

To,
The Additional Chief Conservator of Forest (C),
Ministry of Environment, Forests & climate
change, 4th Floor, E&F Wing,
Kendriya Sadan, Koramangala,
Bangaluru-560 034.

Date : 27th May 2019
From : Director – Goa Plant
C. A. Menezes
Phone : 0832 – 2347101

E mail : menezes.c.1@pg.com
Letter no. : EHS/19/39

**Subject : Six monthly compliance reports (for the period
01.10.2018 to 31.03.2019)**

**Reference: MoEF No. J-11011/1311/2007-IA-II (I) dated 11.02.09 (Expansion of
bulk drug unit at Plot no. 11, Marvasodo, Usgaon, Ponda, Goa by
M/s. Merck Limited – Environmental Clearance reg.)**

Dear Sir,

We are sending herewith six-monthly compliance reports (for the period
01.10.2018 to 31.03.2019) for your kind perusal. We are also attaching
compilation of reports carried out during the period as annexures and CD
version of the report.

Please find below the other details required by you.

Name & contact details of the responsible person:

1. Name: Mr. C. A. Menezes, Director Goa Plant

Address: Plot no. 11/1, Marvasodo, Usgaon, Goa – 403407.

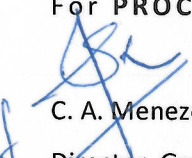
Email: menezes.c.1@pg.com

Phone: 0832 2347101; 9823344052. Company Website: www.pg.com

Thanking you,

Yours faithfully,

For **PROCTER & GAMBLE HEALTH LIMITED**


C. A. Menezes

Director, Goa Plant – Procter & Gamble Health Limited

Encl: a/a

CC: 1. Additional Director (MoEF, New Delhi)

2. Goa State Pollution Control Board, Panaji.

Procter & Gamble Health Limited

(Formerly known as Merck Limited)

CIN: L99999MH1967PLC013726

Registered Office: Godrej One, 8th Floor,
Pirojshanagar, Eastern Express Highway, Vikhroli East,
Mumbai 400 079 | Tel: (91-22) 6210 9800
www.pghealthindia.com

Six Monthly Compliance Report

(20.05.2019)

For the Period of 1st October 2018 to 31st March 2019

Of

Company Name: Merck Limited

Address: Plot No.11, Marwasodo Usgaon, Ponda -Goa

Annex- 1

A SPECIFIC CONDITIONS		
Condition No	Points	Compliance Status for the Period of 1 st October 2018 to 31 st March 2019
I)	The project authorities shall install the effluent treatment plant to treat the wastewater up to the norms laid down by the Goa State Pollution Control Board (GSPCB). The company shall regularly monitor the treated wastewater quality and the reports shall be submitted to the Ministry's Regional Office at Bangalore and GSPCB.	The Effluent Treatment Plant is available. The treated water quality is monitored regularly. Daily analysis is done at in-house laboratory & monthly basis from MoEF recognised laboratory. The copy of monthly analysis report is submitted to GSPCB on monthly basis. Online monitoring system for treated effluent is available. Refer <i>Annexure-1</i>
II)	The company shall provide guard pond for treated wastewater. Bioassay test and toxicity index test shall be carried out regularly for the waste water before and after treatment and record shall be submitted with the six-monthly reports.	Tank of capacity 180 m ³ is available for holding raw effluent & two tanks of capacities 220 m ³ each are available to hold neutralised effluent. Treated wastewater sampling is done for Bio assay test (toxicity test) on monthly basis from MoEF approved lab. Compiled data of the same is attached herewith. Refer <i>Annexure -1</i> . In house testing for bioassay test & toxicity index test is done.
iii)	The water requirement and waste water generation shall not exceed 707 KLD and 416 KLD respectively. The treated waste water shall be utilised for green belt development and zero discharge shall be maintained from the plant premises.	At present water consumption is around 600 to 700 KLD & waste water generation is approx. 350 KLD. The treated water is used for utility: 200 KLD & for green belt purpose 150 KLD.
iv)	The project authorities shall provide the chilled brine solution in secondary condenser for condensation of the VOCs and ensure that the solvent recovery shall not be less than 98%.	All the secondary condensers are provided with chilled water / brine solution for reducing the solvent loss. Recovered solvent & residue checked for recovery (98 - 99%).

v)	The company shall provide the monitoring arrangement with vents and regular monitoring shall be carried out and reports submitted to the SPCB, CPCB and Ministry's Regional Office at Bangalore.	Vents monitoring are carried out as per consent condition and report submitted to GSPCB. Refer <i>Annexure -2</i>
vi)	<u>To prevent solvent loss, following measures shall be taken: -</u>	
	A). Reactor shall be connected to chilled brine condenser system.	Reactors are connected to chilled water/ brine condenser.
	B). The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 98% recovery.	The condensers are provided with sufficient HTA and residence time to achieve more than 98% recovery.
	C). Solvents shall be stored in a separate space specified with all safety measures.	Solvents are stored in a separate /dedicated area with safety measures as per the requirement under petroleum act. Solvent detection system & automatic sprinkler system is in place.
	D). Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.	All the electrical equipments are provided with earthing wherever solvent handling is done.
	E). Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	Flame proof area has been defined & marked on location. Solvent storage tanks are provided with flame arresters & breather valve to prevent losses.
vii)	The process emissions VOCs and particulate matter from various units shall conform to the standards prescribed by the concerned authorities 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.	The process emissions VOC & SPM monitoring has been carried out. refer - <i>Annexure -3</i> Emergency operation procedure is in place.
viii)	Fugitive emissions in the work zone environment, product and raw-materials storage area shall be regularly monitored. The emission shall conform to the limits imposed by GSPCB.	Solvent online detection system is provided in solvent storage areas. Fugitive emission monitoring is carried out in store area- refer <i>Annexure -3</i>

ix)	<u>For control of fugitive emission and VOCs following steps shall be followed: -</u>	
	A). Closed handling system shall be provided for chemicals.	Close handling system provided
	B). Reflux condenser shall be provided over reactor.	Reflux condenser is provided over reactor.
	C). Solvent handling pump shall be provided with mechanical seals to prevent leakages.	All the solvent handling pumps provided with mechanical seal.
	D). System of leak detection and repair of pump/pipeline based on preventive maintenance.	Solvent leak detection system in place. Developed Standard Operating Procedure for Preventive maintenance / repair is available.
	E). Solvent shall be taken from underground storage tanks to reactors through closed pipeline. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.	Solvents are stored in above ground tanks. All above ground solvent tanks available with proper vent through trap receiver and condenser operated with chilled water & flame arrestor is provided.
x)	The hazardous wastes generated from the plant shall be disposed of in accordance with the Hazardous Waste (HW) of (Management and Handling) Rules 1989 and as amended. The company shall submit the copy of membership to CHWTSD (Common Hazardous Waste Treatment Storage and Disposal Facility) to the Ministry's Regional Office at Bangalore.	Hazardous waste is handled and disposed as per Hazardous Waste Rule. Refer <i>Annexure - 4</i>
xi)	During transfer of materials, spillages shall be avoided, and garland drains be constructed to avoid of accidental spillages with domestic waste and storm drains.	Bund wall has been made to protect the accidental spillages with domestics and storm drain.
xii)	The project authorities shall develop greenbelt in 18 acres out of total 37 acres as per guidelines of CPCB to mitigate the effect of fugitive emission.	Total 18 acres green belt is developed out of total 37 acres area to mitigate the effluent discharge.
xiii)	Adequate financial provision shall be made in the budget of the project for implementation of the above suggested environment	Adequate budget / financial provision made for environmental management. Budget for 2018: Rs. 76,94,169/- Budget for 2019: Rs. 85,00,000/-
xiv)	The company shall make adequate arrangement for control of odour nuisance from the plant premises. There shall be no odour from the unit.	The manufacturing facility is made as per GMP requirement & in close ventilation system. There is no odour nuisance from the plant premises.
xv)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational health surveillance of workers is carried out annually as per Factories Act.

xvi)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. OHSAS 18001 shall be discontinued from Dec 2018. 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.	The company has received ISO 14001:2004 Certificate for Environmental Management System and OHSAS 18001:2007 certificate for Occupational Health and Safety Management System and is Valid till November End. Pre-employment & routine medical examination is done for all employees. Regular training programmes are conducted on handling of chemicals.
xvii)	Usage of PPEs by all employees/ workers shall be ensured.	Usage of PPE's are ensured through SOP/OCP & instruction signs displayed at relevant areas etc.
xviii)	The company shall strictly all the recommendations mentioned in the charter on Corporate Responsibility for (CREP) Environmental Protection (CREP) for bulk drug & chemical units.	CREP recommendations are followed. Water consumption reduction & Waste minimisations steps are taken at plant level. Waste segregated as per the category.
xix)	The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	Fire Protection system /Fire detection system have been installed. Inertisation of the reactors done by purging nitrogen.
xx)	Provision shall be made for housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	All provisions are made as and when required.

B GENERAL CONDITIONS		
Condition No	Particulars	Status
I)	The project authorities shall strictly adhere to the stipulations of the SPCB/state government or any statutory body.	All the stipulations of the SPCB / State Govt or any other statutory body shall strictly adhere
II)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations 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.	For further expansion or modification, prior approval will be taken from MOEF.

iii)	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 as amended. Authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	Compliance made as per manufacture, storage and import of Hazardous Chemical Rules. Authorization from the SPCB shall be obtained for collection, treatment and disposal. As per Hazardous Waste Management & Handling rule 1989. Disposal records manifest copy is available.
iv)	Ambient air quality monitoring stations shall be set up in the downwind direction as well as where maximum ground level of concentration are anticipated in consultation with the State Pollution Control Board.	Ambient air quality monitoring is done by online monitoring system which is connected to CPCB & GSPCB server.
v)	For control of process emissions, stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided. The scrubbed water shall be sent to ETP for further treatment.	Stack height of Boiler is 34 mt. Other stacks are maintained as per consent conditions. Scrubber waste water is treated through ETP.
vi)	<u>The company shall undertake following Waste Minimization measures: -</u>	
	A). Metering of quantities of active ingredients to minimize waste.	Waste generation are monitored
	B). Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	By products from the process are reused /recycled
	C). Maximizing recoveries.	Chilled /brine in secondary condenser available for maximizing recoveries.
	D). Use of automated material transfer system to minimize spillage.	Used Powder Charging system to minimize manual handling and spillage. Close loop feeding is followed.
	E). Use of "Closed Feed" system into batch reactors.	Closed Feed system is available in the batch reactors.
vii)	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003. Authorization from the SPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.	Hazardous wastes are handled and dispose as per Hazardous Waste Rule. Authorisation is obtained from Goa State Pollution Control Board. Refer Annexure - 4 for hazardous waste disposed during the six months.
viii)	The overall noise levels in an around the plant area shall 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 shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noise levels are monitored through calibrated Noise level meter and monitoring records are kept in Register. Refer Annexure -5

ix)	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry the environmental management and monitoring functions.	Environmental Management Cell (as per ISO 14001:2004 management system) headed by Directors and full fledged environmental laboratory facility is available.
x)	The project authorities shall provide rainwater harvesting system and ground water recharge.	Rain water harvesting pond for storing about 21600 KL is available with ground water charging system.
xi)	The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office of /SPCB / CPCB. A six-monthly compliance status report shall be submitted to monitoring agencies	Six monthly compliance is submitted regularly to MoEF, CPCB & SPCB.
xii)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry at the http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality of concerned and a copy of the same shall be forwarded to the Ministry's Regional Office.	Complied.
xiii)	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.
6.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Maximum compliances are completed & we will maintain in future also.
7.0	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner shall implement these conditions.	Maximum compliances are completed & we will maintain in future also.
8.0	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	---
9.0	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974 Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management & Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	All conditions are followed.

Annexure 1

Treated water analysis

Parameters	PH	COD	BOD	TSS	O&G	Sulphide as S ²⁻	phenolics compound	Hexavalent chromium as Cr+6	cyanide as CN*	Phosphate as P	As	Pb	Ammonical Nitrogen	Hg	Bio-Assay test
Limits	6 - 8.5	250mg/lit	30mg/lit	100mg/lit	10mg/lit	2mg/lit	1mg/lit	0.10mg/lit	0.10mg/lit	5mg/lit	0.2mg/lit	0.1mg/lit	50 mg/lit	0.01mg/lit	90% survival of fish after 96hrs in 100% effluent
Oct-18	6.97	100	15.2	32	1.6	<2	<0.02	0.04	<0.01	4.29	<0.01	<0.01	3.92	<0.001	90% survival for 96hrs
Nov-18	7.35	124	17.16	37	2.4	<2.00	<0.02	0.03	<0.01	3.75	<0.01	<0.01	1.68	<0.001	90% survival for 96hrs
Dec-18	7.25	116	14.7	54	2	<2.00	<0.02	0.04	<0.01	<1.0	<0.01	<0.01	2.8	<0.001	90% survival for 96hrs
Jan-19	7.19	96	13.2	45	1.8	<2.00	<0.02	<0.01	<0.01	<1.0	<0.01	<0.01	2.24	<0.001	90% survival for 96hrs
Feb-19	7.23	108	16.2	49	2.4	<2.00	<0.02	0.01	<0.01	<1.0	<0.01	<0.01	2.8	<0.001	90% survival for 96hrs
Mar-19	7.4	124	17.16	57	2.8	<2.00	<0.02	<0.01	<0.01	<1.00	<0.01	<0.01	1.68	<0.001	90% survival for 96hrs

Raw water analysis

Parameters	PH	COD mg/lit	BOD mg/lit	TSS mg/lit	O&G mg/lit
Oct-18	5.64	2200	333.33	309	6.4
Nov-18	5.17	2560	633.27	423	6.8
Dec-18	5.1	2200	566.61	343	6
Jan-19	5.18	1160	516.46	335	6.4
Feb-19	5.87	1480	540	302	6.8
Mar-19	6.19	1720	575	327	7

Annexure 2

Stack monitoring report

Process stack scrubber - OxyneX ST (\$11)(Quarterly)	Parameters	VOC Cyclohexane	Heptane	HCL
	Limits			
	Oct-18	<0.2		1.8
	Jan-19	<0.2		1.5

Process stack (reactor GZ) (\$12)(Quarterly)	Parameters	HC
	Limits	
	Oct-18	Plant Closed
	Jan-19	Permantly

Vitamin E scrubber (\$13)(Quarterly)	Parameters	Acetic acid	Hexane
	Limits		
	Oct-18	<0.1	<0.1
	Jan-19	<0.1	<0.1

QC scrubber no 1 (\$14)(Quarterly)	Parameters	Sulfuric Acid Mist	Hydrochloric Acid Mist	Nitric Acid Mist
	Limits			
	Oct-18	<0.1	<0.1	<0.1
	Jan-19	<0.1	<0.1	<0.1

QC scrubber no 2 (\$15)(Quarterly)	Parameters	Ether	Methanol
	Limits		
	Oct-18	<0.1	<0.1
	Jan-19	<0.1	<0.1

Dust collector 1 TDS (\$16)(Quarterly)	Parameters	PM
	Limits	
	Oct-18	28.64
	Jan-19	24.32

Dust collector 2 TDS (\$17)(Quarterly)	Parameters	PM
	Limits	
	Oct-18	41.88
	Jan-19	38.21

Process stack (dust collector vent dry powder)(S18)(Quarterly)	Parameters	PM
	Limits	
	Oct-18	32.75
	Jan-19	Closed

Scrubber stack TDS (Quarterly)	Parameters	HCL
	Limits	
	Oct-18	1.6
	Jan-19	1.9

DG set Stack- 500KVA(\$7)(Quarterly)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	3.67kg/hour	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.1	0.7	0.12	0.08	9.5	0.04
	Jan-19	0.11	0.63	0.16	0.09	9.3	0.05

DG set Stack- 500KVA(\$8)(Quarterly)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	3.67kg/hour	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.09	0.75	0.13	0.08	9.1	0.03
	Jan-19	0.1	0.65	0.12	0.09	9	0.04

DG set Stack new-500 KVA(Stack 1)(Quarterly)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	3.67kg/hour	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.11	0.44	0.1	0.08	9.7	0.03
	Jan-19	0.13	0.41	0.14	0.07	9.4	0.04

DG set (750KVA) (Stack 1) (sr.no. 07/1612/0423)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	–	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.12	0.35	0.21	0.08	9	0.04
	Jan-19	0.13	0.32	0.17	0.06	9.1	0.05

DG set (750KVA) (Stack 1) New (sr.no. 07/1612/0424)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	–	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.1	0.44	0.16	0.08	8.8	0.03
	Jan-19	0.13	0.4	0.17	0.09	8.4	0.05

DG set (750KVA) (Stack 2) New (sr.no. 07/1612/0424)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	–	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.11	0.49	0.17	0.1	9.1	0.04
	Jan-19	0.15	0.43	0.19	0.1	9.3	0.03

DG set (750KVA) (Stack 2) New (sr.no.07/1604/0014)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	3.67kg/hr	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.12	0.33	0.16	0.1	9.1	0.04
	Jan-19	0.09	0.26	0.14	0.12	9.2	0.04

DG set (750KVA) (Stack 1) New (sr.no.07/1604/0014)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	3.67kg/hr	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	11	0.32	0.21	0.09	9.6	0.04
	Jan-19	0.13	0.36	0.19	0.07	9.3	0.05

DG set (750KVA) (Stack 2) (sr.no.07/1612/0423)	Parameters	Particulate matter	SO2	NOx	CO	CO2	HC
	Limits	0.3 g/Kw-hr	–	9.2g/kw-hr	3.5g/kw-hr	%	1.3g/kw-hr
	Oct-18	0.12	0.36	0.2	0.11	9.6	0.04
	Jan-19	0.11	0.38	0.15	0.1	9.2	0.04

Boiler (6 TPH)	Parameters	Particulate matter	SO2
	Limits	800mg/Nm3	
	Oct-18	314.06	0.54
	Jan-19	302.54	0.61

Thermopac stack Guaiazulene (S9)(Quarterly)	Parameters	Particulate matter	SO2
	limits	150mg/Nm3	0.3kg/hour
	Oct-18	Plant Closed Permantly	
	Jan-19		

Thermopac stack oxynex ST S10	Parameters	Particulate matter	SO2
	limits	150mg/Nm3	1.44kg/hour
	Oct-18	40.85	0.46
	Jan-19	36.21	0.4

Annexure 3

Workplace monitoring report

Mar-19

Work place monitoring- PRL (Six monthly)	VOC	HCL	NH3	HC
	<0.2 ppm	<0.1 mg/m3	<20.0 ug/m3	<0.001 ppm

Work place monitoring- Vitamin E production (Six monthly)	Acetic acid	VOC
	<0.006 ppm	<0.2 ppm

Work place monitoring- Dry Powder (Six monthly)	PM10	PM2.5
	0.12 mg/m3	0.06 mg/m3

Work place monitoring- TDS production (Six monthly)	VOC
	<0.20 ppm

Work place monitoring- Chemical RM store (Six monthly)	PM10	PM2.5	SO2	NOX	CO	PHAS	Toluene	Xylene
	0.11 mg/m3	0.06 mg/m3	<0.003 mg/m3	<0.009 mg/m3	0.06 mg/m3	<0.001 ppm	<0.01 ppm	<0.01 ppm

Work place monitoring- DP Godown (Six monthly)	VOC
	<0.2 ppm

Work place monitoring- ETP lime house (Six monthly)	PM10	PM2.5
	0.10 mg/m3	0.07 mg/m3

Work place monitoring- QC (Six monthly)	VOC	HCL	NH3	HC
	<0.2 ppm	<0.1 mg/m3	<20.00 ug/m3	<0.001 ppm

Work place monitoring- Oxynex ST (Six monthly)	HC	HCL
	<0.001 ppm	<0.1 mg/m3

Form 4

TOTAL	6.47	8.774	15.08	0	35.49	76.41	0	16.43	11.2	0	11.3	16.3	7.89	2.96	17.2	0.82	0
Consent quantity/A	24 tons	120 tons	69 tons	70 tons	131 tons	728 tons	20 tons	70 tons	15 tons	23 tons	20 tons	82 tons	54 tons	21.9 tons	30.3 tons	19.2 tons	15 tons
GRAND TOTAL	226.274																

ANNEXURE 5

Ambient noise level monitoring report

Oct-18	Sampling Location	Noise in dB (A) leq (Day time)	Noise in dB (A) leq (Night time)
	Near Main gate	56.5	52.8
	Near Injection plant	55.3	47.2
	Near OxyneX ST plant	54.5	51.1
	Near Soft gel	52.8	50.8
	Near GZ	58.5	55.9
	Near boiler	63	62.4

Jan-19	Sampling Location	Noise in dB (A) leq (Day time)	Noise in dB (A) leq (Night time)
	Near Main gate	57.3	51.5
	Near Injection plant	55.8	42.1
	Near OxyneX ST plant	56.1	50.2
	Near Soft gel	53.4	49.9
	Near GZ	51.6	53.5
	Near boiler	60.8	60.1

Annexure 6

Ambient air quality report

Parameters	PM10	PM2.5	SO2	NO	NO2	NOX	CO	O3
	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3(L)	µg/m3
Oct-18	35.68	34.83	1.36	2.72	6	8.7	0.72	12.66
Nov-18	46.77	44.01	1.22	4.39	8.48	12.69	1.16	12.08
Dec-18	66.24	54.27	3.45	4.36	10.25	14.41	1.51	9.2
Jan-19	85.8	66.2	4.8	7.8	12.8	20.6	1.2	0.2
Feb-19	68.57	54.65	3.98	4.91	10.85	15.47	1.7	68.57
Mar-19	41.4	45.2	25.1	6.3	8.1	14.3	0.4	0.1