

# **CEPI ACTION PLAN**

## **VAPI**

**Comprehensive Environment Pollution Index (CEPI) - ACTION PLAN- Vapi Region**

<b>Sr. No.</b>	<b>Activity</b>	<b>Issue</b>	<b>Action</b>	<b>Implementing Agency/ Organization</b>	<b>Time Frame</b>	<b>Financial Implication and outlay</b>
<b>1.</b>	<b>WATER</b>					
1.1	Up gradation of CETP	-	Installation of Additional New Common Spray Dryer (Capacity – 8000 Kg/hr) at the CETP Vapi site.	VGEL	November – 2019	To be borne by VGEL- CETP, Vapi
1.2	Up-gradation of CETP	-	To carry out by following technologies:  <b>(i)</b> By Bio-augmentation to treat the refractory COD by using Automated Chemostat Treatment (ACT) Technology Provided by Bio Petro Clean Technology.  <b>(ii)</b> By Fenton’s Catalytic Reactor (FCR) Technology to treat refractory COD.  <b>(iii)</b> Up-gradation of CETP to treat high	VGEL	April 2021	To be borne by VGEL- CETP, Vapi

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			<p>TDS and refractory COD effluent by Mechanical Vapor Recompression (MVR).</p> <p>To carry out treatability study for up-gradation of CETP by conducting trails on Pilot Plant and followed by implementation.</p> <ul style="list-style-type: none"> <li>• Pilot Plant Order date</li> <li>• Pilot Plant Study Completion</li> <li>• Order date for implementation at plant scale</li> <li>• Date of Implementation of Plant Scale</li> </ul>			

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			<p>(iv) Installation of Floating type Jet Mixers at equalization tank to control shock load by proper homogenization.</p> <p>(v) Installation of Solar Sun Drying system of sludge – Capacity - 50 MT per Day</p>			
1.3	<b>Phase- I</b> CETP augmentation	<ul style="list-style-type: none"> <li>- Query raised by SEIAA dated 15/05/2019.</li> <li>- VGEL replied to the query dated 02/10/2019.</li> </ul>	Expansion of Capacity 55 to 70 MLD	VGEL	6 months after obtaining Environment Clearance (EC) from competent authority.	To be borne by VGEL-CETP, Vapi

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1.4	Disposal of treated effluent at the point decided by NIO.	Court Matter: References:- O.A. No. 109/2014 (WZ)  R.A. No. 21/2018 (M.Nos. 860/2018, 861/2018, 862/2018 and 1284/2018) in O.A. No. 109/2014 (WZ) Civil Appeal Diary No (s). 9808/2019 M.A. No. 12/2019 in O.A. 109/2014 (WZ)	Laying of pipeline for disposal of treated effluent at the point decided by NIO.	VGEL	As per Hon'ble Court Order	To be borne by VGEL-CETP, Vapi
1.5	Online Monitoring system Installation	-	Installation and commissioning of online monitoring system & auto sampler on each pumping station receiving industrial waste water as well as CETP inlet and outlet.	VGEL	December- 2020	To be borne by VGEL-CETP, Vapi

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1.6	Fresh water consumption shall be Nil in ETP.	-	No fresh water shall be utilized for preparation of chemical slurry in CETP.	VGEL	February-2020	To be borne by VGEL-CETP, Vapi
1.7	Acid Bank	VIA will peruse this matter with GIDC at local level and head Office level for finalization and acquisition of land	(Spent acid reception, collection, storage Treatment & Disposal)  VIA will identify the location and space for Acid Bank Plant, other than CETP premises within 1 month and submit time bound plan along with Bar Chart.	VIA	Long Term	To be borne by VIA, Association
1.8	Sampling of surface water of Bill khadi, River Daman Ganga and River Kolak in CEPI Area	-	To assess the quality of surface water of Bill khadi, River Daman Ganga and River Kolak in CEPI Area, upstream and downstream sampling shall be carried out regularly.	VIA	Weekly	To be borne by VIA, Association

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1.9	Disconnection of all underground drainage connection	-	To provide over ground discharge line from individual member unit to GIDC chamber and disconnect all other underground drainage connection including domestic.	Notified Area Authority	December 2020	To be borne by Notified Area Authority.
1.10	To provide SCADA-PLC System and Auto Sampler at the outlet of each CETP member units	-	To provide SCADA-PLC System and Auto Sampler at the outlet of each CETP member units & shall make design to stop hydraulic discharge if exceeds the threshold quantity & allowing specific time period for discharge. <ul style="list-style-type: none"> <li>• 1<sup>st</sup> Phase- Large Scale Industries</li> <li>• 2<sup>nd</sup> Phase- Medium Scale Industries</li> <li>• 3<sup>rd</sup> Phase- Small Scale Industries</li> </ul>	Notified Area Authority	November-2021	To be borne by Notified Area Authority
1.11	Up-gradation of collection pipeline network and internal drain network	-	Up-gradation of collection pipeline network and internal drain network of waste water to cater existing as well future load as and where required and to lay surface line	Notified Area Authority	Ongoing process based on as and when required.	To be borne by Notified Area Authority

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1.12	Drainage Disconnection for Zero Waste Water generating units	-	Drainage Disconnection for Zero Waste Water generating units/ premises.	Notified Area Authority	December- 2019	To be borne by Notified Area Authority
1.13	Sewage Treatment Plant (STP)	<ul style="list-style-type: none"> <li>• Vapi Nagarpalika STP time limit is March – 2020.</li> <li>• Notified Area STP time limit is March- 2021.</li> </ul>	Sewage Treatment Plant (STP) for Notified area and Nagarpalika	Concern Local Body (Vapi Nagarpalika / Notified Area Authority)	March-2021	To be borne by concern local body (Vapi Nagarpalika / Notified Area Authority).
1.14	Real time monitoring of effluent installation by Large and Medium Red Category.	-	Real time monitoring of effluent with respect to quantity system shall be installed by Large and Medium Red Category and shall be connected to GPCB server as applicable.	Red Large/Medium units & GPCB	May-2020	To be borne by individual industrial units.



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<b>2</b>	<b>AIR</b>					
2.1	Monitoring of Ambient Air Quality Monitoring Station	-	<p>Monitoring of Ambient Air Quality Monitoring Station identified for CEPI (6 station) including Source appeasements study.</p> <ul style="list-style-type: none"> <li>• Identification of 3<sup>rd</sup> Party for monitoring</li> <li>• Monitoring</li> </ul>	VIA	Ongoing Process	To be borne by VIA, Association
2.2	Plantation	Consultation with social forestry department	<p>Additional plantation shall be carried out within the CEPI area in demarcated green belt by concern authority.</p> <ul style="list-style-type: none"> <li>• Green belt in CEPI area shall be increased by 40 % from 33%.</li> </ul>	VIA	October-2020	To be borne by VIA, Association
2.3	Upgradation of road network with re carpeting and greenbelt	-	To control the emission/dusting all roads shall be metal road.	Notified Area Authority	March-2021	To be borne by Notified Area Authority

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	development both side of the road.					
2.4	Strengthening of Manual Ambient Air monitoring stations	-	Increase in manual Ambient Air monitoring stations at Vapi <ul style="list-style-type: none"> <li>• Existing – 5 stations</li> <li>• Total after Proposed – 9 Stations</li> </ul>	GPCB	May-2020	To be borne by GPCB. Locations for new ambient air monitoring stations will be finalized consultation with VIA.
2.5	Common Boiler facility		Common Boiler for Steam Generation: <ul style="list-style-type: none"> <li>• Industrial unit may be diverted to the common boiler concept considering existing facility &amp; availability of existing grid.</li> <li>• Expansion of existing steam boiler facility based on demand.</li> </ul>	Common Boiler Facilitator	May-2020	To be borne by Common Boiler Facilitator.

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<b>3</b>	<b>LAND</b>					
3.1	Extension of TSDF	-	Extension of existing TSDF Site	VGEL	October 2020	To be borne by VGEL
3.2	New TSDF site development	Land issue	New TSDF site development with incinerator. <ul style="list-style-type: none"> <li>• Submit a Time bound plan with bar chart for implementation by end of December-2019.</li> <li>• Project Implementation.</li> </ul>	VGEL	April 2022	To be borne by VGEL
<b>4.</b>	<b>HEALTH</b>					
4.1	Health study	-	Health study shall be carried out in CEPI Area including extended upto 5 Kms radius as per format given by MoEF&CC. <ul style="list-style-type: none"> <li>• Finalization agency and issue work order.</li> </ul>	VIA	May-2020	To be borne by VIA, Association

## **ABBREVIATIONS**

CEPI – Comprehensive Environment Protection Index

CETP- Common Effluent Treatment Plant

CPCB- Central Pollution Control Board

CMEE- Common Multiple Effect Evaporator

COD- Chemical Oxygen Demand

EIA- Environment Impact Assessment

GIDC- Gujarat Industries Development Corporation

GPCB- Gujarat Pollution Control Board

MLD- Million Liter per day

MoEF&CC- Ministry of Environment and Forests & Climate Change

NAA- Notified Area Authority

NIO- National Institute of Oceanography

SEIAA- State Environment Impact Assessment Authority

STP- Sewage Treatment Plant

TDS- Total Dissolved Solids

TOC- Total Organic Carbon

TOR- Terms of Reference

VIA- Vapi Industries Association

VGEL- Vapi Green Enviro Limited

ZLD- Zero Liquid Discharge