



Dahej SEZ Ltd.

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CIN : U45209GJ2004PLC044779

Ref.: DSL/MoEF/Reports/2017/3545

Date: 22/11/2017

To,
Regional Officer, MoEFCC
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ),
E-5, Kendriya Paryavaran Bhawan,
E-5 Arera Colony, Link Road-3,
Ravishankar Nagar, Bhopal – 462016

Subject: Submission of Six Monthly Compliance Reports (April-2017 to October-2017) of Environmental Clearance (EC) and CRZ Clearance of Dahej SEZ Ltd. At: Dahej Village, Taluka- Vagra, Dist. - Bharuch – 392140, Gujarat.

Ref.: 1) Environmental Clearance No. - 21-1084/2007-IA.III dated 17th March, 2010.
2) CRZ Clearance No. - 11-50/2011-IA.III dated 19th September, 2014.

Dear Sir,

With reference to above subject matter, we herewith submit Six Monthly (April-2017 to October-2017) Compliance Report of Environmental Clearance (EC) and CRZ Clearance in hard copy with CD for your kind perusal.

Thanking you,
Yours Faithfully,

S. N. Patil

S. N. Patil
Chief Executive Officer

Encl: a/a

कार्यालय / OFFICE
पर्यावरण एवं वन मंत्रालय (केन्द्रीय)
Ministry of Environment & Forests (C)
कार्यालय (पश्चिम क्षेत्र)
Regional Office (Western Region)
भोपाल (म.प्र.) - 462016
24/11/17



COMPLIANCE REPORT OF EC CLEARANCE

for

Conditions of Clearance under the EIA notification, 2006 for
Development of SEZ.

(Environment Clearance No. 21-1084/2007-IA.III dated 17 March, 2010)

Period: April 2017 to September 2017



of



M/S. DAHEJ SEZ LTD.

(A JOINT VENTURE OF GIDC & ONGC)

at

Village: Dahej, Taluka Vagra, District Bharuch.

M/S. Dahej SEZ Limited**Compliance Report of EC Clearance**

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PROJECT DETAILS							
Name of Publication	Compliance Report of EC Clearance from Month April 2017 to September 2017						
Project Number	1417058112	Report No.	1	Version	1	Released	November 2017
Prepared & Managed By	Mitali Khuman & Sapana Amin		Released By			Sangram Kadam	
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Point-wise Compliance Report of EC Clearance**(October 2016 to March 2017)**

Standard Conditions related to Activity 7(c) –Category “B” projects under the Schedule of Ministry of Environment and Forests, GoI notification dated 14-09-06.

S. No.	Description	Compliance Status
Environment Clearance No. 21-1084/2007-IA.III dated 17th March, 2010		
A	PART A: SPECIFIC CONDITIONS:	
1	Construction Phase	
i.	“Consent for Establishment” shall be obtained from Gujarat Pollution Control Board under Air and Water Act and copy shall be submitted to the ministry before start of any construction work at the site.	Consent to Establish is obtained from GPCB as GPCB/BRCH/NOC-3633/27240 dated 20 th September, 2008
ii.	The area falling under CRZ shall be kept open and no activity shall be carried out. A separate clearance shall be obtained from MoEF under the provision of CRZ notification, 1991 as amended from time to time by Govt. of India to any development / construction activity at site.	CRZ clearance is obtained for area falling under CRZ as F. No. 11-50/2011-IA.III dated 19 th September, 2014.
iii.	All the commitments made during the meeting held on 25 th – 28 th February 2008, 16 th – 18 th July, 2008, 29 th – 30 th September, 2008 23 rd – 24 th November, 2009 and 25 th – 29 th January, 2010 and the details submitted vide letters dated 13.06.2008, 04.09.2008, 26.09.2008, 13.10.2008, 14.10.2008, 12.11.2008, 23.04.2009, 01.05.2009, 26.05.2009, 03.07.2009, 16.07.2009, 31.07.2009, 27.10.2009, 11.11.2009, 11.01.2010, 28.01.2010 and 30.01.2010 shall be strictly complied with.	All the commitments made during the said meetings are being complied with.
iv.	The Project proponent shall exclude the portion of the plot area allotted to units which fall under CRZ area and no approval shall be given to them without obtaining prior CRZ/ Environment Clearance.	Agreed and Complied.
v.	Fresh demarcation of HTL/LTL lines and CRZ area shall be undertaken through one of the authorized agencies identified by the MoEF shall be undertaken.	Agreed and Complied.
vi.	Separate CRZ Clearance shall be obtained by M/s. Dahej SEZ Ltd. for the area falling under CRZ.	CRZ clearance is obtained for area falling under CRZ vide letter No. 11-50/2011-IA.III dated 19 th September, 2014.
vii.	M/s. Dahej SEZ Ltd. shall issue directions to all the allottees whose plots are affected partly under CRZ Notification to	In the terms and conditions of allotment letter, all allot whose plots are affected partly under CRZ

S. No.	Description	Compliance Status
	obtain necessary clearance after getting the recommendations from the State Coastal Zone Management Authority.	Notification were directed to obtain CRZ Clearance.
viii.	Necessary permission / NOC shall be obtained from competent authority for the disposal of treated effluent into deep sea.	CCA from GPCB was obtained vide letter no. GPCB/BRCH-B-CCA-1194 (3) / ID-31038 / 209369 dated 04/04/2014 is obtained by GIDC, who are co-developers in Dahej SEZ for disposal of treated effluent into deep sea.
ix.	Treated waste water shall be used for flushing of toilets, horticulture and HVAC purposes, in that order.	Complied.
x.	Provision shall be made for the 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, crèche etc. the housing may be in the form of temporary structures to be removed after the completion of the project.	Local workers were employed, safe drinking water, mobile toilets, emergency first-aid faculty, etc. are provided for them.
xi.	A First Aid Room will be provided in the project both during construction and operation of the project.	Provided.
xii.	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	Complied.
xiii.	Disposal of muck during construction phase should not create any adverse effect on neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people only in approved sites with the approval of competent authority.	Complied.
xiv.	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Soil and Ground water samples were tested and it confirmed that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
xv.	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach unto the ground water.	Agreed and were complied.
xvi.	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Gujarat Pollution Control Board.	Agreed and Complied.
xvii.	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	Agreed and complied.
xviii.	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.	DG Sets are operated only during power outages. The diesel required for operating DG (62.5 kVA) is ~ 40 ltr/hr. We are storing < 2.5 KL of

S. No.	Description	Compliance Status
		HSD at site, thus clearance from Chief Controller of Explosives is not required.
xix.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	Agreed and complied.
xx.	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/Gujarat PCB.	Agreed and complied.
xxi.	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27 th August, 2003. (The above condition is applicable only if the project site is located within the 100 Km of Thermal Power Stations).	Agreed and Complied.
xxii.	Ready Mixed concrete must be used in building construction.	Agreed and complied.
xxiii.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Complied.
xxiv.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Agreed and complied.
xxv.	Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.	No ground water was abstracted during construction/operation phase.
xxvi.	Separation of grey and black water should be done by the use of dual plumbing line for separation for grey and black water.	At present dual plumbing line is not provided.
xxvii.	Fixtures for showers, toilet flushing and drinking should be low flow either by use of aerators or pressure reducing devices or sensor based control.	Agreed and complied.
xxviii.	Use of glass may be reduced by upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.	Agreed and complied.
xxix.	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Agreed and complied.
xxx.	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	Agreed and complied.

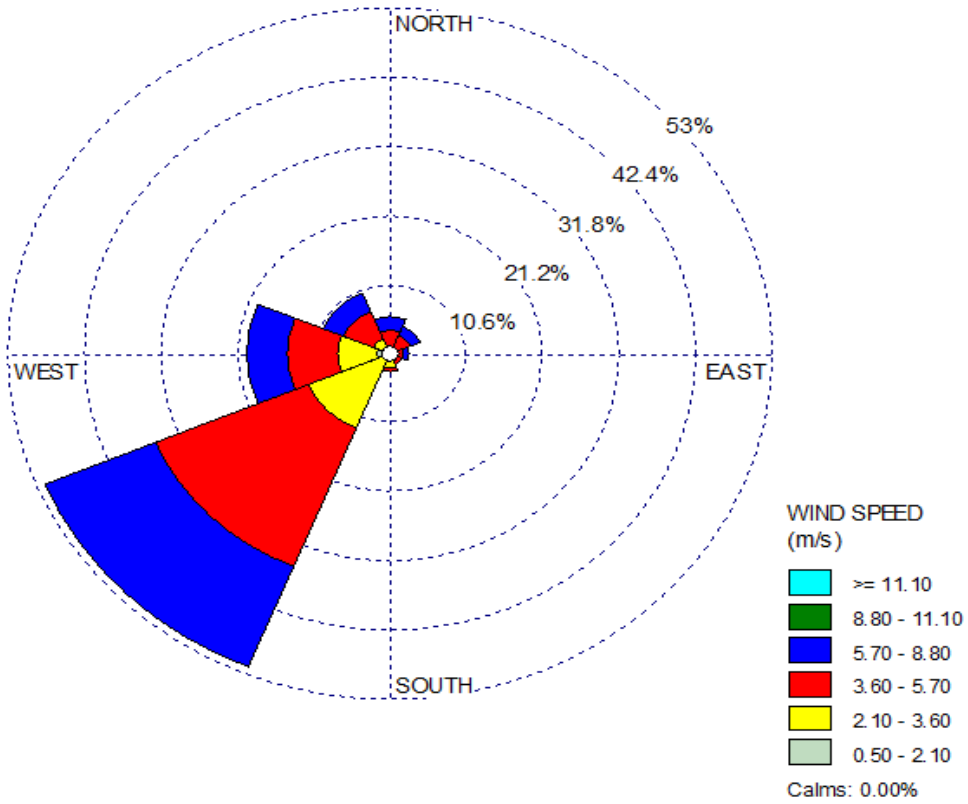
S. No.	Description	Compliance Status
xxxi.	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc.	All necessary approvals were taken.
xxxii.	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Agreed and complied.
xxxiii.	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	Agreed and Noted.
II.	Operation Phase	
i.	The installation of the Effluent Treatment Plant (ETP)/Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated affluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated affluent shall conform to the norms and standards of the Gujarat Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	Agreed and was complied.
ii.	Necessary permission/NOC shall be obtained from competent authority for the disposal of treated effluent into deep sea.	Ref. Compliance status as mentioned in Part A, 1, viii.
iii.	The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material. The hazardous wastes shall be disposed at authorized TSDF site.	The member units coming up in the SEZ area have obtain membership of nearby Authorized TSDF site for disposal of their hazardous wastes.
iv.	Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Gujarat Pollution Control Board.	Agreed and Complied.
v.	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Agreed and Complied. Noise levels were recorded at the nearest village, i.e. Dahej by NABL & MoEF approved Laboratory of Kadam Environmental Consultants. The summary of the same is Annexure 2
vi.	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be	Agreed and Complied.

S. No.	Description	Compliance Status
	raised so as to provide protection against particulates and noise.	
vii.	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	Agreed and Complied.
viii.	Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The borewell for rainwater recharging should be kept at least 5 mts. above the highest ground water table.	Rain water harvesting is done. Storage of RWH tank is 4,000 Liters, as per the plan submitted.
ix.	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	Ground water quality is monitored at the nearest village, i.e. Dahej by NABL & MoEF approved Laboratory of Kadam Environmental Consultants. The summary of the same is as shown in Annexure 4
x.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	Agreed and complied.
xi.	A report on energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials and technology, R & U Factors etc. and submit to the Ministry in three months time.	Energy Audit would be conducted as per the requirement.
xii.	Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.	Agreed and complied.
xiii.	Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.	Agreed and complied.
xiv.	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	Complied.
Part – B. GENERAL CONDITIONS		
1.	The environmental safeguards contained in the EIA report should be implemented in letter and spirit.	Complied.
2.	The project proponent shall also submit six monthly reports on status of compliance of stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Complied.

S. No.	Description	Compliance Status
3.	Officials from Regional Office of MOEF, Bhopal who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bhopal.	Agreed and support to all officials would be provided.
4.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Agreed & Noted.
5.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Agreed & Noted.
6.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	All the applicable permissions from the respective competent authorities are obtained.
7.	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1991 and EIA Notification, 2006.	Agreed & Noted.
8.	The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with Gujarat Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.	Receipt of Environmental Clearance (Hard Copy) to our office was later than 10 days of its issuance date i.e. 17 th March, 2010. Thus, Advertisement were circulated in Gujarat Samachar Vadodara Edition dated 29.04.2010, Gujarat Prabha Bharuch Edition dated 29.04.2010 and Sandesh Vadodara Edition dated 29.04.2010.
9.	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	Agreed and Noted.
10.	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 Act, 1997.	Agreed and Noted.
11.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestion / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.

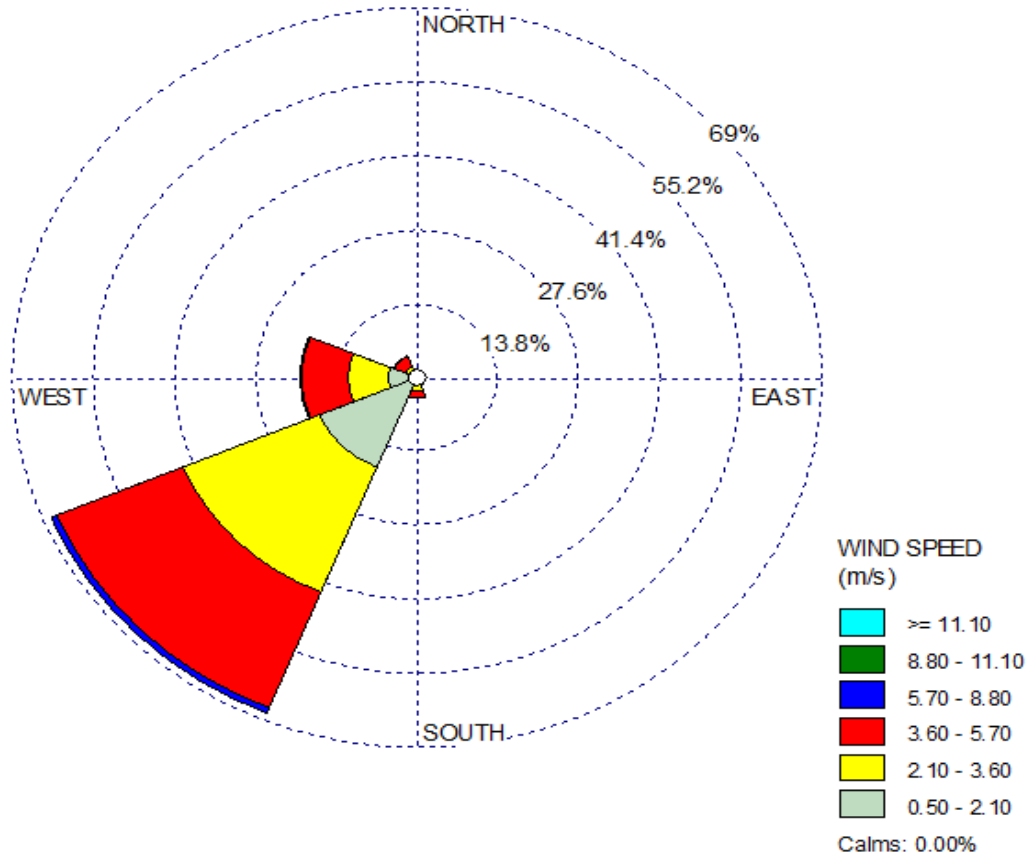
S. No.	Description	Compliance Status
12.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal office of CPCB and the SPCB. The criteria pollutant levels, namely SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Monitoring data is attached as <i>Annexure 1</i>
13.	The environmental statement for each financial year ending 31 st March in Form –V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Complied.

Wind rose Diagram (April 2017)



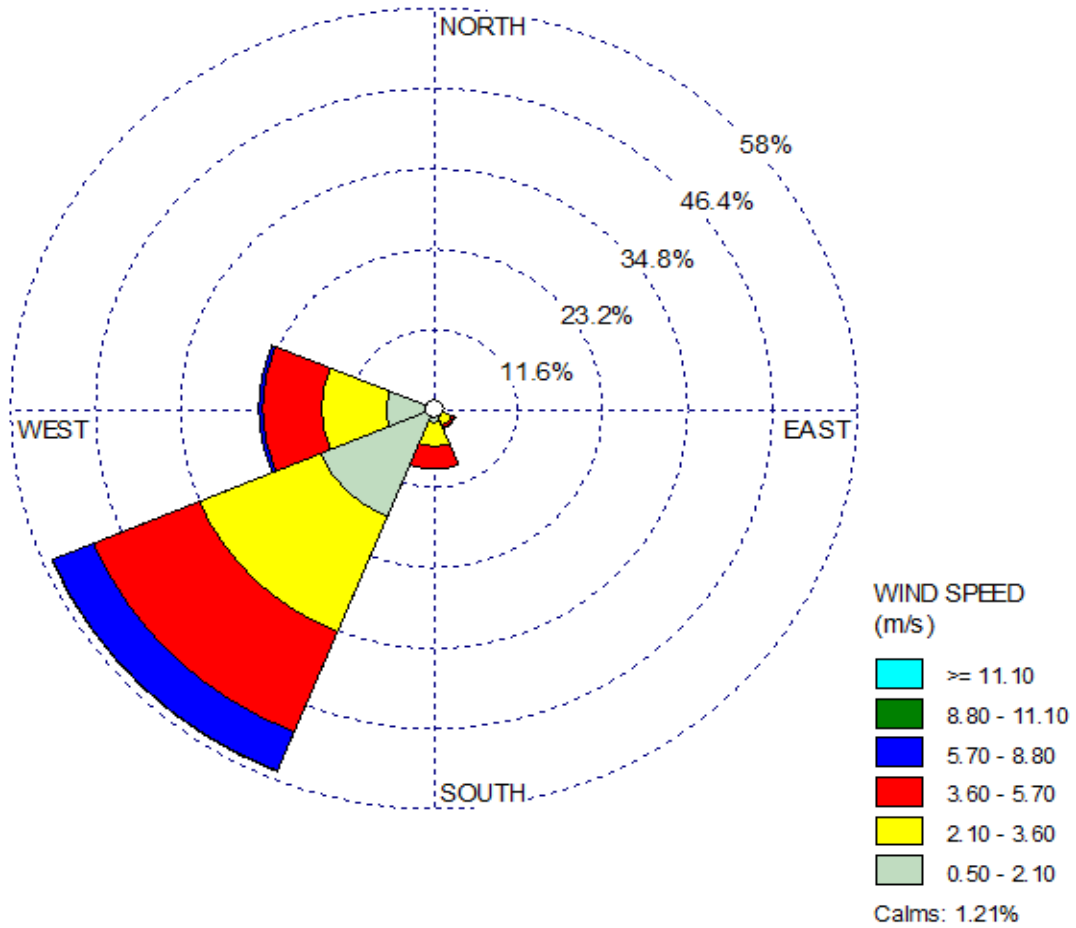
Directions	%
N	5.84
NE	4.73
E	2.78
SE	1.95
S	2.92
SW	51.73
W	19.89
NW	10.15
CALM	0.00

Wind rose Diagram (May 2017)



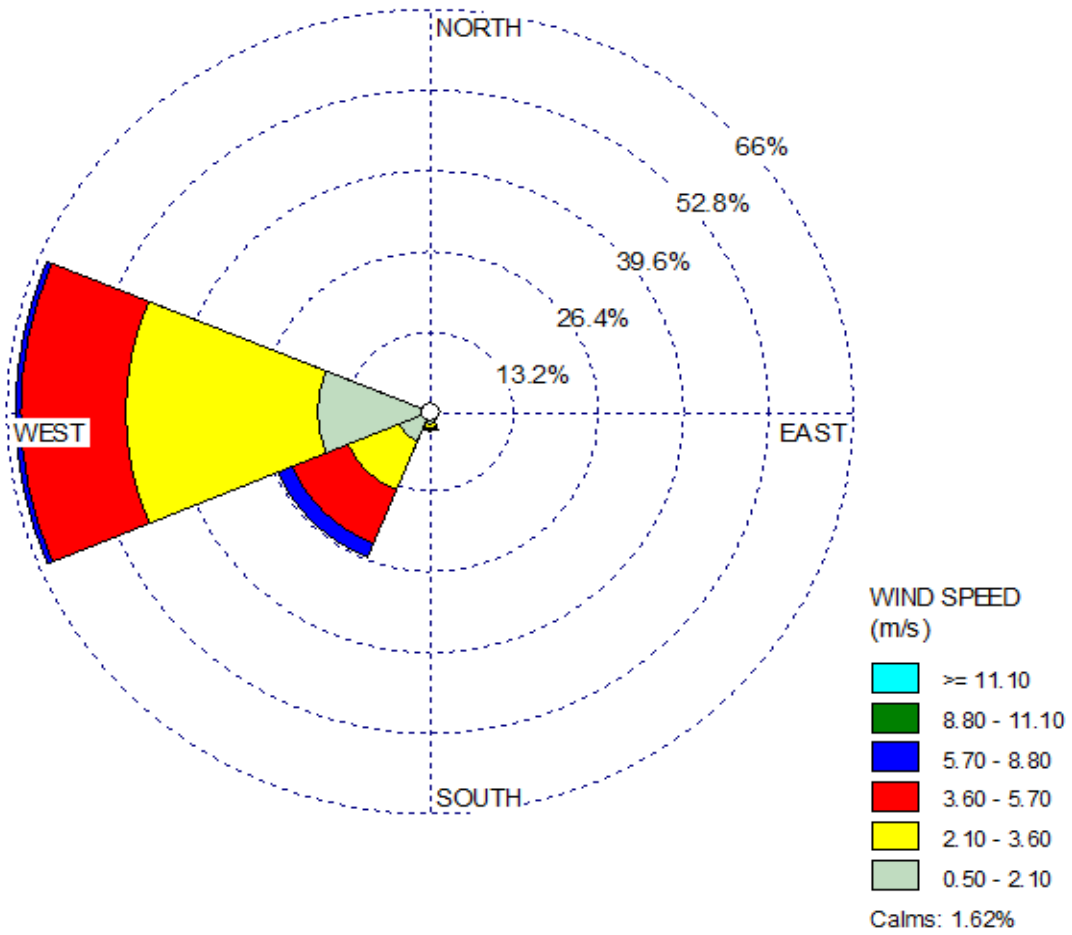
Directions	%
N	1.48
NE	1.21
E	0.00
SE	1.21
S	4.03
SW	67.54
W	20.16
NW	4.58
CALM	0.00

Wind rose Diagram (June 2017)



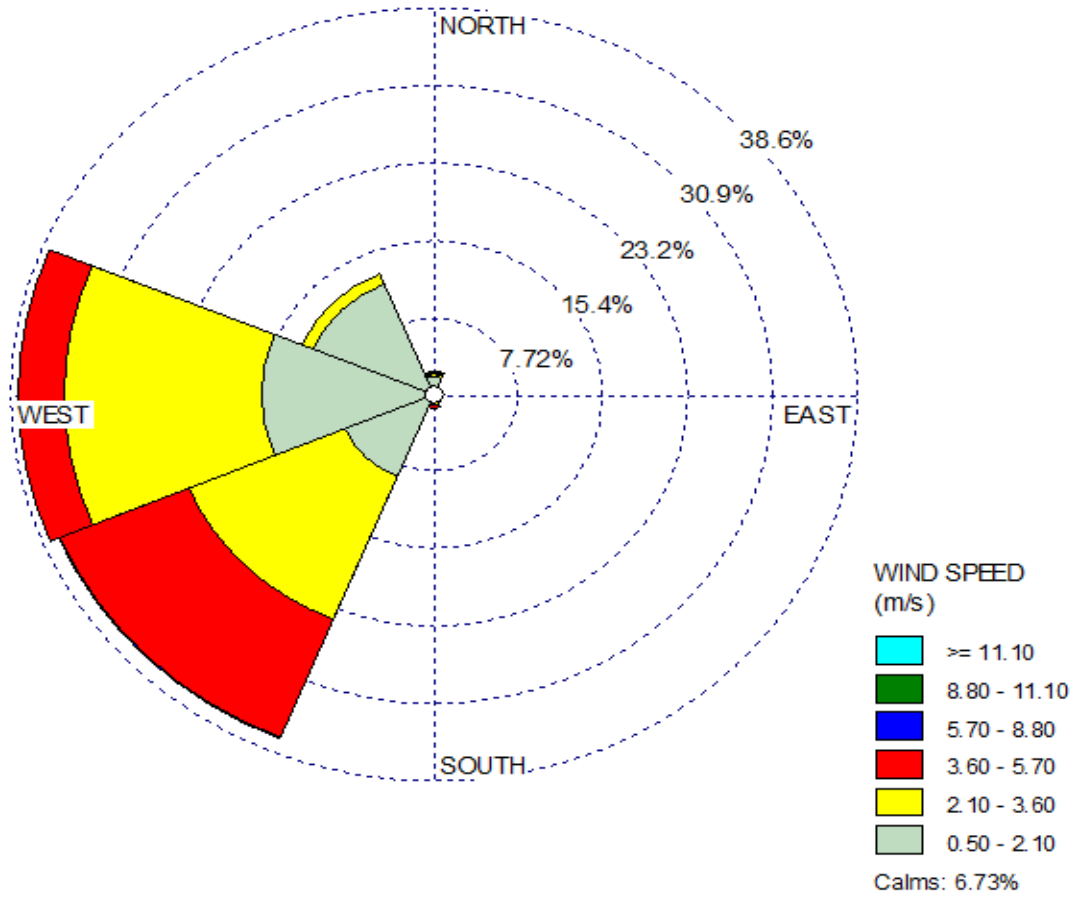
Directions	%
N	0.14
NE	0.54
E	0.54
SE	3.36
S	8.89
SW	56.66
W	24.09
NW	1.08
CALM	1.21

Wind rose Diagram (July 2017)



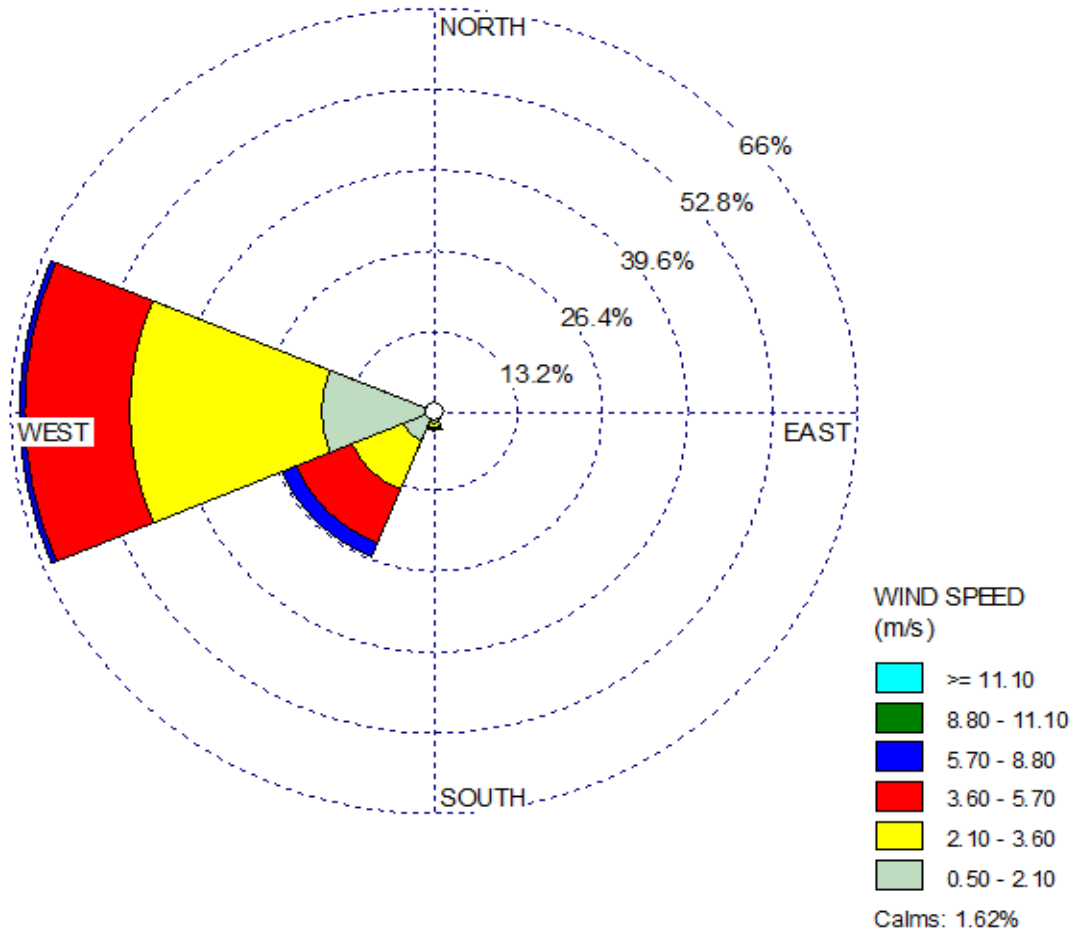
Directions	%
N	0.13
NE	0.13
E	0.00
SE	0.67
S	3.36
SW	25.90
W	64.50
NW	1.48
CALM	2.93

Wind rose Diagram (August 2017)



Directions	%
N	2.42
NE	0.94
E	0.00
SE	0.27
S	1.48
SW	37.01
W	37.82
NW	13.06
CALM	6.73

Windrose Diagram (September 2017)



Directions	%
N	0.13
NE	0.13
E	0.00
SE	0.67
S	3.36
SW	25.90
W	64.50
NW	1.48
CALM	2.93

Annexure 1: Average Ambient Air quality Results (April 2017 to September 2017)**Note: Values in Brackets indicates latest CPCB Limits for NAAQM.****1) April 2017**

S. No	Parameter	CPCB Limit	Unit	Location and Results		
				Nr. Fire Pump, SEZ-I	Nr. water tank, SEZ-I	Above SEZ-II Office
1	PM10	100	µg/m ³	224.50	219.50	171.00
2	PM2.5	60	µg/m ³	30.50	34.00	36.50
3	SO ₂	80	µg/m ³	14.44	14.39	15.05
4	NO _x	80	µg/m ³	27.72	28.85	29.68

2) May 2017

S. No	Parameter	CPCB Limit	Unit	Location and Results		
				Nr. Fire Pump, SEZ-I	Nr. water tank, SEZ-I	Above SEZ-II Office
1	PM10	100	µg/m ³	155.00	83.00	165.50
2	PM2.5	60	µg/m ³	42.50	40.00	47.50
3	SO ₂	80	µg/m ³	16.04	16.07	15.29
4	NO _x	80	µg/m ³	30.82	29.08	28.84

3) June 2017

S. No	Parameter	CPCB Limit	Unit	Location and Results		
				Nr. Fire Pump, SEZ-I	Nr. water tank, SEZ – I	Above SEZ-II Office
1	PM10	100	µg/m ³	109.50	168.00	83.00
2	PM2.5	60	µg/m ³	30.00	31.50	18.50
3	SO ₂	80	µg/m ³	13.00	11.71	13.01
4	NO _x	80	µg/m ³	27.25	26.99	27.78

4) July 2017

S. No	Parameter	CPCB Limit	Unit	Location and Results		
				Nr. Fire Pump, SEZ-I	Nr. water tank, SEZ – I	Above SEZ-II Office
1	PM10	100	µg/m ³	48.50	51.00	60.50
2	PM2.5	60	µg/m ³	20.00	21.00	23.00
3	SO ₂	80	µg/m ³	10.73	10.32	10.38
4	NO _x	80	µg/m ³	25.95	21.87	23.28

5) August 2017

S. No	Parameter	CPCB Limit	Unit	Location and Results		
				Nr. Fire Pump, SEZ-I	Nr. water tank, SEZ – I	Above SEZ-II Office
1	PM10	100	µg/m3	90.00	61.50	63.50
2	PM2.5	60	µg/m3	28.00	23.50	21.50
3	SO2	80	µg/m3	11.15	11.26	14.94
4	NOx	80	µg/m3	21.88	22.23	27.78

6) September 2017

S. No	Parameter	CPCB Limit	Unit	Location and Results		
				Nr. Fire Pump, SEZ-I	Nr. water tank, SEZ – I	Above SEZ-II Office
1	PM10	100	µg/m3	160	103	161
2	PM2.5	60	µg/m3	39.5	29	35
3	SO2	80	µg/m3	11.87	11.21	11.6
4	NOx	80	µg/m3	25.46	26.29	26.85

Annexure 2: Noise Monitoring Results

Monitoring Month		Results in dB (LEQ) base on 24 hour reading			
		Sampling Location			
		Admin Building (SEZ I)	C Pumping station SEZ (I)	Admin Building SEZ (II)	D Pumping station SEZ (II)
April 2017	Maximum	62	59	66	65
	Minimum	38	39	35	40
May 2017	Maximum	65	59	68	63
	Minimum	31	40	31	40
June 2017	Maximum	69	60	69	67
	Minimum	39	38	30	40
July 2017	Maximum	67	57	72	67
	Minimum	44	38	31	40
August 2017	Maximum	65	59	-	-
	Minimum	40	41	-	-
September 2017	Maximum	65	55	78	-
	Minimum	40	38	35	-

Annexure 3: Surface Water Characteristics**1) Surface Water samples in April 2017**

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results	
			Nr. Opal gate boundary "C" Pumping Road	SEZ-II Nr. Godrej gate Drain Water
			10/04/2017	20/04/2017
1	pH @ 25 ° C	Unit	8.02	7.29
2	Colour [Hazen	Hazen Unit(APHA)	10	10
3	Taste	Agreeable	N.A	N.A
4	Odour	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)	NTU	N.D (MDL: 0.1)	N.D
6	Temperature	0C	30	30
7	Total Dissolved Solids	Mg/Lit.	1416	3096
8	Total Alkalinity	Mg/Lit.	156	20
9	Chloride (as Cl) –	Mg/Lit.	294	597
10	Sulphate (as SO4-2)	Mg/Lit.	396	788
11	Nitrate (as NO3)	Mg/Lit.	11.50	2.61
12	Calcium (as Ca)	Mg/Lit.	40.08	136.27
13	Magnesium (as Mg)	Mg/Lit.	17	32
14	Fluoride (as F)	Mg/Lit.	0.75	1.35
15	Iron (as Fe)	Mg/Lit.	0.20	0.11
16	Zinc (as Zn)	Mg/Lit.	0.15	0.19
17	Phenolic Compound	Mg/Lit.	N.D (MDL: 0.02)	N.D (MDL: 0.02)
18	Residual Chlorine	Mg/Lit.	N.D (MDL: 0.1)	N.D (MDL: 0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

2) Surface Water samples in May 2017

S. No	Parameters	Unit	Location, Date of Sample collected & Monitoring Results			
			Shiva pharma SEZ 1	Front of Indofill	Aries color storm drain	"C" pumping
			02/05/2017	16/05/2017	09/05/2017	05/06/2017
1	pH @ 25 ° C	Unit	7.48	8.25	7.23	7.69
2	Colour [Hazen	Hazen	10	230	20	10
3	Taste	Agreeable	N.A	N.A	N.A	N.A
4	Odour	Unobjectionabl	Unobjectionabl	Unobjectionabl	Unobjectionabl	Unobjectionabl
5	Turbidity(NTU	NTU	N.D (MDL: 0.1)	N.D (MDL: 0.1)	N.D (MDL: 0.1)	N.D (MDL: 0.1)
6	Temperature	0C	30	30	30	28
7	Total	Mg/Lit.	2664	537080	336	1064
8	Total	Mg/Lit.	250	4300	150	160
9	Chloride (as	Mg/Lit.	738	19863	96	241
10	Sulphate (as	Mg/Lit.	671	178125	27	301
11	Nitrate (as	Mg/Lit.	13.42	33.27	<0.2	9.58
12	Calcium (as	Mg/Lit.	212	802	45	35
13	Magnesium	Mg/Lit.	66	996	21	30
14	Fluoride (as	Mg/Lit.	1.26	0.94	0.07	0.86
15	Iron (as Fe)	Mg/Lit.	0.28	1.53	0.12	0.38
16	Zinc (as Zn)	Mg/Lit.	0.26	0.20	0.16	0.2
17	Phenolic	Mg/Lit.	N.D (MDL:	N.D (MDL:	N.D (MDL:	N.D (MDL:
18	Residual	Mg/Lit.	N.D (MDL: 0.1)	N.D (MDL: 0.1)	N.D (MDL: 0.1)	N.D (MDL: 0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

3) Surface Water samples in June 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Aries colour crossing	Raamdev industries drain water	"C" pumping
			19/06/2017	28/06/2017	05/06/2017
1	pH @ 25 ° C	Unit	6.98	7.59	7.69
2	Colour [Hazen	Hazen Unit(APHA)	Light brown	10	10
3	Taste	Agreeable	N.A	N.A	N.A
4	Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)	NTU	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D (MDL: 0.1)
6	Temperature	0C	28	28	28
7	Total Dissolved	Mg/Lit.	340	1668	1064
8	Total Alkalinity	Mg/Lit.	200	260	160
9	Chloride (as Cl)	Mg/Lit.	92	522	241
10	Sulphate (as	Mg/Lit.	31	285	301
11	Nitrate (as NO3)	Mg/Lit.	<0.2	3.99	9.58
12	Calcium (as Ca)	Mg/Lit.	47	45	35
13	Magnesium (as	Mg/Lit.	32	21	30
14	Fluoride (as F)	Mg/Lit.	0.18	0.86	0.86
15	Iron (as Fe)	Mg/Lit.	0.24	0.19	0.38
16	Zinc (as Zn)	Mg/Lit.	0.10	0.20	0.2
17	Phenolic	Mg/Lit.	N.D (MDL: 0.02)	N.D.(MDL:0.02)	N.D (MDL: 0.02)
18	Residual	Mg/Lit.	N.D (MDL: 0.1)	N.D.(MDL:0.1)	N.D (MDL: 0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

4) Surface Water samples in July 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			"C" Pumping	Nr.Sigachi Storm Drain Water	Nr. OPAL Corner
			06/07/2017	10/07/2017	18/07/2017
1	pH @ 25 ° C	Unit	8.07	6.94	7.4
2	Colour [Hazen	Hazen Unit(APHA)	5	35	10
3	Taste	Agreeable	N.A	N.A	N.A
4	Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)	NTU	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)
6	Temperature	0C	28	28	28
7	Total Dissolved	Mg/Lit.	1092	4056	284
8	Total Alkalinity	Mg/Lit.	830	2700	180
9	Chloride (as Cl) –	Mg/Lit.	256	1639	48
10	Sulphate (as	Mg/Lit.	301	1164	72
11	Nitrate (as NO3)	Mg/Lit.	3.45	<0.2	1.53
12	Calcium (as Ca)	Mg/Lit.	47	294	66
13	Magnesium (as	Mg/Lit.	44	65	45
14	Fluoride (as F)	Mg/Lit.	0.06	<0.05	<0.05
15	Iron (as Fe)	Mg/Lit.	0.21	0.16	0.015
16	Zinc (as Zn)	Mg/Lit.	0.15	0.18	0.21
17	Phenolic	Mg/Lit.	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine	Mg/Lit.	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

5) Surface Water samples in August 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Front of unique Pvt .Ltd)	Nr. Accent cell	Front of unique Pvt .Ltd)
			14/08/2017	08/08/2017	14/08/2017
1	pH @ 25 ° C	Unit	7.65	7.4	7.65
2	Colour [Hazen Unit (ADHA)]	Hazen Unit (ADHA)	200	250	200
3	Taste	Agreeable	N.A	N.A	N.A
4	Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)	NTU	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)
6	Temperature	0C	29	29	29
7	Total Dissolved Solids	Mg/Lit.	940	972	940
8	Total Alkalinity	Mg/Lit.	320	220	320
9	Chloride (as Cl)	Mg/Lit.	283	269	283
10	Sulphate (as SO ₄ -2)	Mg/Lit.	222	257	222
11	Nitrate (as NO ₃)	Mg/Lit.	<0.2	59.34	<0.2
12	Calcium (as Ca)	Mg/Lit.	79	84	79
13	Magnesium (as Mg)	Mg/Lit.	35	32	35
14	Fluoride (as F)	Mg/Lit.	0.02	0.23	0.02
15	Iron (as Fe)	Mg/Lit.	0.2	0.27	0.2
16	Zinc (as Zn)	Mg/Lit.	0.19	0.13	0.19
17	Phenolic Compound as Residual Chlorine	Mg/Lit.	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine	Mg/Lit.	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

6) Surface Water samples in September 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Shiva pharma	Nr.Aries Colour	Meghmani organic industries limited
			22/09/2017	22/09/2017	25/09/2017
1	pH @ 25 ° C	Unit	7.58	7.34	7.53
2	Colour [Hazen Unit (ADHA)]	Hazen Unit (ADHA)	5	50	Brown
3	Taste	Agreeable	N.A	N.A	N.A
4	Odour	Unobjectionable	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)	NTU	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)
6	Temperature	0C	30	30	30
7	Total Dissolved	Mg/Lit.	1384	5124	5220
8	Total Alkalinity	Mg/Lit.	300	1020	850
9	Chloride (as Cl ⁻)	Mg/Lit.	709	1418	1374
10	Sulphate (as SO ₄ -2)	Mg/Lit.	135	2165	1501
11	Nitrate (as NO ₃)	Mg/Lit.	27.98	19.78	14.95
12	Calcium (as Ca)	Mg/Lit.	62	154	79
13	Magnesium (as Mg)	Mg/Lit.	33	60	50
14	Fluoride (as F)	Mg/Lit.	0.64	0.39	0.78
15	Iron (as Fe)	Mg/Lit.	0.21	0.18	0.19
16	Zinc (as Zn)	Mg/Lit.	0.29	0.22	0.24
17	Phenolic Compound as	Mg/Lit.	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine	Mg/Lit.	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

Marine Water Characteristic**1) Sample 1 (During High tide)**

S. No.	Parameters	Unit	Date of Sample collected & Monitoring Results				
			05.04.2017	26.05.2017	26.06.2017	29.07.2017	26.09.2017
1	pH @ 25 ° C		7.55	7.62	7.42	7.69	7.59
2	Temperature	°C	30	5	28	28	30
3	Turbidity(NTU)	Pt-CO	3.1	3.3	3.6	3.4	2.8
4	Total Suspended Solids	Mg/L	128	133	123	215	123
5	Biochemical Oxygen Demand (BOD)		120	113	118	136	150
6	Ammonical Nitrogen	-	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)
7	Salinity (ppt)	Mg/L	28.6	30.7	31.7	33.8	33.1
8	Dissolved Oxygen	Mg/L	3.1	3	3.2	3.6	3.3
9	Total Nitrogen	Mg/L	0.44	0.4	0.25	0.39	0.5
10	Dissolved Phosphate	Mg/L	0.71	0.94	0.59	1.06	1.06
11	Nitrate	Mg/L	1.92	1.53	0.84	1.46	2.07
12	Nitrite	Mg/L	0.07	0.06	0.05	0.11	0.08
13	Phenol	Mg/L	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
14	Petroleum Hydrocarbon(PHC)(ppb)	Mg/L	N.D.	N.D.	N.D.	N.D.	N.D.

* ND: Not Detected, MDL: Minimum Detection Limit

2) Sample 2 (During low tide)

S. No.	Parameters	Unit	Date of Sample collected & Monitoring Results				
			05.04.2017	26.05.2017	26.06.2017	29.07.2017	26.09.2017
1	pH @ 25 ° C		7.6	7.62	7.84	7.77	7.84
2	Temperature	°C	30	5	30	28	30
3	Turbidity(NTU)	Pt-CO	3	3.3	3.5	3.2	3
4	Total Suspended Solids	Mg/L	91	133	103	113	170
5	Biochemical Oxygen Demand (BOD)		181	113	144	106	136
6	Ammonical Nitrogen	-	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)
7	Salinity (ppt)	Mg/L	30.3	30.7	32.5	34.6	29.9
8	Dissolved Oxygen	Mg/L	3.4	3	3.3	3.3	3.1
9	Total Nitrogen	Mg/L	0.22	0.4	0.2	0.3	0.29
10	Dissolved Phosphate	Mg/L	0.59	0.94	0.71	1.18	0.71
11	Nitrate	Mg/L	0.92	1.53	0.77	1.07	1.23
12	Nitrite	Mg/L	0.07	0.06	0.06	0.08	0.07
13	Phenol	Mg/L	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
14	Petroleum Hydrocarbon(PHc)(ppb)	Mg/L	N.D.	N.D.	N.D.	N.D.	N.D.

* ND: Not Detected, MDL: Minimum Detection Limit

Annexure 4: Ground Water Characteristic**1) Ground water samples in April 2017**

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Ambetha	Luvara	Jageshwar
			25.04.2017	25.04.2017	25.04.2017
1	pH @ 25 ° C		7.62	7.2	7.46
2	Colour [Hazen	oC	10	5	5
3	Taste	Pt-CO	N.A	N.A	N.A
4	Odour	Mg/L	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)		N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)
6	Temperature	-	30	30	30
7	Total Dissolved	Mg/L	1992	2352	3776
8	Total Alkalinity	Mg/L	450	1010	1180
9	Chloride (as Cl) –	Mg/L	995	1142	1592
10	Sulphate (as SO4-	Mg/L	278	192	369
11	Nitrate (as NO3)	Mg/L	43.32	56.81	57.12
12	Calcium (as Ca)	Mg/L	26.45	60.92	78.56
13	Magnesium (as Mg)	Mg/L	35	21	64
14	Fluoride (as F)	Mg/L	1.06	0.66	1.39
15	Iron (as Fe)	Mg/L	0.06	0.04	0.01
16	Zinc (as Zn)	NTU	0.05	0.03	0.04
17	Phenolic Compound	Mg/L	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine	Mg/L	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

Ground Water Characteristic**2) Ground water samples in May 2017**

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Dahej	Suva	Lakhigam
			20.05.2017	20.05.2017	20.05.2017
1	pH @ 25 ° C		7.54	8.01	7.49
2	Colour [Hazen	oC	5	5	5
3	Taste	Pt-CO	N.A	N.A	N.A
4	Odour	Mg/L	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)		N.D.(MDL:0.1)	N.D.	N.D.
6	Temperature	-	30	30	30
7	Total Dissolved	Mg/L	2044	2308	5772
8	Total Alkalinity	Mg/L	850	530	800
9	Chloride (as Cl) –	Mg/L	579	940	2748
10	Sulphate (as SO4-	Mg/L	222	123	485
11	Nitrate (as NO3)	Mg/L	60.64	<0.2	32.43
12	Calcium (as Ca)	Mg/L	122.64	58.52	160
13	Magnesium (as Mg)	Mg/L	71	52	97
14	Fluoride (as F)	Mg/L	0.8	1.52	0.99
15	Iron (as Fe)	Mg/L	0.03	0.04	0.09
16	Zinc (as Zn)	NTU	0.05	0.03	0.07
17	Phenolic Compound	Mg/L	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine	Mg/L	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

3) Ground water samples in June 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Jageshwer	Luvara	Ambetha
			23.06.2017	23.06.2017	23.06.2017
1	pH @ 25 ° C		7.52	7.35	7.59
2	Colour [Hazen	oC	5	5	5
3	Taste	Pt-CO	N.A	N.A	N.A
4	Odour	Mg/L	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)		N.D.(MDL:0.1)	N.D.	N.D.
6	Temperature	-	28	28	28
7	Total Dissolved Solids	Mg/L	3580	2296	2040
8	Total Alkalinity	Mg/L	1100	957	440
9	Chloride (as Cl)	Mg/L	1495	841	868
10	Sulphate	Mg/L	419	173	222
11	Nitrate (as NO ₃)	Mg/L	34.96	43.09	37.18
12	Calcium (as Ca)	Mg/L	90	79.36	44.09
13	Magnesium (as Mg)	Mg/L	106	47	51
14	Fluoride (as F)	Mg/L	0.99	0.84	1.43
15	Iron (as Fe)	Mg/L	0.09	0.11	0.04
16	Zinc (as Zn)	NTU	0.07	0.06	0.09
17	Phenolic Compound		N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine		N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

4) Ground water samples in July 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Lakhigam	Suva	Dahej
			25.07.2017	25.07.2017	25.07.2017
1	pH @ 25 ° C		7.56	7.69	7.34
2	Colour [Hazen	oC	5	5	5
3	Taste	Pt-CO	N.A	N.A	N.A
4	Odour	Mg/L	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)		N.D.(MDL:0.1)	N.D.	N.D.
6	Temperature	-	28	28	28
7	Total Dissolved Solids	Mg/L	5464	1772	1524
8	Total Alkalinity	Mg/L	900	580	800
9	Chloride (as Cl)	Mg/L	2652	815	535
10	Sulphate	Mg/L	403	167	168
11	Nitrate (as NO ₃)	Mg/L	30.51	<0.2	24.92
12	Calcium (as Ca)	Mg/L	127	68.14	71.34
13	Magnesium (as Mg)	Mg/L	91	17	44
14	Fluoride (as F)	Mg/L	0.87	1.4	1.33
15	Iron (as Fe)	Mg/L	0.01	0.09	0.01
16	Zinc (as Zn)	NTU	0.07	0.07	0.02
17	Phenolic Compound		N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine		N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limit

5) Ground water samples in September 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results		
			Dahej	Suva	Lakhigam
			29.09.2017	29.09.2017	29.09.2017
1	pH @ 25 ° C		7.86	8.69	8.21
2	Colour [Hazen Unit(APHA)]	oC	5	5	5
3	Taste	Pt-	N.A	N.A	N.A
4	Odour	Mg/L	Unobjectionable	Unobjectionable	Unobjectionable
5	Turbidity(NTU)		N.D.(MDL:0.1)	N.D.	N.D.
6	Temperature	-	30	30	30
7	Total Dissolved Solids	Mg/L	4524	2172	3068
8	Total Alkalinity	Mg/L	890	570	980
9	Chloride (as Cl) –	Mg/L	1982	802	1226
10	Sulphate (as SO4-2)	Mg/L	418	365	365
11	Nitrate (as NO3)	Mg/L	39.94	5.29	52.67
12	Calcium (as Ca)	Mg/L	47	27.25	44.09
13	Magnesium (as Mg)	Mg/L	76	47	68
14	Fluoride (as F)	Mg/L	1.58	0.84	0.26
15	Iron (as Fe)	Mg/L	0.15	0.02	0.1
16	Zinc (as Zn)	NTU	0.06	0.06	0.15
17	Phenolic Compound as	Mg/L	N.D.(MDL:0.02)	N.D.(MDL:0.02)	N.D.(MDL:0.02)
18	Residual Chlorine	Mg/L	N.D.(MDL:0.1)	N.D.(MDL:0.1)	N.D.(MDL:0.1)

* ND: Not Detected, MDL: Minimum Detection Limi

Annexure 5: Waste water Characteristics**1) April 2017**

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results							
			Sigachi inlet	Sigachi Outlet	C Pumping	D Pumping	Sunpharma Inlet	Sunpharma outlet	Fermenta Biotech inlet	Fermenta biotech outlet
			4/04/2017	4/04/2017	17/04/2017	19/04/2017	27/04/2017	27/04/2017	27/04/2017	28/04/2017
1	pH		6.94	7.14	7.48	6.82	8.72	7.59	5.71	6.94
2	Total Dissolve	Mg/L	4100	256	24044	1420	19632	4992	7268	2468
3	Suspended	Mg/L	210	38	109	29	85	36	24	21
4	COD	Mg/L	694	29	1340	68	30400	240	11920	176
5	BOD (3 days at	Mg/L	208	9	402	20	9120	72	3579	53
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	1795	99	6314	221	10380	1488	1687	368
8	Sulphate	Mg/L	519	29	9701	562	4499	1017	2000	1074
9	Nitrate	Mg/L	<0.2	<0.2	27.14	24.07	95.83	66.09	<0.2	<1
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

* ND: Not Detected, MDL: Minimum Detection Limit

2). Waste Water Collection in May 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results										
			C Pumping Station	Accent Outlet	Meghamani Outlet	Aries Color Outlet	Firmenich SEZ-1)	Meghamani Organic SEZ I	Rallis India Outlet	Hindustan MI ETP Outlet	Meghamani Industries	Rank Pharma ETP outlet	Rank Pharma ETP outlet
			05/05/2017	14/05/2017	11/05/2017	13/05/2017	12/05/2017	11/05/2017	18/05/2017	18/05/2017	17/05/2017	19/05/2017	19/05/2017
1	pH		7.56	6.85	7.20	7.54	7.58	7.66	7.44	7.58	6.73	7.23	7.23
2	Total Dissolve	Mg/L	20844	2312	312	35292	7068	5752	1644	920	17924	2308	2308
3	Suspended	Mg/L	708	40	31	55	44	10	13	21	14	13	13
4	COD	Mg/L	750	54	63	617	346	175	125	21	746	46	46
5	BOD (3 days at	Mg/L	225	16	20	185	104	53	38	7	224	15	15
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	3519	1133	96	9787	2603	1832	246	260	10028	1196	1196
8	Sulphate	Mg/L	8838	106	25	15041	766	1412	436	94	524	174	174
9	Nitrate	Mg/L	11.65	1.46	54.20	59.03	<0.2	18.78	4.75	78.58	56.12	57.35	57.35
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

* ND: Not Detected, MDL: Minimum Detection Limit

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results										
			D Pumping Station	Fermenta Bio ETP outlet	Ramdev	Torrent Pharma Outlet	Glenmark ETP outlet	Coromandel ETP outlet	Sigachi Outlet	Shiva Pharma ETP Outlet	Indofil ETP Outlet	Sunpharma ETP Outlet	Rock wool ETP outlet
			19/05/2017	19/05/2017	23/05/2017	24/05/2017	24/05/2017	24/05/2017	16/05/2017	15/05/2017	16/05/2017	17/05/2017	15/05/2017
1	pH		7.51	7.42	7.16	7.17	7.73	6.06	7.18	6.82	7.93	8.10	7.20
2	Total Dissolve	Mg/L	2512	2576	484	1656	200	1524	664	10268	126232	6680	356
3	Suspended	Mg/L	20	26	10	9	12	18	10	145	300	11	35
4	COD	Mg/L	150	125	12	20	8	20	175	529	171	179	67
5	BOD (3 days at	Mg/L	45	38	4	6	3	7	53	159	51	54	20
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	468	400	207	694	58	87	241	5448	3519	2748	125
8	Sulphate	Mg/L	728	725	27	109	12	1099	14	962	40987	1006	21
9	Nitrate	Mg/L	3.60	3.37	22.62	1.46	6.90	52.21	9.05	21.16	51.98	59.65	43.62
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

3). Waste Water Collection in June 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results										
			Shiva Pharma ETP Outlet	Firmenich	Rock wool ETP outlet	C Pumping	Sigachi outlet	Meghamani Organic SEZ I	Accent Outlet	Ramdev	Sunpharma ETP Outlet	Hindustan ML	Raks Pharma ETP outlet
			01/06/2017	03/06/2017	3/06/2017	1/06/2017	06/06/2017	07/06/2017	05/06/2017	06/06/2017	07/06/2017	16/06/2017	15/06/2017
1	pH		6.81	7.72	7.86	8.03	8.12	8.13	7.37	7.95	7.99	7.44	7.25
2	Total Dissolve Solid	Mg/L	10544	6312	342	22092	340	6428	2124	452	6264	712	2512
3	Suspended Solids	Mg/L	106	54	34	696	15	10	57	17	21	27	13
4	COD	Mg/L	393	743	35	607	16	144	86	27	167	23	62
5	BOD (3 days at 27 °C)	Mg/L	118	223	11	182	5	43	26	9	50	7	19
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	5303	2507	111	3375	231	1687	1099	198	2652	241	1200
8	Sulphate	Mg/L	1177	976	19	9656	37	1999	174	26	1004	101	387
9	Nitrate	Mg/L	22.16	<0.2	41.48	9.28	7.51	19.48	1.69	20.55	53.51	60.11	45.85
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

* ND: Not Detected, MDL: Minimum Detection Limit

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results										
			Aries Color Outlet	Meghamani LLP Outlet	Meghamani Industries	Indofil ETP Outlet	Glenmark ETP outlet	D Pumping	Fermenta Bio ETP outlet	Coromandal ETP outlet	Toronto Pharma Outlet	Rallis India Outlet	ONGC petronet Addition limited
			05/06/2017	08/06/2017	09/06/2017	09/06/2017	14/06/2017	16/06/2017	14/06/2017	16/06/2017	16/06/2017	15/06/2017	19/06/2017
1	pH		8.08	7.73	7.19	8.29	7.85	7.75	7.52	7.31	7.42	7.40	7.25
2	Total Dissolve Solid	Mg/L	37868	320	17480	43612	268	1652	1582	2296	1776	840	3084
3	Suspended Solids	Mg/L	41	17	15	185	10	26	27	22	14	20	14
4	COD	Mg/L	650	74	591	125	31	156	121	35	27	163	105
5	BOD (3 days at 27	Mg/L	195	22	177	37	9	47	36	11	8	47	32
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	9456	111	9691	3327	72	477	391	72	723	217	236
8	Sulphate	Mg/L	13291	41	821	21459	18	596	573	1248	179	323	1556
9	Nitrate	Mg/L	53.51	47.92	53.51	49.60	6.52	3.99	4.98	52.52	1.92	3.99	12.11
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

4). Waste Water Collection in July 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results										
			Shiva Pharma ETP Outlet	Rock Wool ETP outlet	Meghamani SEZ I	Ramdev	Meghamani LLP Outlet	C Pumping	Firmenich SEZ-I)	Meghamani Industries	Sigachi Outlet	Aries Color outlet	Hindustan M I Outlet
			03/07/2017	03/07/2017	04/07/2017	4/07/2017	04/07/2017	06/07/2017	06/07/2017	06/07/2017	10/07/2017	07/07/2017	27/07/2017
1	pH		7.23	5.73	7.75	7.89	6.48	7.53	7.34	7.15	7.04	7.67	7.28
2	Total Dissolve Solid	Mg/L	13244	416	7336	5336	2008	12840	5364	11324	1868	23040	840
3	Suspended Solids	Mg/L	28	24	11	13	18	454	31	27	17	40	20
4	COD	Mg/L	225	83	133	21	183	602	158	427	880	133	25
5	BOD (3 days at 27	Mg/L	67	25	40	6	55	180	47	128	264	40	8
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	6460	96	2555	3471	1109	4050	1543	6171	916	8726	273
8	Sulphate	Mg/L	1397	115	2144	40	315	2071	1614	657	98	3772	159
9	Nitrate	Mg/L	43.78	32.51	8.82	19.93	66.24	<0.2	<0.2	26.07	1.46	51.37	73.98
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

* ND: Not Detected, MDL: Minimum Detection Limit

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results										
			Indofil ETP Outlet	Accent Outlet	Sunpharma ETP outlet	Fermenta Bio ETP outlet	Rallis India Outlet	D Pumping	Coromandel ETP outlet	Raks Pharma Outlet	Genmark ETP outlet	Opal Final Outlet	Torrent Pharma
			07/07/2017	10/07/2017	12/07/2017	13/07/2017	13/07/2017	13/07/2017	17/07/2017	24/07/2017	24/07/2017	29/07/2017	27/07/2017
1	pH		7.85	7.51	7.73	7.66	7.68	7.14	6.88	6.19	7.09	6.56	6.93
2	Total Dissolve Solid	Mg/L	8712	1856	12280	5068	2444	2948	3644	2220	176	3112	1228
3	Suspended Solids	Mg/L	45	63	30	22	19	33	19	14	18	17	20
4	COD	Mg/L	62	112	111	186	138	115	28	79	28	29	58
5	BOD (3 days at 27	Mg/L	18	34	33	56	42	34	8	24	8	9	17
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	2893	1012	5207	2796	1205	1109	1254	1132	90	1792	707
8	Sulphate	Mg/L	1623	95	1121	780	225	669	592	256	10	741	159
9	Nitrate	Mg/L	15.33	4.68	47.53	<0.2	<0.2	<0.2	28.90	52.67	6.44	3.76	1.69
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

5) Waste Water Collection in August 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results											
			Shiva Pharma ETP Outlet	Arries color outlet	Sigachi Outlet	Meghamani Outlet	Meghamani Industries	Ramdev	Indofill Outlet	Accent Outlet	Rock wood outlet	Meghamani LLP Outlet	Sunpharma ETP outlet	C Pumping
			2/08/2017	03/08/2017	03/08/2017	5/08/2017	9/08/2017	8/08/2017	09/08/2017	08/08/2017	11/08/2017	09/08/2017	10/08/2017	10/08/2017
1	pH		7.38	8.06	7.26	8.55	7.58	7.95	7.58	7.50	7.69	7.53	7.83	7.96
2	Total Dissolve Solid	Mg/L	3884	23896	872	4568	15228	5912	40820	2680	1020	1188	6020	13032
3	Suspended Solids	Mg/L	42	34	72	58	22	32	44	62	20	126	16	38
4	COD	Mg/L	197	372	272	79	280	172	485	79	8	129	183	809
5	BOD (3 days at 27	Mg/L	59	113	82	23	84	51	147	24	2	39	55	240
6	Oil & Grease	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
7	Chloride	Mg/L	1886	12164	471	1650	8628	3489	3772	1509	707	471	2452	3630
8	Sulphate	Mg/L	544	3219	40	1227	1067	15	16290	254	19	149	1027	1662
9	Nitrate	Mg/L	33.66	50.52	1.76	7.51	24.92	16.48	17.48	4.22	30.28	56.66	45.85	<0.2
10	Dissolve Oxygen	Mg/L	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

* ND: Not Detected, MDL: Minimum Detection Limit

5) Waste Water Collection in September 2017

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results											
			Shiva Pharma ETP Outlook	Rock wool ETP Outlet	C Pumping	Rallis India Outlet	Raksh Pharma outlet	Hindustan MI ETP outlet	Sunpharma	Meghamani LIP	Meghamani organic SEZ i	Torrent Pharma	Fermenta Bio ETP outlet	Glenmark ETP outlook
			07/09/2017	07/09/2017	07/09/2017	8/09/2017	8/09/2017	8/09/2017	11/09/2017	11/09/2017	11/09/2017	12/09/2017	12/09/2017	12/09/2017
1	pH		7.54	7.83	7.71	7.32	5.70	7.47	8.25	6.80	8.48	7.78	7.55	7.60
2	Total Dissolve Solid	Mg/L	12060	2232	34504	3336	2076	872	0108	1152	7188	2844	2085	384
3	Suspended Solids	Mg/L	34	13	46	62	20	11	27	36	32	40	72	60
4	COD	Mg/L	177	16	573	267	33	40	157	77	183	130	103	50
5	BOD (3 days at 27	Mg/L									55	30	31	15
6	Oil & Grease	Mg/L	51	3	171	80	10	12	47	23				
7	Chloride	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
8	Sulphate	Mg/L	6303	1390	4516	1588	1191	695	3573	546	2134	1347	743	232
9	Nitrate	Mg/L	1305	52	15484	718	618	137	1554	219	1747	408	503	12
10	Dissolve Oxygen	Mg/L									16.10	<0.2	<0.2	<0.2
			34.35	29.52	<0.2	9.28	23.77	63.71	49.68	48.38	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)
			N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)				

* ND: Not Detected, MDL: Minimum Detection Limit

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results									
			Accent Outlet	Sigachi Outlet	Aries color	D Pumping	Opal Final Outlet	Firmeinich	Indofill ETP outlet	Meghamani Industries	Ramdev	Coromandel
			15/09/2017	15/09/2017	15/09/2017	18/09/2017	18/09/2017	19/09/2017	19/09/2017	19/09/2017	22/09/2017	29/09/2017
1	pH		7.45	7.89	8.00	7.12	6.76	7.41	7.46	7.58	7.26	6.98
2	Total Dissolve Solid	Mg/L	2428	896	38268	2844	3832	6564	48712	8768	6336	4216
3	Suspended Solids	Mg/L	88	37	30	44	49	73	19	14	12	24
4	COD	Mg/L	283	47	287	150	43	147	87	177	67	20
5	BOD (3 days at 27	Mg/L										
6	Oil & Grease	Mg/L	85	14	86	45	13	44	26	53	53	6
7	Chloride	Mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
8	Sulphate	Mg/L	1393	604	9102	1115	1254	2229	3529	3901	3483	1533
9	Nitrate	Mg/L	9	11	13780	503	1000	1670	15881	2157	17	1118
10	Dissolve Oxygen	Mg/L	<0.2	<0.2	34.88	<0.2	23.54	<0.2	0.06	18.17	9.66	12.11
			N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)	N.D.(MDL:0.2)

Annexure 6: Soil Quality Monitoring Data**1) Sample 1**

S. No.	Parameters	Unit	Location, Date of Sample collected & Monitoring Results
			C-Pumping SEZ-1
			12.09.2017
1	Antimony as Sb	mg/kg	N.D.
2	Arsenic as As	mg/kg	N.D.
3	Beryllium as Be	mg/kg	N.D.
4	Cadmium as Cd	mg/kg	0.066
5	Chromium as Cr	mg/kg	0.339
6	Copper as Cu	mg/kg	0.218
7	Lead as Pb	mg/kg	N.D.
8	Nickel as Ni	mg/kg	0.43
9	Selenium as Se	mg/kg	N.D.
10	Silver as Ag	mg/kg	N.D.
11	Titanium as Ti	mg/kg	N.D.
12	Zinc as Zn	mg/kg	0.139
13	Mercury as Hg	mg/kg	N.D.
14	Volatile Organic Compound (VOC)	ppm	N.D.
15	Semi volatile organic compound (SVOCs)	ppm	N.D.
16	Inclusive of polynustear Aromatic Hydrocarbon	Ppb	N.D.
17	Total Polychlorinated biphenyl	Ppb	N.D.
18	Total Petroleum Hydrocarbon	Ppb	N.D.

* ND: Not Detected