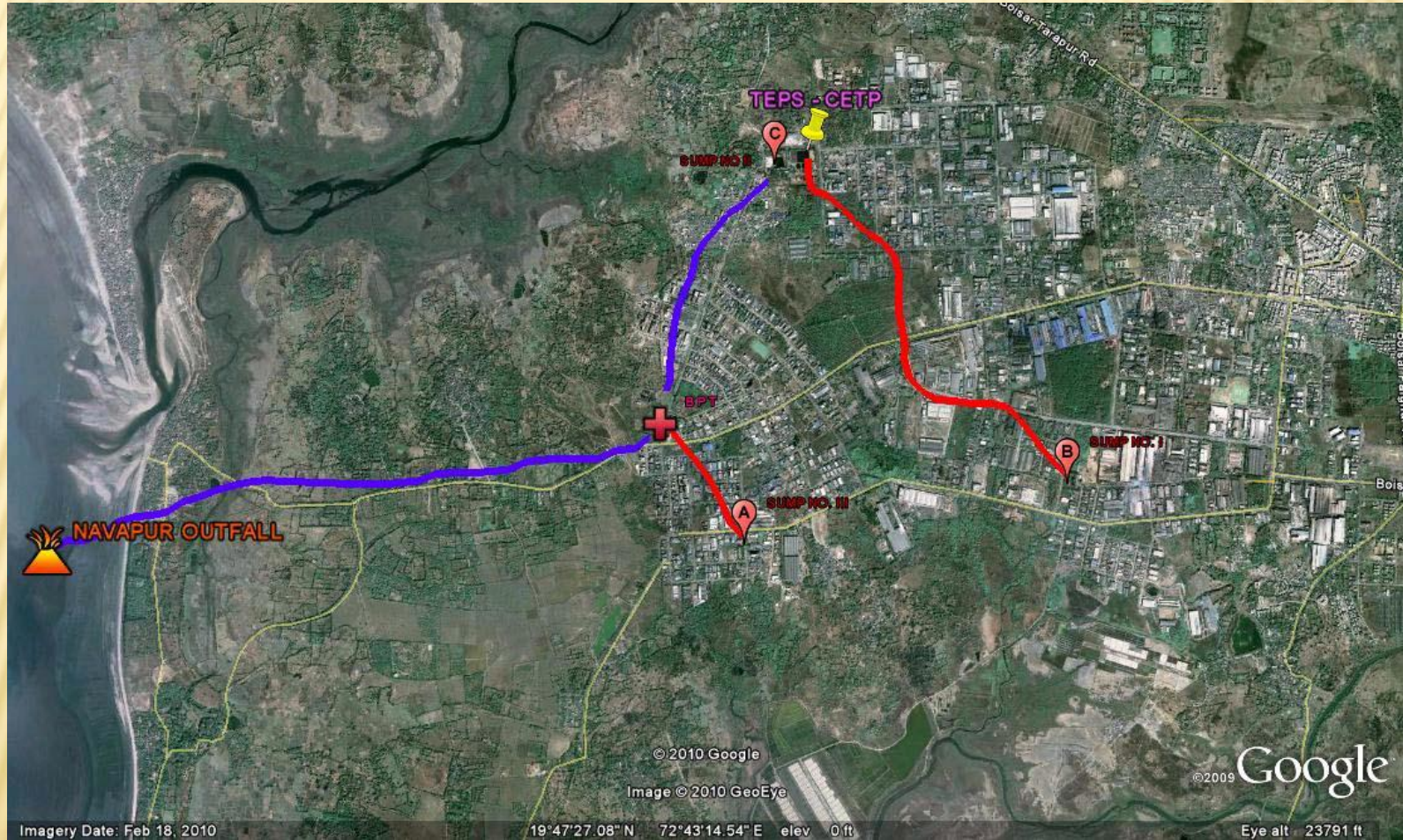
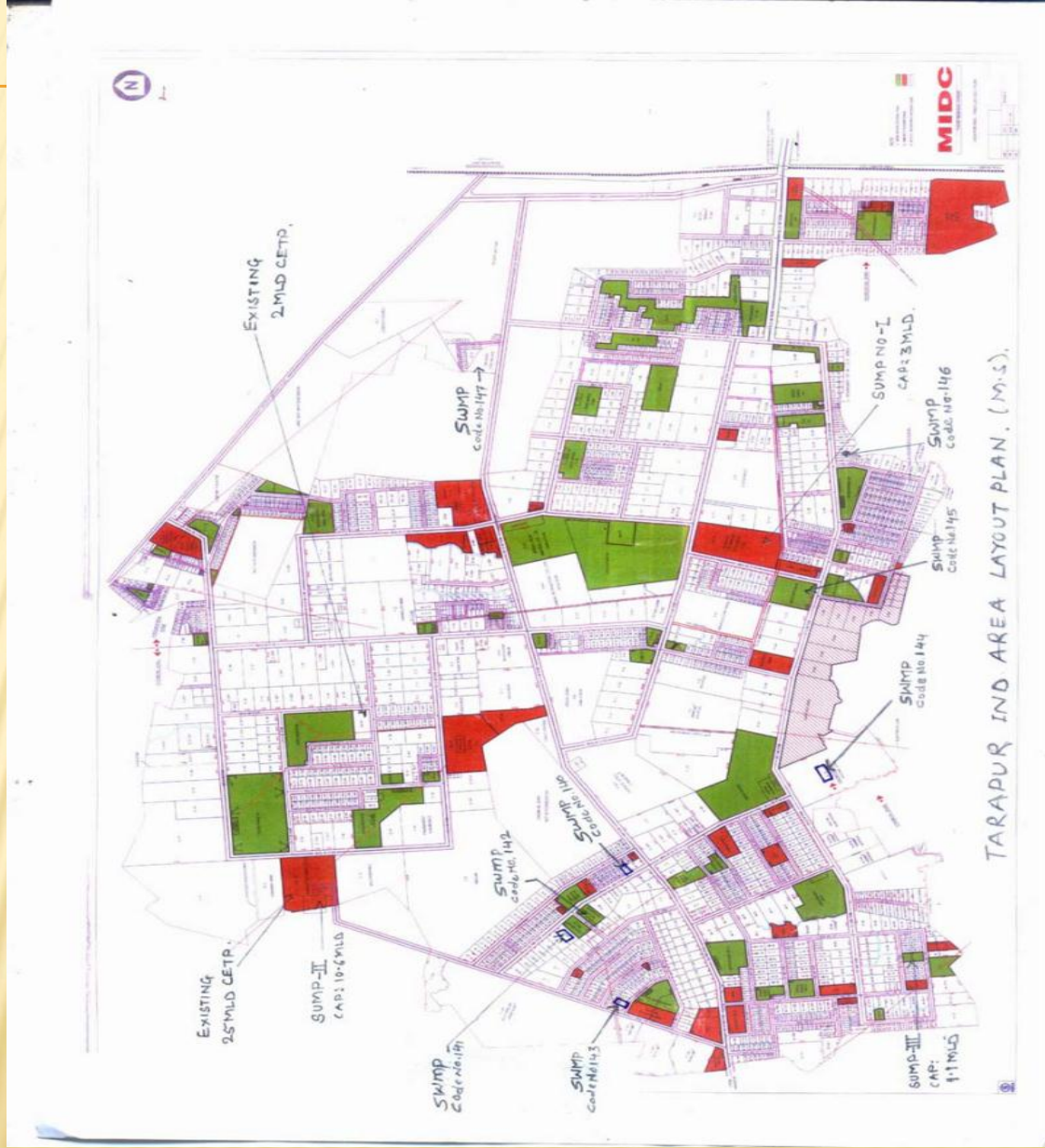

CEPI Presentation on Action Plan for Tarapur

Date :- 03/07/2015

LOCATION OF MIDC TARAPUR



MIDC TARAPUR LAYOUT



GENERAL INFORMATION OF MIDC

- ❖ Year of Establishment :- 1972.
- ❖ Area of MIDC :- 1028 Hectares.
- ❖ Water Consumption :- About 85 MLD
- ❖ Effluent Generation :- About 43 MLD
- ❖ Number of Industries :- 1083 Nos.



COMPRESSIVE ENVIRONMENTAL POLLUTION INDEX (CEPI)

- CPCB has declared December 2009 various total 88 pollution stretches in India accordingly MIDC Tarapur, Tal Palghar Dist. Palghar is one of them at sr. no 36.
- The CEPI index of MIDC Tarapur was calculated based on prevailing environmental base line like water, air, land. The CEPI index of water, air & land was projected as 51.25, 60.75 and 56.0 respectively. The cumulative CEPI index of MIDC Tarapur was shown as 72.01.
- Considering gravity of environmental degradation and associated pollution problems, CPCB declared ban on setting up of new industrial units and expansion of existing industrial units .
- Thereafter, M.P.C. Board has taken initiative by preparing action plan including short term and long term measures so as to cope up pollution problems and minimize CEPI index.

- The action plan was prepared indicating various short & long term measures along with responsibilities fixed on specific stake holders.
- MIDC, a infrastructure providing organization was quoted with major role to improve existing infrastructure. Also, MPCB being a law enforcement authority was quoted with the specific role of co-ordination among various stake holders like MIDC, CETP, Industries Associations and local Government .
- The action plan prepared by M.P.C. Board was submitted to Central Government / CPCB with a request to vacate ban on setting up of new industrial units and expansion of existing industrial units . Considering, the proposed short & long term measures proposed by Board office, CPCB decided to lift the moratorium on 26/10/2010.

INFORMATION ABOUT CETP

- **Existing CETP Capacity** :- 25 MLD
- **Proposed CETP** :- 50 MLD
- **Compliance of Existing CETP** :- Presently not meeting the consented standards.
- **Status of proposed CETP** :- Environment Department have accorded environmental clearance. Construction work is started, about 40 to 45 % work is completed.

INDUSTRIAL STATISTIC – MIDC TARAPUR

Scale / Category	Red	Orange	Green	Total
LSI	50	03	26	79
MSI	28	05	24	57
SSI	394	53	500	947
Total	472	61	561	1083

COMPREHENSIVE ENVIRONMENTAL POLLUTION INDEX (CEPI)

Water Environment : Water CEPI = 56

A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
3.0	5.0	15.0	8.0	0.0	3.0	11.0	3.0	5.0	0.0	15.0	15.0

Air Environment : Air CEPI = 60.75

A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
5.75	5.0	28.75	2.0	3.0	3.0	8.0	3.0	3.0	5.0	14.0	10.0

Land Environment : Land CEPI = 51.25

	A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
Existing	3.0	5.0	15.0	7.75	3.0	3.0	13.75	5.0	1.5	0.0	7.5	15.0

The cumulative CEPI index of MIDC Tarapur was shown as 72.01 (CPCB- 2009).

SHORT TERM ACTION POINTS (UPTO 1 YEAR, INCLUDING CONTINUOUS ACTIVITIES)

Sr. No.	Action point	Compliance
1.	Expansion of TEPS-CETP from existing 25 MLD to 37 MLD (Expansion -12MLD)	<ul style="list-style-type: none"> •Deffered due to local villager's opposition. •Proposed 50 MLD CETP to which Env. Clearance is granted and work is started. Expected to be completed within 12 months.
2	Upgradation of existing 25 MLD CETP.	<ul style="list-style-type: none"> •CETP has upgraded aeration system with aspirator technology •Solar pit has provided and covered in monsoon by tarpaulin
3.	Arresting leakage of drainage pipe line	<ul style="list-style-type: none"> •AMC is granted by MIDC. • The leakages in pipe line are arrested. •Any incidental choke up in collection systems. • Manholes and chambers are attended immediately though AMC. • Though the leakages are arrested the effluent carrying line from Hotel Contesa to TEPS CETP the chambers are overflow near Hotel Contesa and near M/s Omega Colour s D- 21/2/3 MIDC Tarapur. •Sump No II and other drain is till some times overflowing .
4	Connection Sump III to CETP	<ul style="list-style-type: none"> •Work is completed

SHORT TERM ACTION POINTS (UPTO 1 YEAR, INCLUDING CONTINUOUS ACTIVITIES)

5	Identification of Solvent Use & solvent recovery plant to Improve the efficiency of solvent recovery by solvent using industries	<ul style="list-style-type: none">•Due to various measures taken by the industries solvent recovery improved. And following industries has taken messurs1. M/s. Arti Drugs Ltd, Plot No. N-198, MIDC,Tarapur, Tal.Palghar.This industry has developed new technology for the recovery of ammonium sulphate 2000 Mt / month by unit operation like evaporation, crystallization. Earlier the same was treated in their ETP.2. M/s Camlin Fine Chemicals. Ltd., Plot No. D,MIDC Tarapur has segregated of high COD stream .3. M/s. Arti Industries Ltd., , Plot No E-50, has installed zero discharge plant such as incineration high COD.4. M/s Lupin Limited Plt No. T-142 MIDC, Tarapur has provided Anaerobic Digester for segregated effluents.
6	Survey of stack monitoring	<ul style="list-style-type: none">•Coal fired boiler Stack monitoring work is completed.

SHORT TERM ACTION POINTS (UPTO 1 YEAR, INCLUDING CONTINUOUS ACTIVITIES)

6.	Illegal dumping of hazardous waste	<ul style="list-style-type: none">•Board has informed CHWTSDF to increase the frequency of collecting of HW and its transportation.• In recent time only one incidence of illegal HW disposal was reported.
7.	Massive Tree Plantation (One lacs Trees)	<ul style="list-style-type: none">•MIDC is carrying out massive tree plantation program on empty/ reserved plots, and on boundary of MIDC.•4500 nos of trees has been distributed by MIDC to TIMA,•MIDC has directed TEPS-CETP to plant 10000 nos of trees during 2011 monsoon period.

LONG TERM ACTION POINTS (MORE THAN 1 YEAR):

S. No.	Action point	Compliance
1.	Expansion of TEPS CETP from existing 25 MLD to 50 MLD	<ul style="list-style-type: none">•MIDC has allotted plot admeasuring 85000 m2.• Letter of intention (LOI) for 50 MLD additional CETP has been awarded to M/s Ramky Enviro Engineers ltd.,vide TEPS letter dated 19/06/2012. Environment Clearance approved by GoM. Construction Work is started

LONG TERM ACTION POINTS (MORE THAN 1 YEAR):

2.	If outlet treated quality is not achieved, advanced technologies such as MBR/RO are to be enforced	•After installation of additional CETP, If outlet parameters are not achieved, then,, advanced technology such as MBR/RO will be insisted.
3.	Replacement of RCC drainage by HDPE within MIDC area.	MIDC has Replaced internal pipe line by HDPE.

LONG TERM ACTION POINTS (MORE THAN 1 YEAR):

4.	Augmentation of sump no. 1 holding capacity and Augmentation of pumping machinery at sump 1 & 2	•Augmentation of sump No.1 is completed by constructing additional sump. Also augmentation of pumping at Sump No.1 and 2 is completed.
5.	Extension of pipeline inside Navapur sea	NIO has completed pre and post monsoon study. Work allotted to M/s. Masurkar & said work will be completed within 2 years.

LONG TERM ACTION POINTS (MORE THAN 1 YEAR):

6.	Reuse and recycle of treated water by the textile industries	<ul style="list-style-type: none">•5 nos of industries has started and recycling 50 % of their treated effluent i.e 1604.5 CMD• 7 No.of Textile industries has provided zero discharge system and recycling about 2434 CMD
7.	Pursuing matter with Mahanagar Gas limited/ GAIL to make available CNG to MIDC Tarapur	<ul style="list-style-type: none">•Laying of pipeline from Vikramgad to MIDC is completed and connection are given to 2 major industries (M/s. JSW & M/s. Tata steel Ltd.) supply of GAS started within 15 days.

LONG TERM ACTION POINTS (MORE THAN 1 YEAR):

8.	Proposal of installation of continuous Ambient Quality monitoring under CPCB scheme	of of Air	•M/s JSW Steel Ltd has installed three Nos of CAAQMS monitoring station at above SRO MPCB office Tarapur Terrace , 2nd is residential colony near railway bridge and third at JSW power Plant.
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CEPI AFTER IMPLEMENTATION OF SHORT & LONG TERM ACTION PLAN (WATER)

Short Term : Water CEPI will be reduced from 56 to 43 after Short Term Action Plan

	A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
Existing	3.0	5.0	15.0	8.0	0.0	3.0	11.0	3.0	5.0	0.0	15.0	15.0
After ST	2.0	5.0	10.0	6.0	0.0	2.0	8.0	3.0	5.0	0.0	15.0	10

Water CEPI = 43 After Short Term Action Plan

Water CEPI will be further reduced from 43 to 38 after Long Term Action Plan

	A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
Existing	3.0	5.0	15.0	8.0	0.0	3.0	11.0	3.0	5.0	0.0	15.0	15.0
After LT	2.0	5.0	10.0	6.0	0.0	2.0	8.0	3.0	5.0	0.0	15.0	5

CEPI AFTER IMPLEMENTATION OF SHORT & LONG TERM ACTION PLAN (AIR)

Short Term : Air CEPI will be reduced from 60.75 to 46.25 after Short Term Action Plan

	A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
Existing	5.75	5.0	28.75	2.0	3.0	3.0	8.0	3.0	3.0	5.0	14.0	10.0
After ST	4.75	5.0	23.75	1.5	3.0	2.0	6.5	3.0	2.0	5.0	11.0	5.0

Long Term measures : Air CEPI will be reduced from 46.25 to 33.25 after long Term Action Plan.

	A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
Existing	5.75	5.0	28.75	2.0	3.0	3.0	8.0	3.0	3.0	5.0	14.0	10.0
After LT	3.0	5.0	15.0	1.5	3.0	2.0	6.5	3.0	1.0	4.0	7.0	4.0

CEPI AFTER IMPLEMENTATION OF ACTION PLAN (LAND)

- Land CEPI will be reduced from 51.25 to 48.00 after both Short & Long Term Action Plan

	A1	A2	A	B1	B2	B3	B	C1	C2	C3	C	D
Existing	3.0	5.0	15.0	7.75	3.0	3.0	13.75	5.0	1.5	0.0	7.5	15.0
After ST	2.5	5.0	12.5	7.0	3.0	3.0	13.00	5.0	1.5	0.0	7.5	15.0
After LT	2.5	5.0	12.5	7.0	3.0	3.0	13.00	5.0	1.5	0.0	7.5	15.0

Action Taken Against Industries:-

Board has undertaken special survey in sep-2013.

On the basis of Survey :- Closure directions issued - 59

Proposed directions issued- 23

Inspite of above board has taken action, abstract of same (1/4/2014 to 31/03/2015) is as below :

➤ Closure directions issued	:	08 - Nos.
➤ Interim directions issued	:	32 - Nos.
➤ No. of industries BG Forfeited	:	63 - Nos.
➤ BG Forfeiture amount	:	Rs. 1,79,25,000/-

- 11) **Action against CETP :** MPC Board have initiated action against TEPS-CETP, Tarapur vide various directions dated 4/4/2012, 15/12/2012, 19/1/2013, 19/10/2013. Extensive surveys have been conducted by the Board office so as to identify defaulters and initiate necessary legal action against them. The action taken report against industries, CETP, MIDC is being regularly submitted to Hon'ble High Court, Bombay in the matter of PIL No. 17/2013. It has been directed CETP to restrict generation of effluent to 25 MLD, to divert all direct discharges/bypasses to CETP for further treatment and appropriate disposal, to take effective steps so as to achieve the consented standards, etc.
- 12) **Action against MIDC :** MPCB has also issued various directions to the Chief Engineer, MIDC, Tarapur regarding direct disposal of effluents from the Members of TEPS-CETP, repairs of pipelines to avoid leakages, to ensure restricted water supply so that generation of effluent shall not exceed 25 MLD i.e. capacity of CETP, to prevent entry of unauthorized tankers by appointing Security Personnel at the entry of Gates, to explore the possibility of installation of C.C. TV Cameras, to prepare concrete proposal for providing / repairing appropriate storm water drainage system & road network along with time bound programme.

IMPROVEMENTS

- × **solvent recovery system installed by industries = 29 Nos.**
(other units are sending their spent solvent to solvent distillation plant for recovery)
- × **Reuse and recycle of treated water by the textile industries : 17 Nos.**
- × **Reuse and recycle of treated water by the chemical & other industries : 4 Nos.**

- × **Multi Effective Evaporator provided = 4 Nos.**
- × **Waste Pickle Recovery : 1 No.**
- × **Caustic Recovery Plant : 2 Nos.**
- × **Recovery of Ammonium Sulphate : 2 Nos (Arti Drugs N-198 and Nupur Chemical)**
- × **Recovery of phenol from effluent : 1 No (M/s. IVP Ltd, Plot No: D-19)**
- × **Recovery of ferrous sulphate from effluent : 1 No. (M/s. Nipur Chemicals, Plot No. D-17)**
- × **Recovery of nitric acid from Nitrous gases and Sodium bisulphite solution from SO₂ gases : 1 No. (M/s. Nipur Chemicals, Plot No. D-17)**
- × **Advanced Air Pollution Control Equipments : M/s Tata steel Ltd. , Plot No. A- 6 MIDC, Tarapur has provided Fume less pickling to avoid Air pollution.**
- × **ESP Intalled units= 2 Nos. (M/s JSW & M/s Bombay Rayon)**

Sr. No.	ISSUES PENDING	Responsible Agency	Remarks
1.	Commissioning of new 50 MLD capacity CETP	TEPS-CETP and TIMA	Expected to be completed before June 2016.
2.	Improvement in existing CETP of 25 MLD capacity to acheive outlet standards.	TEPS-CETP	
3.	Arresting Leakage of Drainage Pipe line/Blockages and overflowing of chambers.	MIDC	
4.	Storm Water drains in some of the areas of MIDC are not provided & thereby increasing hydraulic load on CETP.	MIDC	
5.	Replacement of RCC pipe line of 6km. by HDPE	MIDC	
6.	Extention of Effluent pipeline into Navapur sea. (7.1 km into deep sea)	MIDC	
7.	Persuing matter with Mahanagar Gas /GAIL to make available CNG to industries	M/s GAIL	
8.	Proposal of installation of CAAQMS under CPCB Scheme	MPCB	However 3 CAAQMS are installed in & near MIDC Tarapur by private industry.
9.	Excess Effluent generation	MPCB & MIDC	

$$\text{Aggregate CEPI} = i_m + \{(100 - i_m) \times (i_2/100) \times (i_3/100)\}$$

Where i_m - maximum sub index and i_2 and i_3 are sub indices for other media.

Parameters	CPCB CEPI-2009	CEPI -2011	CEPI-2013	MPCB CEPI-2015	Remarks
Water	56	63	63	43	1) There is no buffer zone in between residential & industrial area.
Air	60.75	79.75	58	54.5	2) MIDC has completed the work replacement of 36 km of RCC effluent carrying pipeline and remaining 6 km pipeline is yet to be replaced. ,
Land	51.25	43	48	48	3) The work of laying of pipeline by GAIL for CNG gas supply to the industries is completed. But actual supply is yet to be commissioned.
Aggregate CEPI	72.01	85.24	73.3	63.89	4) New 50 MLD capacity CETP work yet to be completed. 5) As per suggestion of NIO, laying of pipeline of 7.1 km from existing final disposal point to deep into the sea is yet to be started.

Thanks