Business Use

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 : 22nd November 2023
From : P&G Health Limited
Usgaon, Goa

Letter No. : HSE/23/61

Subject: Six monthly compliance reports (for the period of 01.04.2023 to 31.09.2023)

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/Madam,

We are sending herewith six-monthly compliance reports (for the period 01.04.2023 to 31.09.2023) for your kind perusal. We are also attaching compilation of reports carried out during the period as annexures. Please find below the other details required by you.
Name & contact details of the responsible person:

Name: Mr. Yugit Bansal, Sr. Director Goa Plant
Address: Plot no. 11/1, Marvasodo, Usgaon, Goa – 403407.
Email: bansal.y@pg.com
Phone: 0832 2347105
Company Website: https://www.pghealthindia.com/

Thanking you.
Yours faithfully.
For **PROCTER & GAMBLE HEALTH LIMITED**

22/11/23

Signature of authorized signatory

Encl: a/a CC: 1. Additional Director (MoEF, New Delhi)
2. Goa State Pollution Control Board, Panaji.

Six Monthly Compliance Report

(22.11.2023)

For the Period of 1st April 2023 to 30th September 2023

Of

Company Name: Procter & Gamble Health Limited

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

Annex- 1

A	SPECIFIC CONDITIONS	
Condition No	**Points**	**Compliance Status for the Period of 1st April 2023 to 30th September 2023**
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 *Annexure-1***
II)	The company shall provide guard pond for treated wastewater. Bioassay test and toxicity index test shall be carried out regularly for the wastewater 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 Bioassay test (toxicity test) on monthly basis from MoEF approved lab. Compiled data of the same is attached herewith. **Refer *Annexure -1*.**
iii)	The water requirement and wastewater generation shall not exceed 707 KLD and 416 KLD respectively. The treated wastewater shall be utilised for green belt development and zero discharge shall be maintained from the plant premises.	At present water consumption is around 600 KLD & wastewater generation is approx. 260 KLD. The treated water is used for green belt purpose.
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 *Annexure -2***
vi)	**<u>To prevent solvent loss, following measures shall be taken: -</u>**	
vi) A)	Reactor shall be connected to chilled brine condenser system.	Reactors are connected to chilled water/ brine condenser.
vi) 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.
vi) 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.
vi) 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.
vi) 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. Manufacturing of Vitamin E acetate & Oxynex ST has been discontinued & equipment are dismantled. No solvent storage is done in tanks.
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 - ***Annexure -3*** 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 ***Annexure -3***

ix)	**<u>For control of fugitive emission and VOCs following steps shall be followed: -</u>**	
ix) A)	Closed handling system shall be provided for chemicals.	Close handling system provided
ix) B)	Reflux condenser shall be provided over reactor.	Reflux condenser is provided over reactor.
ix) C)	Solvent handling pump shall be provided with mechanical seals to prevent leakages.	All the solvent handling pumps provided with mechanical seal.
ix) 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.
ix) 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.	Manufacturing of Vitamin E acetate & Oxynex ST has been discontinued & equipment are dismantled. No solvent storage tanks are available at site.
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 CHWTSDF (Common Hazardous Waste Treatment Storage and Disposal Facility) to the Ministry's Regional Office at Bangalore.	Hazardous waste is handled and disposes as per Hazardous Waste Rule. Refer ***Annexure - 4***
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 safeguard. Fund so earmarked shall not be diverted for any other purposes.	Adequate budget / financial provision made for environmental management. Budget for 2023-24: Rs. 60,00,000/-
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. As informed to the Ministry, OHSAS 18001 shall be continued. 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.	P&G internal HSE standards equivalent to OHSAS 18001 are implemented at site. 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/PPE matrix & instruction signs displayed at relevant areas etc.
xviii)	The company shall strictly all the recommendations mentioned in the charter on Corporate Responsibility for (CREP) For 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 33 mt. Other stacks are maintained as per consent conditions. Scrubber wastewater is treated through ETP.
vi)	**The company shall undertake following Waste Minimization measures: -**	
vi) A)	Metering of quantities of active ingredients to minimize waste.	Waste generations are monitored
vi) 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
vi) C)	Maximizing recoveries.	Chilled /brine in secondary condenser available for maximizing recoveries.
vi) 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.
vi) 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 headed by Director and full fledge environmental laboratory facility is available.
x)	The project authorities shall provide rainwater harvesting system and ground water recharge.	Rainwater harvesting pond for storing about 21600 KL is available with ground water recharging 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.	--
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.	--
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.	Complied.

Annexure 1

Water Analysis of Raw / Treated Effluent - Apr 2023 to Sep 2023

Effluent Treated water Analysis																							Effluent Raw water Analysis				
Parameters	PH	COD mg/lit	BOD mg/lit	TSS mg/lit	O&G mg/lit	Sulphide as S2- mg/lit	Phenolics compound mg/lit	Hexavalent chromium as Cr+6 mg/lit	Ammonical Nitrogen mg/lit	Benzene mg/lit	Xylene mg/lit	Methylene Chloride mg/lit	Chlorobenzene mg/lit	SAR mg/lit	Zinc mg/lit	Copper mg/lit	Total Chromium mg/lit	Cyanide as CN* mg/lit	Phosphate as P mg/lit	Arsenic mg/lit	Lead mg/lit	Mercury mg/lit	Bio-Assay test	PH	COD mg/lit	BOD mg/lit	TSS mg/lit	O&G mg/lit
Legal Consent Limits As per- Goa State Pollution Board	**6 - 8.5**	**250**	**30**	**100**	**10**	**2**	**1**	**0.1**	**100**	**0.1**	**0.12**	**0.9**	**0.2**	Less than 26 (applicable only for discharge on land)	**5**	**3**	**2**	**0.1**	**5**	**0.2**	**0.1**	**0.01**	**90% survival of fish after 96hrs in 100% effluent**					
Apr-23	6.35	72	15.3	39	2	<2	<0.02	<0.01	45.92	ND	ND	ND	ND	0.73	0.21	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.001	90% survival for 96hrs	6.6	1328	334	210	8
May-23	6.97	88	18.8	45	2	<2	<0.02	<0.01	42.56	ND	ND	ND	ND	0.62	0.17	<0.01	<0.01	0.01	<1	<0.01	<0.01	<0.001	90% survival for 96hrs	5.6	1680	525	245	8
Jun-23	6.13	76	19	41	2.4	<2	<0.02	<0.01	39.2	ND	ND	ND	ND	0.49	0.22	0.04	<0.01	0.01	<1	<0.01	<0.01	<0.001	90% survival for 96hrs	6.4	712	172	257	7
Jul-23	7.02	88	17.76	45	2	<2	<0.02	<0.01	45.36	ND	ND	ND	ND	0.61	0.18	0.07	<0.01	0.01	<1	<0.01	<0.01	<0.001	90% survival for 96hrs	5	2400	699	243	7
Aug-23	7.31	76	19.95	39	1.4	<2	<0.02	<0.01	47.6	ND	ND	ND	ND	0.75	0.24	0.12	<0.01	0.01	2.15	<0.01	<0.01	<0.001	90% survival for 96hrs	5.86	2560	766	269	8
Sep-23	6.66	68	15.3	44	1.2	<2	<0.02	<0.01	45.92	ND	ND	ND	ND	0.75	0.17	0.09	<0.01	0.01	2.14	<0.01	<0.01	<0.001	90% survival for 96hrs	7.87	920	200	276	9.4

Annexure 2

Stack monitoring report - Apr 2023 to Sept 2023 - Frequency of Monitoring is Quarterly

Sr No.	Area	Parameters	Legal Limits as per Pollution Control Board	Apr-23	Jul-23
1	QC scrubber no 1	Sulfuric Acid Mist mg/M³	NA	<0.10	<0.10
		Hydrochloric Acid Mist mg/M³	NA	<0.10	<0.10
		Nitric Acid Mist mg/M³	NA	<0.10	<0.10
2	QC scrubber no 2	Ether mg/M³	NA	<0.10	<0.10
		Methanol mg/M³	NA	<0.10	<0.10
3	Dust collector 1(VIT E Dry Powder & Food Premix)	PM	NA	32.84	27.21
4	TDS Scrubber stack	HCL mg/m3	NA	1.5	NA
5	DG set Stack- 500KVA(Sr No 07/0804/0198)	Particulate matter g/Kw-hr	0.3	0.13	0.14
		SO2 kg/hour	2.1	0.13	0.12
		Nox g/kw-hr	9.2	0.25	0.32
		CO g/kw-hr	3.5	0.08	0.07
		Carbon Dioxide %	NA	11.4	11.2
		HC g/kw-hr	1.3	0.05	0.06
6	DG set Stack- 500KVA(Sr No 07/0804/0199)	Particulate matter g/Kw-hr	0.3	0.13	0.14
		SO2 kg/hour	2.1	0.12	0.13
		Nox g/kw-hr	9.2	0.14	0.16
		CO g/kw-hr	3.5	0.07	0.08
		Carbon Dioxide %	NA	11.3	10.6
		HC g/kw-hr	1.3	0.06	0.05
7	DG set Stack new-500 KVA(Sr No 07/1109/01149)	Particulate matter g/Kw-hr	0.3	0.15	0.13
		SO2 kg/hour	2.1	0.12	0.14
		Nox g/kw-hr	9.2	0.24	0.33
		Carbon Dioxide %	NA	11.2	11.5
		CO g/kw-hr	3.5	0.09	0.08
		HC g/kw-hr	1.3	0.06	0.07
8	DG set (750KVA) (Stack 1) (25420923) (sr.no. 07/1612/0423)	Particulate matter g/Kw-hr	0.3	0.12	0.14
		SO2 kg/hour	3.15	0.14	0.12
		Nox g/kw-hr	9.2	0.4	0.23
		Carbon Dioxide %	NA	11.3	11.5
		CO g/kw-hr	3.5	0.08	0.09
		HC g/kw-hr	1.3	0.07	0.07
9	DG set (750KVA) (Stack 2) (25420923)(sr.no. 07/1612/0423)	Particulate matter g/Kw-hr	0.3	0.15	0.14
		SO2 kg/hour	3.15	0.14	0.12
		Nox g/kw-hr	9.2	0.38	0.21
		Carbon Dioxide %	NA	11.6	11.6
		CO g/kw-hr	3.5	0.1	0.09
		HC g/kw-hr	1.3	0.07	0.08
10	DG set (750KVA) (Stack 1) New (sr.no. 07/1604/0014) 25415671	Particulate matter g/Kw-hr	0.3	0.15	0.13
		SO2 kg/hour	3.15	0.13	0.11
		Nox g/kw-hr	9.2	0.16	0.14
		Carbon Dioxide %	NA	11.2	11.1
		CO g/kw-hr	3.5	0.07	0.08
		HC g/kw-hr	1.3	0.05	0.06
11	DG set (750KVA) (Stack 2) (Sr.No. 07/1604/014) 25415671	Particulate matter g/Kw-hr	0.3	0.14	0.13
		SO2 kg/hour	3.15	0.13	0.12
		Carbon Dioxide %	NA	11.4	11.2
		Nox g/kw-hr	9.2	0.18	0.12
		CO g/kw-hr	3.5	0.08	0.07
		HC g/kw-hr	1.3	0.06	0.04
12	DG set (750KVA) (Stack 1) New (sr.no.) (25421685)	Particulate matter g/Kw-hr	0.3	0.13	0.14
		SO2 kg/hour	3.15	0.15	0.13
		Nox g/kw-hr	9.2	0.22	0.18
		Carbon Dioxide %	NA	11.4	11.3
		CO g/kw-hr	3.5	0.08	0.08
		HC g/kw-hr	1.3	0.07	0.05
13	DG set (750KVA) (Stack 2) New (sr.no.) (25421685)	Particulate matter g/Kw-hr	0.3	0.13	0.14
		SO2 kg/hour	3.15	0.12	0.13
		Nox g/kw-hr	9.2	0.36	0.17
		Carbon Dioxide %	NA	11.5	11.7
		CO g/kw-hr	3.5	0.09	0.07
		HC g/kw-hr	1.3	0.06	0.06
14	Fire Diesel Pump Stack	Particulate matter g/Kw-hr	0.3	0.12	Under inspection/ maintenance
		SO2 kg/hour	NA	0.04	
		Nox g/kw-hr	9.2	0.18	
		Carbon Dioxide %	NA	11.2	
		CO g/kw-hr	3.5	0.07	
		HC g/kw-hr	1.3	0.05	
15	Boiler (6 TPH)	Particulate matter mg/Nm3	800	178.47	161.24
		SO2 kg/hour	NA	0.44	0.38
16	Boiler (4 TPH)	Particulate matter mg/Nm3	800	159.93	Under inspection/ma intenance
		SO2 kg/hour	20.32	0.33	

Annexure 3

Workplace Monitoring Report			
Apr 2023 to Sep 2023			
Sr No	**Area**	**Parameter with Units**	**Apr-23**
1	Work place monitoring- PPI Lab (Six monthly)	**VOC ppm**	<1.0
		HCL mg/m3	<1.0
		NH3 ug/m3	<20.00
		HC ppm	<0.001
2	Work place monitoring- Dry Powder (Six monthly)	**PM10 mg/m3**	0.05
		PM2.5 mg/m3	0.021
3	Work place monitoring- TDS production (Six monthly)	**VOC ppm**	<1.0
4	Work place monitoring- Chemical RM store (Six monthly)	**PM10 mg/m3**	0.057
		PM2.5 mg/m3	0.025
		SO2 mg/m3	<0.003
		NOX mg/m3	<0.006
		CO mg/m3	0.04
		PHAs PPM	<0.001
		Toluene/Xylene PPM	<0.01
5	Work place monitoring- DP Godown (Six monthly)	**VOC PPM**	<1.0
6	Work place monitoring- ETP lime house (Six monthly)	**PM10 mg/m3**	0.051
		PM2.5 mg/m3	0.022
7	Work place monitoring- QC (Six monthly)	**VOC PPM**	<1.0
		HCL mg/m3	<1.0
		NH3 ug/m3	<20.00
		HC ppm	<0.001
8	Work place monitoring- Pharma RM store (Six monthly)	**PM10 mg/m3**	0.048
		PM2.5 mg/m3	0.019

Haz Waste Manifest Apr 2023 to Sep 2023

Annexure 4

Sr. No.			1	2	3	4	5	6	7			8				9	10	11	12
Description			Used/ spent oil	Spent solvents	Discarded Containers/ Barrels/ Liners used for Hazardous Chemicals	Off specification Products	Date expired Products	Chemical sludge from ETP	DEHM Residue	Oxynex Forerun	Spent solvents (Mother liquor residue)	DEHM Residue	Oxynex Residue	Spent acetic acid conc. & zinc salt mixture / Gelatin waste	Organic Oxygen compound (acetic acid)	Zinc dust	Spent Carbon From ETP	Spent Ionex Change Resign From DM Water Plant	Name of the Authorized party
									Spent solvents			Process Residue & Wastes							
Sr No	Date	Category	5.1	20.2	33.1	28.4	28.5	35.3	28.6			28.1				6.2	28.3	35.2	
			MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	MT	
1	03.04.2023	HWR-2023/018												7.2					JK Cement
2	05.04.2023	HWR-2023/019			1.23														Deepak Enterprises
3	10.04.2023	HWR-2023/020			0.439														Deepak Enterprises
4	19.04.2023	HWR-2023/021												7.5					JK Cement
5	20.04.2023	HWR-2023/022			1.052														Deepak Enterprises
6	24.04.2023	HWR-2023/023			1.192														Deepak Enterprises
7	09.05.2023	HWR-23/024						7.89											JK Cement, Karnataka
8	09.05.2023	HWR-23/025			1.151														Deepak Enterprises
9	11.05.2023	HWR-23/026			1.663														Deepak Enterprises
10	20.05.2023	HWR-23/027			1.156														Deepak Enterprises
11	29.05.2023	HWR-23/028			1.4														Deepak Enterprises
12	07.06.2023	HWR-23/029			1.11														Deepak Enterprises
13	08.06.2023	HWR-23/030			0.573														Deepak Enterprises
14	10.06.2023	HWR-23/031			1.252														Deepak Enterprises
15	17.06.2023	HWR-23/032			1.041														Deepak Enterprises
16	26.06.2023	HWR-23/033			0.418														Deepak Enterprises
17	07.07.2023	HWR-23/034			0.8														Deepak Enterprises
18	12.07.2023	HWR-23/035										7.34							JK Cement, Karnataka
19	15.07.2023	HWR-23/036			1.521														Deepak Enterprises
20	28.07.2023	HWR-23/037			1.344														Deepak Enterprises
21	28.07.2023	HWR-23/038	1.21																Bana Refinery Pvt Ltd
22	02.08.2023	HWR-23/039			1.383														Deepak Enterprises
23	09.08.2023	HWR-23/040			1.384														Deepak Enterprises
24	16.08.2023	HWR-23/041			0.903														Deepak Enterprises
25	16.08.2023	HWR-23/042										6.985							JK Cement, Karnataka
26	19.08.2023	HWR-23/043										8.13							JK Cement, Karnataka
27	21.08.2023	HWR-23/044			0.563														Deepak Enterprises
28	28.08.2023	HWR-23/045			0.827														Deepak Enterprises
29	30.08.2023	HWR-23/046						7.87											JK Cement, Karnataka
30	31.08.2023	HWR-23/047										6.87							JK Cement, Karnataka
31	04.09.2023	HWR-23/049						7.67											JK Cement, Karnataka
32	04.09.2023	HWR-23/050			0.526														Deepak Enterprises
33	05.09.2023	HWR-23/051			1														Deepak Enterprises, Goa
34	06.09.2023	HWR-23/052	1.2																Bana Refinery Pvt Ltd
35	11.09.2023	HWR-23/053			0.814														Deepak Enterprises, Goa
36	13.09.2023	HWR-23/054						7.1											JK Cement, Karnataka
37	15.09.2023	HWR-23/055			0.707														Deepak Enterprises, Goa
38	29.09.2023	HWR-23/056			1.194														Deepak Enterprises, Goa
		TOTAL	2.41	0	26.643	0	0	30.53	0	0	0	29.325	0	14.7	0	0	0	0	
		Consent quantity/A	24 MT	120 MT	70 MT	34 MT	35 MT	131 MT	87 MT			728 MT				7.5 MT	4 T	5T	
		GRAND TOTAL	103.608																

Annexure 5

Ambient Noise level Apr 2023 to Sep 2023

Ambient Noise level Monitoring Report Day time			
		Apr-23	Jul-23
		Noise in dB (A) leq (Day time)	Noise in dB (A) leq (Day time)
	Legal Limits	**75**	**75**
1	Near Main gate	55.1	57.5
2	Near Injection plant	56.7	59.4
3	Near Oxynex ST plant	58.5	59.3
4	Near Soft gel	54.4	55.1
5	Near GZ	55.3	53.2
6	Near boiler	72.8	73

Ambient Noise level Monitoring Report Night time			
		Apr-23	Jul-23
		Noise in dB (A) leq (Night time)	Noise in dB (A) leq (Night time)
	Legal Limits	**70**	**70**
1	Near Main gate	51.2	52.4
2	Near Injection plant	52.3	51.7
3	Near Oxynex ST plant	54.6	53.8
4	Near Soft gel	49.1	51.1
5	Near GZ	50.3	48.7
6	Near boiler	68.7	67.9

Annexure 6

Site Ambient air quality report Apr 2023 to Sep 2023

Ambient Ambient air quality report Near ETP

Month/ Parameters	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NOX µg/m3	Ammonia (NH3) µg/m3	CO µg/m3	Lead (Pb) µg/m3	Benzene(C6H6) µg/m3	Arsenic (As) µg/m3	Nickel(Ni) µg/m3	O3 µg/m3	Benzo(a) Pyrene Ng/M3
Limits (For 24 Hrs)	100	60	80	80	400	4	1	5	6	20	180	1
Apr-23	76.53	24.74	4.4	10.09	<20.00	<0.20	<0.10	<1.00	<5.00	<5.00	<20.00	<0.20
Jul-23	32.82	11.39	<3.00	<6.00	<20.00	<0.20	<0.10	<1.00	<5.00	<5.00	<20.00	<0.20
Annual Average	54.675	18.065	4.4000	10.0900	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Ambient air quality report Near Main Security Gate

Month/ Parameters	PM10	PM2.5	SO2	NOX	Ammonia (NH3)	CO	Lead (Pb)	Benzene(C6H6)	Arsenic (As)	Nickel(Ni)	O3	Benzo(a) Pyrene
	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3(L)	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	Ng/M3
Limits (For 24 Hrs)	100	60	80	80	400	4	1	5	6	20	180	1
Apr-23	90.8	27.86	3.95	9.66	<20.00	<0.20	<0.10	<1.00	<5.00	<5.00	<20.00	<0.20
Jul-23	38.77	14.47	<3.00	<6.00	<20.00	<0.20	<0.10	<1.00	<5.00	<5.00	<20.00	<0.20
Annual Average	64.79	21.17	3.95	9.66	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Ambient air quality report Near Softgel Plant

Month/ Parameters	PM10	PM2.5	SO2	NOX	Ammonia (NH3)	CO	Lead (Pb)	Benzene(C6H6)	Arsenic (As)	Nickel(Ni)	O3	Benzo(a) Pyrene
	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	mg/m3(L)	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	Ng/M3
Limits (For 24 Hrs)	100	60	80	80	400	4	1	5	6	20	180	1
Apr-23	77.68	26.9	3.56	7.8	<20.00	<0.20	<0.10	<1.00	<5.00	<5.00	<20.00	<0.20
Jul-23	30.28	12.64	<3.00	<6.00	<20.00	<0.20	<0.10	<1.00	<5.00	<5.00	<20.00	<0.20
Annual Average	53.98	19.77	3.56	7.80	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!