterly monitoring of fugitive emissions is carried out. The quarterly reports for the period of 1st October 2017 to 31st March 2018 are attached as Appendix –A5
vi	For control of fugitive emission all unsaturated hydro carbon will be routed to the flare system and the flare system shall be designed for smoke less burning.	Taken care during implementation of the project.
vii	The company shall strictly follow all the recommendation mentioned in the charter on corporate responsibility for environmental protection (CREP).	The company followed all the recommendation mentioned in the charter on Corporate Responsibility for Environmental Protection (CREP) prior to coming of the Revised Standards applicable to refinery for Environment Protection.
viii	Occupational health surveillance of worker shall be done on a regular basis and records maintained as per the Factory Act.	Already in compliance. The quarterly reports for the period of 1st October 2017 to 31st March 2018 are attached as Appendix –A13

Sl. No.	Specific Conditions	Compliance Status
ix	Greenbelt shall be developed to mitigate the effect of fugitive emission all around the plant in a minimum 30% plant area in consultation with DFO as per CPCB guidelines.	Greenbelt is already existed. More than 33% of plant area is having green cover. Tree Census has been carried out through DFO Chirang District in 2013 where 84545 Nos. of grown up trees were enumerated. The company is planting around 2000 nos. of tree every year as a part of its corporate MOU. In the year 2017-18, till 30 th September BGR has planted 29600 nos. of trees
x	The Company shall make the suitable arrangement for disposal of catalyst waste and alumina balls. The report of waste disposal shall be submitted to Ministry's Regional Office at Shillong.	Complied Please refer Appendix-A6(a)
xi	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.	Complied
xii	To prevent fire and explosion at Oil and Gas facility, potential ignition sources should be kept to a minimum and adequate separation distance between potential ignition sources and flammable material shall be in place.	All necessary precautions are in place as per OISD Guidelines

B. General Conditions

S. No.	General Conditions	Compliance status
i	The project authorities must strictly adhere to the stipulations made by the concerned State Pollution Control Board (SPCB) and the State Government and any other statutory body.	Taken care during implementation of the project.
ii	No further expansion or modification in the project shall be carried without prior approval of the Ministry of Environment and Forests. In case of deviations or alternations in the project proposal from those submitted to the Ministry for clearance, a fresh reference shall be made to the Ministry.	Noted
iii	At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system, the respective well site should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved. Provision of adequate height of stack attached to DG sets & flare is to be done.	Taken care during implementation of the project. Emission data for the period of 1st October 2017 to 31st March 2018 are attached as Appendix –A1. No additional DG set was installed for the project.
iv	Wastewater shall be properly collected and treated so as to conform to the standards prescribed under EP Act & Rules and mentioned in the Consents provided by the relevant SPCB.	Waste water disposal system designed to conform to this norm. Detail of Waste water treatment and disposal system is attached as Appendix-A7 . Treated Effluent and discharge water quality from refinery is attached as Appendix-A2

S. No.	General Conditions	Compliance status
v	The overall noise levels in and around the premises shall be limited within the prescribed standards (75 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).	Taken care during implementation of the project. Quarterly Noise Survey is being carried out regularly. Quarterly Reports for the period of 1st October 2017 to 31st March 2018 are attached as Appendix –A9.
vi	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended in 2008 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the expansion project, if required. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.	Complied
vii	Disposal of hazardous wastes shall be as per the Hazardous Wastes (Management and Handling) Rules, 2008. Authorization from the State Pollution Control Board must be obtained for collections / treatment/storage/ disposal of hazardous wastes.	Complied. Authorization from PCBA for Hazardous Waste (Management, Handling and Transboundary Movement Rules 2008) is attached as Appendix –A6(b)
viii	The project authorities will provide adequate funds as non-recurring and recurring expenditure 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.	Sufficient fund is being made available at the time of implementation and operational phase of the project.
ix	The company shall develop rain water harvesting structures to harvest the runoff water for recharge of ground water.	16 nos. of Rooftop Rainwater Harvesting Projects has been implemented covering roof area of around 17440 SQM having potential volume of rainwater harvesting around 46727M ³ . The harvested rainwater for ground water recharge is through recharge pits and recharge trench on the basis of technical details and guidelines from Central Ground Water Board; North Eastern Region, Guwahati. Details attached as Appendix –A9
x	The stipulated conditions will be monitored by the concerned Regional Office of this Ministry /Central Pollution Control Board/State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly. It will also be displayed on the Website of the Company.	Complied

Sr. No.	General Conditions	Compliance status
xi	<p>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 & 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 concerned Regional office of this Ministry.</p>	<p>BGR had advertised "Public Notice" in three local news papers that are widely circulated in the region namely "The Assam Tribune" English daily, "Asomiya Pratidin" an Assamese daily & "Sanseyari Bodosa" a Bodo daily on 26th February, 2008. The information is already submitted to statutory agencies.</p>
xii	<p>A separate environment management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.</p>	<p>BGR is having a separate environmental management cell of HSE department and full fledged laboratory to carry-out environment management and monitoring functions.</p> <p>Organogram of HSE Department is attached as Appendix-A11.</p> <p>BGR Quality Control laboratory (QC Lab) is NABL accredited and CPCB approved under Section 12& 13 of Environment (Protection) Act 1986 and notified in the Govt. of India Gazette no. 272 dated July 4, 2016 vide notification number Legal 42(3)/ 87 dated 7th March 2016. (Copy attached as Appendix-A12)</p>
xiii	<p>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</p>	<p>Last capitalization date was 08/01/2015:</p>

3.0

APPENDIX –A1

STACK MONITORING DATA: (1st October 2017 to 31st March 2018)

A. SO₂ Emission (mg/Nm³):

Stacks	Emission Std.	Observed value		
		Min	Avg.	Max
CDU-I	For F.O. = 1700 For F.G. = 50	22	200	854
CDU-II		9	192	423
DCU-I		9	123	367
DCU-II		8	230	531
CPP		20	249	714
Reformer		9	12	14
HO-1		10	13	16
Isomerisation		9	13	15
DHDT		14	15	18
HGU		1	4	48
SRU		85	427	995
GTG		3	25	169

B. NO_x Emission (mg/Nm³):

Stacks	Emission Std.	Observed value		
		Min	Avg.	Max
CDU-I	For F.O. = 450 For F.G. = 350	20	46	92
CDU-II		31	32	36
DCU-I		3	41	58
DCU-II		7	87	114
CPP		166	257	827
Reformer		57	100	110
HO-1		58	76	126
Isomerisation		54	69	78
DHDT		13	85	239
HGU		3	23	134
SRU		No Analyser		
GTG		12	30	85

C. PM Emission (mg/Nm³)

Stacks	Emission Std.	Observed value		
		Min	Avg.	Max
CDU-I	For F.O. = 100 For F.G. = 10	1.1	5.2	12.5
CDU-II		0.1	4.8	13.7
DCU-I		2.4	7.5	10.0
DCU-II		0.8	2.3	35.6
CPP		1.1	2.7	7.9
Reformer		1.2	1.2	1.3
HO-1/2		4.5	5.3	6.4
Isomerisation		0.2	0.8	2.5
DHDT		0.9	2.1	2.9
HGU		0.2	0.7	8.0
SRU		16.6	24.2	96.8
GTG		1.1	1.2	1.9

STACK MONITORING DATA: (1st October 2017 to 31st March 2018)

D. CO Emission (mg/Nm³)

Stacks	Emission Std.	Observed value		
		Min	Avg.	Max
CDU-I	For F.O. = 200 For F.G. = 150	3.5	21.0	106.2
CDU-II		0.8	37.4	118.1
DCU-I		9.0	22.2	34.4
DCU-II		1.0	77.1	135.7
CPP		23.4	34.4	107.0
Reformer		17.6	18.7	20.6
HO-1/2		16.4	18.7	32.2
ISOMERISATION		17.6	18.7	20.6
DHDT		7.2	34.8	136.0
HGU		4.0	17.6	20.0
SRU		2.5	20.8	29.1
GTG		1.1	2.9	4.9

E. Ni + V Emission (mg/Nm³):

Stacks	Emission Std.	Observed value		
		Min	Avg.	Max
CDU-I	For F.O. = 5	BDL	BDL	BDL
CDU-II		BDL	BDL	BDL
DCU-I		BDL	BDL	BDL
DCU-II		BDL	BDL	BDL
CPP		BDL	BDL	BDL
Reformer		BDL	BDL	BDL
HO-1/2		BDL	BDL	BDL
ISOMERISATION		BDL	BDL	BDL
DHDT		BDL	BDL	BDL
HGU		BDL	BDL	BDL
SRU		BDL	BDL	BDL
GTG		BDL	BDL	BDL

AMBIENT AIR QUALITY AROUND BGR COMPLEX
(Average of monthly sample Schedule – VII)
(1st October 2017 to 31st March 2018)

	Station	Continuous Monitoring Station	Near Tube Well No.14	Near LPG Bottling plant	Rural Health Centre	Bartala Rail Gate	Near TW No.7 in Township
1	SO₂ (Std. 50/80 µg/m³)						
	Min	1.28	4.2	4.5	4.5	4.5	4.2
	Average	9.88	5.9	6.3	6.9	6.8	5.7
	Max	22.27	7.8	8.2	8.8	8.5	6.8
	No. of observation	Continuous	52	52	52	52	52
2	NO₂ (Std. 40/80 µg/m³)						
	Min	9.0	9.0	9.5	9.2	9.2	9.2
	Average	9.5	11.0	11.3	11.9	11.3	10.3
	Max	10.3	13.5	13.8	14.8	13.5	11.8
	No. of observation	Continuous	52	52	52	52	52
3	PM-10 (Std. 60/100 µg/m³)						
	Min	29.0	32.0	36.0	42.0	45.0	35.0
	Average	30.1	49.5	52.2	60.1	57.8	49.1
	Max	35.2	68.0	68.0	76.0	74.0	60.0
	No. of observation	Continuous	52	52	52	52	52
4	PM-2.5 (Std. 40/60 µg/m³)						
	Min	1.3	17.0	17.0	20.0	22.0	15.0
	Average	7.9	25.9	26.9	30.9	29.3	24.3
	Max	32.4	36.0	35.0	39.0	38.0	32.0
	No. of observation	Continuous	52	52	52	52	52
5	Ammonia (Std. 100/400 µg/m³)						
	Min	4.1	6.5	6.5	6.8	6.5	6.2
	Average	4.7	9.1	9.4	10.5	10.1	8.0
	Max	5.5	12.2	12.5	13.2	13.5	11.5
	No. of observation	Continuous	52	52	52	52	52
6	Pb (Std. 0.5/1.0 µg/m³)						
	Min		BDL	BDL	BDL	BDL	BDL
	Average		BDL	BDL	BDL	BDL	BDL
	Max		BDL	BDL	BDL	BDL	BDL
	No. of observation		52	52	52	52	52

7	Arsenic (As) (Std. 6 ng/m³)						
	Min		BDL	BDL	BDL	BDL	BDL
	Average		BDL	BDL	BDL	BDL	BDL
	Max		BDL	BDL	BDL	BDL	BDL
	No. of observation		52	52	52	52	52
8	Ni (Std. 20 ng/m³)						
	Min		BDL	1.2	1.2	1.5	BDL
	Average		BDL	1.2	2.0	2.1	BDL
	Max		BDL	1.2	2.8	2.6	BDL
	No. of observation		52	52	52	52	52
9	CO (Std. 2/4 mg/m³)						
	Min	0.01	BDL	0.1	0.2	0.1	BDL
	Average	1.1	BDL	0.1	0.2	0.2	BDL
	Max	3.9	BDL	0.1	0.3	0.3	BDL
	No. of observation	Continuous	52	52	52	52	52
10	Ozone (Std.100/180 µg/m³ for 8 hrs/1 hr)						
	Min	18.4	8.0	8.0	6.0	8.0	6.0
	Average	35.8	14.0	14.1	14.1	13.0	12.1
	Max	49.0	25.0	25.0	25.0	24.0	22.0
	No. of observation	Continuous	52	52	52	52	52
11	Benzene (Std. 5 µg/m³)						
	Min	0.01	BDL	0.2	BDL	BDL	BDL
	Average	0.25	BDL	0.2	BDL	BDL	BDL
	Max	2.23	BDL	0.2	BDL	BDL	BDL
	No. of observation	Continuous	52	52	52	52	52
12	Benzo (a) Pyrene (Std. 1 ng/m³)						
	Min		BDL	BDL	BDL	BDL	BDL
	Average		BDL	BDL	BDL	BDL	BDL
	Max		BDL	BDL	BDL	BDL	BDL
	No. of observation		52	52	52	52	52

Average of Six Stations												
Parameter	SO ₂	NO ₂	PM-10	PM-2.5	NH ₃	Pb	As	Ni	Benzo (a) Pyrene	CO	C ₆ H ₆	O ₃
Unit	µg/m ³					ng/m ³			mg/m ³	µg/m ³		
NAAQ Std. 2009	50/80	40/80	60/100	40/60	100/400	0.5/1.0	Max 6	Max 20	Max 1	2/4	Max 5	100/180
Min	1.3	9.0	29.0	1.3	4.1	BDL	BDL	1.2	BDL	0.01	0.01	6.0
Average	6.9	10.9	49.8	24.2	8.6	BDL	BDL	1.8	BDL	0.4	0.20	17.2
Max	22.3	14.8	76.0	39.0	13.5	BDL	BDL	2.8	BDL	3.9	2.23	49.0

4.0

APPENDIX-A2

Effluent Discharged (Figure in M³/Hr):(1st October 2017 to 31st March 2018)

A	Industrial Effluent M ³ /Hr	164.53
B	Domestic Effluent from BGR Township M ³ /Hr	46.47
C	Total Effluent Treated (A + B) M ³ /Hr	211.0
D	Treated Effluent Reused M ³ /Hr	207.19
E	Effluent Discharged M ³ /Hr	3.81
F	M ³ of Effluent discharged for 1000 tons of Crude processed	13.58

1. Treated Effluent Quality

(1st October 2017 to 31st March 2018)

Sl. No	Parameter	Std,2008	Min	Avg.	Max
1	p ^H value	6.0 - 8.5	6.5	7.4	8.5
2	Oil and Grease, mg/l	5.0	1.0	1.1	1.5
3	Bio-Chemical Oxygen Demand (3 Day at 27°C), mg/l	15.0	4.0	8.6	14.8
4	Chemical Oxygen Demand (COD), mg/l	125.0	40.0	67.8	121.0
5	Suspended solids, mg/l	20.0	4.0	12.3	19.5
6	Phenolic compounds (as C ₆ H ₅ OH), mg/l	0.35	0.010	0.037	0.330
7	Sulphide (as S), mg/l	0.50	0.08	0.16	0.42
8	CN mg/l	0.20	BDL	BDL	BDL
9	Ammonia as N, mg/l	15.0	1.05	1.15	1.24
10	TKN, mg/l	40.0	4.20	4.68	5.20
11	P, mg/l	3.0	0.26	0.27	0.28
12	Cr (Hexavalent), mg/l	0.10	-	BDL	-
13	Cr (Total), mg/l	2.0	-	BDL	-
14	Pb, mg/l	0.10	-	BDL	-
15	Hg, mg/l	0.01	-	BDL	-
16	Zn, mg/l	5.0	0.18	0.225	0.280
17	Ni, mg/l	1.0	-	BDL	-
18	Cu, mg/l	1.0	0.03	0.035	0.040
19	V, mg/l	0.20	-	BDL	-
20	Benzene, mg/l	0.10	-	BDL	-
21	Benzo (a) pyrene, mg/l	0.20	-	BDL	-

EFFLUENT QUALITY

2. Final Outlet (From the Complex) Effluent Quality

(1st October 2017 to 31st March 2018)

Sl. No.	Parameter	Std 2008	Min	Avg.	Max
1	p ^H value	6.0 - 8.5	6.5	7.3	9.0
2	Oil and Grease, mg/l	5.0	1.0	1.5	2.2
3	Bio-Chemical Oxygen Demand (3 Days at 27° C), mg/l	15.0	3.6	8.2	15.0
4	Chemical Oxygen Demand (COD), mg/l	125.0	45.0	64.0	91.0
5	Suspended Solids, mg/l	20.0	4.0	10.2	19.0
6	Phenolic compounds (as C ₆ H ₅ OH), mg/l	0.35	0.02	0.08	0.30
7	Sulphide (as S), mg/l	0.50	0.1	0.3	0.5
8	CN, mg/l	0.20	BDL	BDL	BDL
9	Ammonia as N , mg/l	15.0	2.10	2.48	2.80
10	TKN, mg/l	40.0	4.80	5.25	5.60
11	P, mg/l	3.0	0.24	0.26	0.28
12	Cr (Hexavalent), mg/l	0.10	-	BDL	-
13	Cr (Total), mg/l	2.0	-	BDL	-
14	Pb, mg/l	0.10	-	BDL	-
15	Hg, mg/l	0.01	-	BDL	-
16	Zn, mg/l	5.0	0.3	0.283	0.3
17	Ni, mg/l	1.0	-	BDL	-
18	Cu, mg/l	1.0	0.04	0.045	0.05
19	V, mg/l	0.20	-	BDL	-
20	Benzene, mg/l	0.10	-	BDL	-
21	Benzo (a) pyrene, mg/l	0.20	-	BDL	-

5.0

APPENDIX - A3

Tree Plantation (1st October 2017 to 31st March 2018)

The entire area inside BGR covers with Greenery through massive plantation activities. Through massive plantation work and by giving protection to natural forest growth in side BGR premises, the entire area has become green. The entire plant area where processing plant facilities do not exist has a green cover. This helps in reduction of noise and air pollution level in one hand while on the other hand provides protection to ecological features of the area. The refinery has an excellent quality environment around its complex. Natural greenery can be seen all around the complex and in all seasons of the year.

Tree Census was done by Divisional Forest Office, Chirang. As per census, 84545 numbers of plants which include trees including shrubs, ocular estimated 33000 numbers bamboos in 1150 no. bamboo culms and also trees planted by BGR during 2003 to 2012.

During, 1st April 2017 to 31st March 2018 BGR has planted 29600 nos. of trees.



NEW GREEN BELT IN OLD DEBRIS YEARD INSIDE THE COMPLEX AS ON April'18



IOCL, BGR TOWNSHIP PLANTATION

Tree Plantation



IOCL, BGR TOWNSHIP PLANTATION



BIRHANGAON GOVT. STATE DISPENSARY PLANTATION

APPENDIX – A 4

Additional Information (1st October 2017 to 31st March 2018)

Effluent reused during the period was around **98.19 %** of the total effluent treated which includes plant effluent as well as BGR Township sewer.

Under the Leak Detection and Repair programme (LDAR), BGR is conducting quarterly Fugitive Emission Survey. During the period from **1st October 2017 to 31st March 2018**, **23519** potential leaky points checked and **165** Leaky points detected and rectified. By following LDAR program in true spirit, the company could not only avoid potential loss of **50.29** MTA (approx.) of light Hydrocarbon to the atmosphere through fugitive sources but also able to keep healthy work environment in the plants.

To ensure work area quality and health of equipments, quarterly noise survey was conducted covering all the operating plants, control rooms and ambient surrounding the BGR. During **1st October 2017 to 31st March 2018**, Noise Survey for two quarters of 2016 -17 has been completed and no abnormality was reported.

As a measure of Haz. Waste Management, M/s Balmer Lawrie & Co. Limited was awarded the contract of mechanized treatment of tank bottom sludge. Melting pit facility is available for recovering oil from oily sludge.

One old slurry thickener from Petrochemical section was converted to confined space bio-remediation reactor to treat oily sludge with help from IOCL-R&D. The process of bio-remediation started from July 2017 and at present per batch approximately 35 m³ of oily sludge is being processed.



BIO-REMEDICATION FACILITY

Further two more Rain Water Harvesting (Ground Water Recharging) schemes in BGR Township have been implemented during 2016-17.

6.0

APPENDIX –A5

Quarterly Fugitive emission Data 1st October 2017 to 31st March 2018



FUG EMISSION DATA
3RD QTR 17-18.docx



FUG EMISSION DATA
4TH QTR 17-18.docx

8.0

APPENDIX-A6 (a)



Haz Waste Return
FORM-4 (2016-17).doc

9.0

Annexure –A6 (b)

Authorization from PCBA for Hazardous Waste

(Management, Handling and Transboundary Movement Rules 2008)



**Consent under HW
Rules 2008.pdf**

10.0

APPENDIX-A7

Detail of Waste water treatment and disposal system.



ETP Description.pdf

11.0

ANNEXURE-A8

Quarterly Noise Survey Data

HSE (ENVIRONMENT) DEPARTMENT



**NOISE SURVEY DATA
3RD QTR 17-18.docx**



**NOISE SURVEY DATA
4TH QTR 17-18.docx**

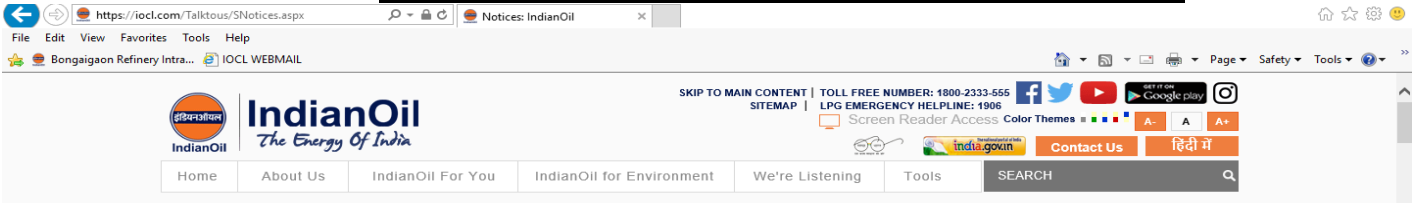
12.0

ANNEXURE-A9
Rain Water Harvesting Data

Status of Rainwater Harvesting				
Sl. No	Location	Roof top Area In M ²	Volume of Rainwater harvesting potential (CUM)	Year of implementation
Implemented				
1	Rainwater Harvesting at Manjeera Guest House	677	1733	2008-09
2	Rainwater Harvesting at Deoshri Guest House	581	1487	2008-09
3	Mandir Complex	833	2132	2011-13
4	MANAS GUEST HOUSE	639	1636	2011-13
5	BRPL VIDYALAYA	1361	3484	2011-13
6	DPS BLOCK-I	704	1802	2011-13
7	DPS BLOCK-II	1810	4634	2011-13
8	Artificial Recharge thru' TW # 3 Roof Top water from Canteen, Cycle/Scooter Shades, CISF bldg. etc.	3134	8023	2011-13
9	Rainwater Harvesting from roof top area of Champa Club	1080	3100	2013-14
10	Rainwater Harvesting from roof top area of Refinery Club Cum Community Centre	2833	8132	2013-14
11	Rain Water Harvesting at CISF ADM Building	825	2368	2014-15
12	Rain Water Harvesting at BGREU Office	275	789	2014-15
13	CISF Barrack	1050	3013	2015-16
14	BGR Community Hall	650	1865	2015-16
15	Gallery of Football Stadium (BGR Township)	988	2529	2016-17
16	Gallery of Volleyball Stadium (BGR Township)			
Total		17440	46727	

Screen Shot of IOCL Website upload of report

Link: <https://iocl.com/Talktous/SNotices.aspx>



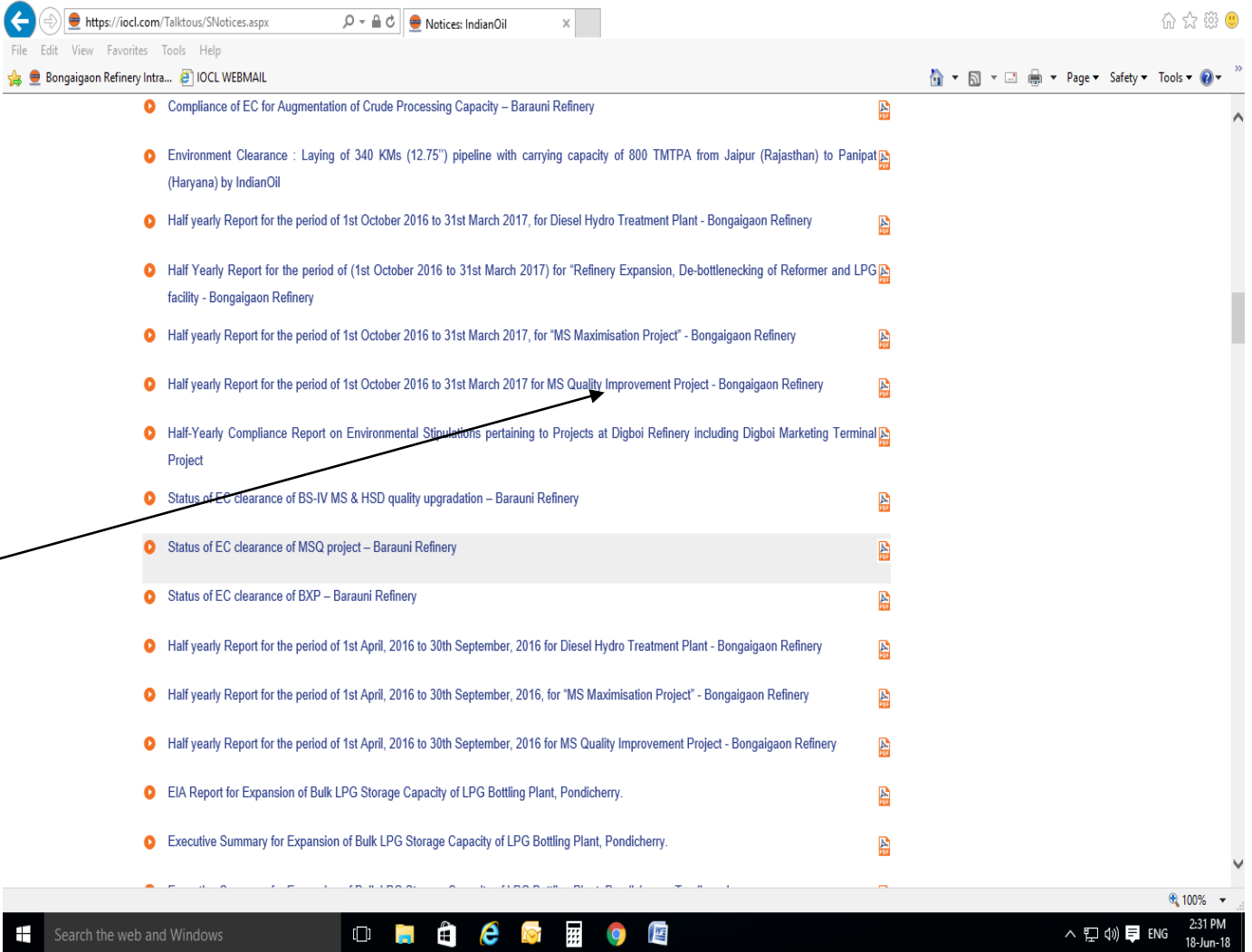
> We are Listening > Statutory Notices

Statutory Notices

- Compliance Report on Terms & Conditions of Environmental Clearance for POL Depot at Imphal, Malom Manipur new!
- Compliance of EC for MSQ project (Oct'17-Mar'18) – Barauni Refinery
- Compliance of EC for Augmentation of Crude Processing Capacity (Oct'17 - Mar'18) – Barauni Refinery
- Compliance of EC for BS-IV MS & HSD quality upgradation (Oct'17- Mar'18) – Barauni Refinery
- Compliance of EC for BXP (Oct'17- Mar'18) – Barauni Refinery
- Compliance of EC for CRU project (Oct'17-Mar'18) – Barauni Refinery

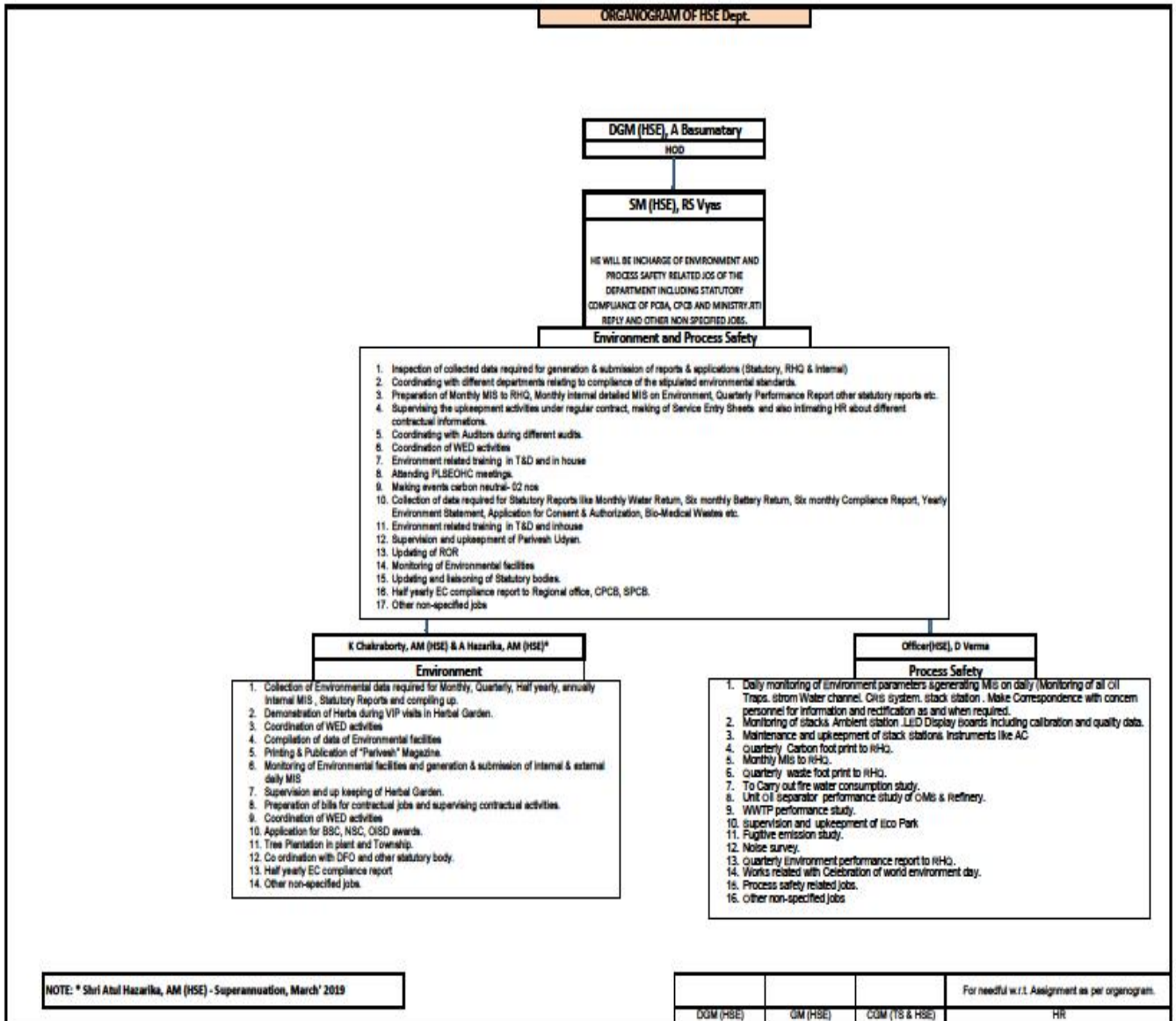
We are Listening

- > Help
- > PaHal-Related Queries
- > Other LPG Queries
- > Queries on Fuel Stations



APPENDIX-A11

HSE Organogram of IOCL-BGR




ANNEXURE-A12

Gazette Notification of BGR Quality Control laboratory (QC Lab) Approval under Environment (Protection) Act 1986.

Govt. of India Gazette no 272 dt: 4/7/2016

संख्या 12-डी-272-2016-12
RPD/SO D.L. 272/2016



भारत का राजपत्र

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केन्द्रीय प्रदूषण नियंत्रण बोर्ड
अभिसूचना
नई दिल्ली, 7 मार्च, 2016

श्री. विधि 42 (1986)—संविधान (संशोधन) अधिनियम, 1986 (1986 का 28) की धारा 29 के अधीन जारी अधिनियम सं. 142 (4) द्वारा 21 फरवरी, 1986 के अध्याय 4 के मातृ अधिनियम 12 की उपधारा 1 के अन्तर्गत और धारा 13 के अधीन प्रथम अधिनियम का प्रथम चरण रूप, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, परीक्षा प्रथम, एन/1/2016 संख्या, दिनांक-14/03/16 (आदर्श सं.) एन/1 की वही अधिनियम के अंतर्गत (2) में विनिर्दिष्ट परीक्षाओं को एक अधिनियम और इसके अधीन से विधि 42 के अधीन अधिनियम (1986 संशोधन) की वही चरण अर्थात् अनुसूची (1) के अधिनियमों की रूप में और (3) अधिनियम के अंतर्गत (2) में विनिर्दिष्ट अधिनियमों को अधिनियम के विधि 42 में चरण अर्थात् एन/1/2016 संख्या, दिनांक-14/03/16 (आदर्श सं.) के अधिनियम संख्या के अधिनियम अधिनियम संख्या (1) अधिनियम के रूप में प्रकाशित किया है।

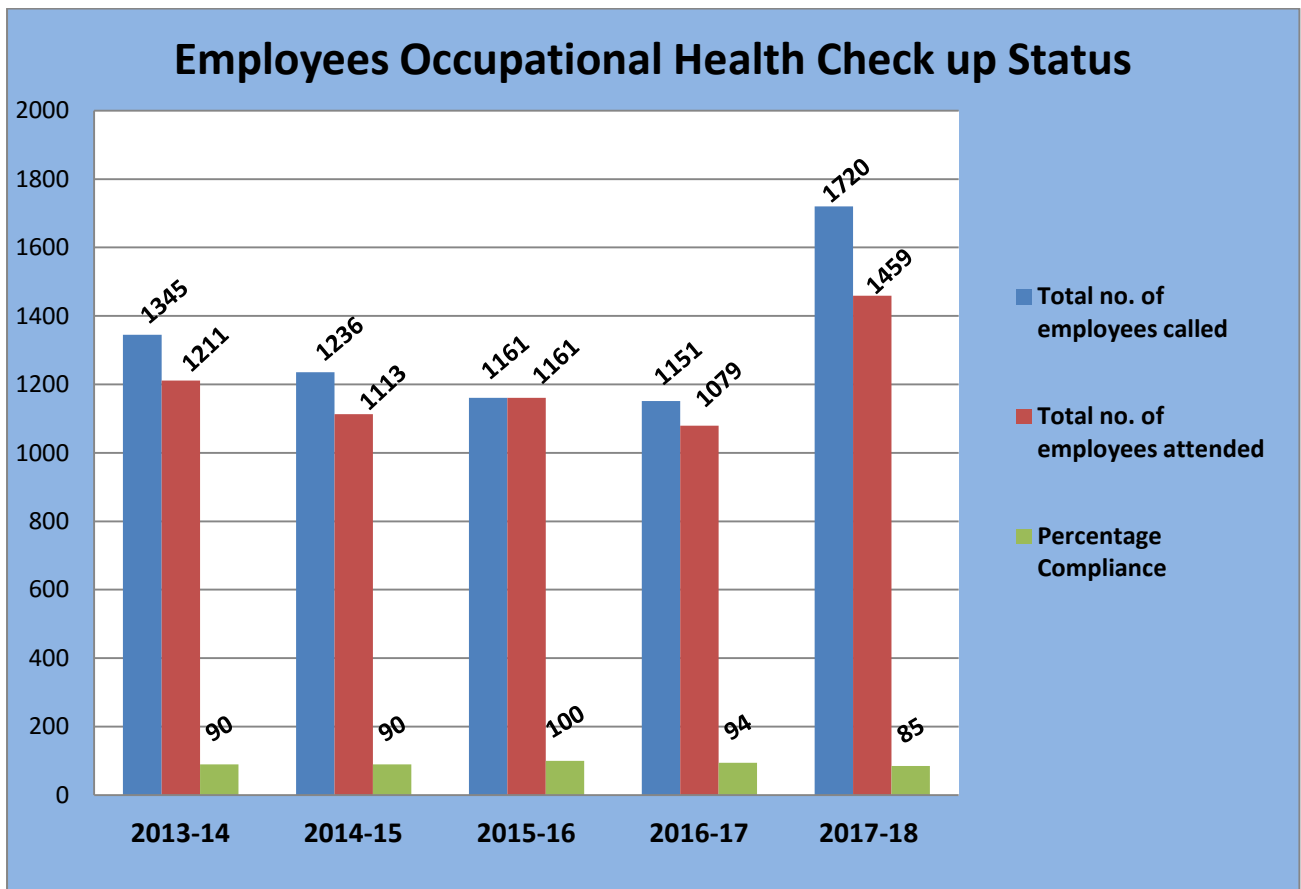
दिनांक 14 मार्च, 2016 की अधिसूचना संख्या गि/42/2016, की रूप संख्या 189 और अन्य संबंधित अधिनियमों के मातृ अधिनियम 42 के अधिनियमों को जोड़ा गया है।

क्र.सं.	परीक्षाओं का नाम	दरभारी अधिनियम का नाम	मान्यता हेतु वैधानिक संस्था
1	2	3	4
16C.	पर्यावरण प्रदूषण अधिनियम 1986 (अधिनियम सं. 142) अधिनियम संख्या 9/16 (अधिनियम सं. 142/2016)	1. डॉ. एन. एन. डी. एन. संयुक्त प्रयोगशाला, कोयंबूर 2. डॉ. टी. एन. एन. पी. एन. प्रयोगशाला, कोयंबूर 3. डॉ. के. एन. पी. एन., परीक्षा-प्रयोगशाला	राज्य पर्यावरण प्रदूषण नियंत्रण बोर्ड, कोयंबूर, महाराष्ट्र। कोयंबूर, महाराष्ट्र। कोयंबूर, महाराष्ट्र।

11/11/16/2016
11

Appendix-A13

Employees Occupational Health Check up Status



17.0

Appendix-A14

Flare system.

