

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH  
APPEAL NO 36 OF 2020 (EARLIER NO 66/2019 (WZ))**

**IN THE MATTER OF:**

Larsen & Toubro Ltd.

...APPELLANT

V.

Sanghi Industries Limited & Ors.

...RESPONDENTS

**CONVENIENCE COMPILATION OF DOCUMENTS FOR THE HON'BLE PRINCIPAL BENCH  
BEING FILED ON BEHALF OF THE RESPONDENT NO 1**

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**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Appeal No. 36/2020  
(Earlier Appeal No. 66/2019 (WZ))

Larsen & Toubro Limited

Appellant

Versus

Sanghi Industries Limited & Ors.

Respondent(s)

Date of hearing: 06.01.2021

Date of uploading of order: 22.01.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

**ORDER**

1. This appeal has been preferred against order dated 23.08.2019 of the State Level Environment Impact Assessment Authority (SEIAA), Gujarat, granting Environmental Clearance (EC) to M/s. Sanghi Industries Limited for setting up of stand-alone Cement grinding unit at Survey No. 125/1 and 126/1+2+3, Village Shivrampur, Ta: Choryasi, Distt.: Surat in category 3(b) of Schedule annexed with Environment Impact Assessment (EIA) Notification dated 14.09.2006.

2. The appellant is a company engaged in construction, manufacturing and other industrial/commercial activities. Its grievance is that the project in question will have hazardous impact on Hazira Manufacturing Complex where the appellant is manufacturing defence equipments. The said industrial area at Surat is 'polluted industrial area' classified as such based on data of air water and soil quality, called 'comprehensive

environment pollution index' (CEPI). The unit is of 'red' category in terms of categorisation of industries based on level of contribution to pollution under the Environment (Protection) Rules. EC has been granted without consideration of crucial aspects such as air emissions, water availability, wildlife etc.

3. The appeal was filed on 20.09.2019. Notice was issued on 26.09.2019. The appeal was allowed to be amended on 24.10.2019. IA No. 28/2020 has been filed by the interveners viz. the village Panchayat. IA No. 131/2019 has been filed by the appellant for production of documents relating to compliance status of main cement unit of the project proponent at Kutch in terms of environmental norms.

4. By way of amendment, the appellant has brought on record proceedings of public hearing dated 22.03.2019 wherein, among others, questions with regard to generation of dust from the plant, capacity of the road and source of water were raised. According to the appellant, such concerns relating to increased air and water pollution have not been addressed. The appellant has also pointed out discrepancies in the EIA report. It is submitted that neither the EIA report explains potential of compliance with the environmental norms nor State Environment Assessment Committee (SEAC) and SEIAA have given any reasons from which possibility of such compliance can be inferred. The proceedings do now show application of mind on the environmental consequences and the EC has been granted in a mechanical manner.

5. There are mangroves in the area but the project proponent concealed the said information in application Form I. Similarly, there is reserve forest area which will be impacted which has not been mentioned. 2 Million Tonnes Per Annum (MTPA) cement is proposed to be grinded

which will require raw material including clinker, gypsum, fly ash, slag which has to be transported, involving movement of huge number of trucks. We made a reference to Table 4.17 in the EIA report showing the truck/tanker capacity and the frequency of trucks per day. The said table is reproduced in para 15 of this order. Though EC mentions that only 363 trucks will be permitted for transporting 278,000 liters water per day (as per specific condition no. 47), atleast 799 canters per day will be required. The land allotted is total 12 acres, out of which 33% is to be green area (as per specific condition no. 67 of the EC) Condition no. 67 of the specific conditions mentions that if land for green belt is not available, plantation can be in open land on road sides. The condition is as follows:

***“67. The SIL shall develop green belt within the factory premises as per the CPCB guidelines, **consisting of at least three rows of trees of local species on periphery. However, if the adequate land is not available within the premises, the SIL shall take up adequate plantation at suitable open land on road sides and other open areas in nearby locality or schools in consultation with the Gram Panchayat/GPCB and submit an action plan of plantation for next three years to the GPCB.**”***

6. There is no provision in the EIA for space for parking for the trucks and other vehicles. Shifting of green belt outside the factory complex will defeat the object of mitigation of pollution. The industrial area in question is polluted industrial area which has no capacity for any further polluting activities as held in the order of this Tribunal dated 10.07.2019 in OA No. 1038/2018, News item published in “The Asian Age” Authored by Sanjay Kaw Titled “CPCB to rank industrial units on pollution levels”.

7. The project proponent-Respondent No. 1 has filed reply by stating that it has state of art facilities to adhere to the environmental norms. The mangroves have been duly disclosed in the EIA report. The project is at a distance of 1.3 km from the mangroves. The Krishak Bharati Cooperative

Ltd. (KRIBHCO) has agreed to supply water through irrigation pipelines. The water requirement will be partly met by recycling.

8. Reply of the SEIAA, Gujarat is that EC has been granted based on EIA report furnished by the project proponent. Undertaking was given not to use lignite and pet coke which is not permissible fuel. The project was considered by the SEAC in the meeting held on 12.06.2019 in continuation of meeting held on 16.04.2019. The project proponent explained mitigation measures against the emissions on which the members of SEAC were satisfied and on their recommendation SEIAA granted EC on 16.7.2019.

Relevant extract from the reply of SEIAA is:

“ xxx xxx  
 12. I say that the answering respondent authority after receiving the recommendation considered the same alongwith the relevant material at its meeting held on 16.07.2019. A true copy of the minutes of the meeting of the respondent authority held on 16.07.2019 is annexed herewith and marked as Annexure R4. Being satisfied with the recommendation made by the Expert Appraisal Committee on the basis of the material and consideration of relevant aspects, the respondent authority decided to grant environment clearance for the proposed project. Accordingly, the clearance was issued on 23.08.2019.”

9. Relevant extracts from the minutes of the meetings of SEAC dated 16.04.2019 and 12.06.2019 are:

**“The 497<sup>th</sup> meeting of the State Level Expert Appraisal Committee (SEAC) was held on 16<sup>th</sup> April, 2019 at Gujarat Pollution Control Board, Sector 10-A, Gandhinagar.**

xxx xxx xxx

**In view of the above, Committee unanimously decided to consider the proposal the proposal after submission of the following details:**

xxx xxx xxx

iii. **Fugitive emission details with its mitigation measures.**  
 Fugitive emission during raw material handling and feeding process and vehicle movements.

*Mitigation measures – High efficiency pulse air jet type bag filters will be considered to arrest the air borne dust at all the locations where transfer of material are takes place; The automatic bagging machine with bag filters will be installed for packing plant; unloading of coal trucks will be carried out with proper care avoiding dropping of the materials from height. Sprinklers will be installed in Raw Material/ Fuel Storage/Loading / Unloading areas. The sprinkling of water will be done along with internal roads in the plant in order to control the dust arising due to the movement of vehicular traffic; Proper maintenance of vehicles shall be carried out; All the workers inside the plant will be provided with disposable dust masks; thick greenbelt will be developed around the plant to arrest the fugitive emissions; and Periodic air quality monitoring shall be carried out as per CPCB/ SPCB norms etc.*

xxx

xxx

xxx

**After deliberation, SEAC unanimously decided to consider the proposal after submission of the following details:**

1. to 4. xxx xxx xxx
5. Sound APCM to control fugitive dust emission during raw material transportation, storage, handling, loading, unloading, transfer, fuel grinding etc.”

xxx

xxx

xxx

**“Minutes of the 514<sup>th</sup> meeting of the State Level Expert Appraisal Committee held on 12/06/2019 at Committee Room, Gujarat Pollution Control Board, Sector 10-A, Gandhinagar.**

xxx

xxx

xxx

15	SIA/GJ/IND2/ 30448/2018	M/s. Sanghi Industries Limited Survey No. 125/1, 125/2 and 126/1+2+3, Vill.: Shivrampur, Tal.: Choryasi, Distt.: Surat	Appraisal – Recommendation
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xxx

xxx

xxx

iii, **Fugitive emission details with its mitigation measures:**

xxx

xxx

xxx

**On Road:**

- All internal roads used for transport of vehicles will be paved and maintained properly and repaired immediately when required.
- For prevention of road dust emission, speed will be restricted to 10 km/hr for heavy vehicles within the project premises.

- *All preventive measures i.e. covering of trucks, paving and maintenance of internal roads will be adopted.*
- *Regular vacuum sweeping and water spraying will be done on the internal roads.*
- *Proper maintenance of vehicles will be carried out.”*

10. The minutes of the meeting of SEIAA dated 16.07.2019 are:

***“Minutes of the 253<sup>rd</sup> Meeting held on 16<sup>th</sup> July, 2019 at 09:00 A.M.***

*The 253<sup>rd</sup> meeting of the State Level Environment Impact Assessment Authority (SEIAA) was held under the Chairmanship of Shri C.L. Meena at Gujarat Pollution Control Board, Gandhinagar. Prof. G.H. Ban, Member of SEIAA and Shri S.M. Saiyad, Member Secretary of the State Level Environment Impact Assessment Authority (SEIAA) attended the meeting.*

xxx

xxx

xxx

***2) Sanghi Industries Limited, Dist. Surat***

- ***After detailed discussion, it was decided to grant environment clearance with all the conditions recommended by the SEAC.”***

11. The stand of the Ministry of Defence is that L&T facility is only a defence manufacturing facility and not a defence establishment. Thus, Works of Defence Act, 1903, prohibiting activities within a particular distance therefrom, does not apply.

12. We have heard Shri Raj Panjwani, learned Senior Counsel for the appellant, Shri Pinaki Mishra, learned Senior Counsel for Respondent No. 1 and Shri Maulik Nanavati, learned Counsel for SEIAA, Gujarat and perused the documents on record, with their assistance. We have also perused the written submissions filed by the parties in pursuance of order dated 06.01.2021 passed on conclusion of the hearing. In view of the fact that we are giving liberty to the parties to file written submissions before the CPCB for consideration of the Committee to which the matter is being referred, we do not find it necessary to make any comment on the said

submissions, beyond the comment on the rival contentions already raised before the Tribunal.

13. Shri Panjwani has drawn our attention to Form I, the EIA and the minutes of the SEAC. He pointed out contradictions in the information in the EIA compared to the information furnished in Form-1, particularly with regard to the mangroves, forests and birds. From the EIA documents, it is pointed out that the project proponent is one of largest cement plants at Kutch while the present project is proposed as grinding unit at Hazira Industrial Zone, Village Shivrampur, Taluka-Choryasi, District-Surat, Gujarat. The land procured for the purpose is 4.856 hectare for use as per following break-up:

**“Table 2.7 Land Breakup of Cement Grinding Unit**

#	Particulars	Total Area (in Ha.)	Area
1.	Production Plant	0.712	14.66%
2.	Office & Lab Area	0.022	0.46%
3.	Raw Material Storage Area	0.632	13.01%
4.	Solid Waste Storage Area	0.005	0.10%
5.	Open Space	1.835	37.79%
6.	Green Belt	1.650	33.98%
	<b>Total</b>	<b>4.856</b>	<b>100.00%</b>

In the above break up, there is no provision for parking of large number of trucks to be used for about 800 trips per day for transporting material and other trucks for transporting water.

14. The main raw material i.e. clinker is to be transported from Kutch plant by sea/road as per statement in the EIA as follows:

**“2.6.3 Transportation & Storage of Raw Material**

*The clinker shall be transported from Sanghipuram (IU) to Surat GU mainly by sea. Clinker shall be extracted from the Clinker load out silos at IU, transported to the captive Jetty of SIL by trucks and loaded on to the barges by grab cranes. Barges shall transport the Clinker to*

the ship stationed at high seas. At Surat, the Clinker shall be unloaded from the ship at nearest port and transported to the Surat GU site by trucks. The clinker received through self-tipping trucks shall be unloaded by into a box feeder and transported to clinker storage silo through conveyor and elevator. The clinker storage has been envisaged in RCC silos of capacity 50,000 Ton, adequate for about 10 day requirement of the plant. Clinker shall be extracted from the bottom of the clinker silos and fed to the clinker hoppers in the cement grinding section through a belt conveyors and elevator.”

15. Under the heading ‘air environment’, the EIA mentions as follows:

**“Table-4.17: Incoming & Outgoing Transportation**

<b>Incoming Raw Material Transportation</b>							
<b>S.No.</b>	<b>Raw Material</b>		<b>Quantity TPA</b>	<b>Quantity TPD</b>	<b>Source</b>	<b>Mode of Transport</b>	<b>No. of vehicles (Truck/day)</b>
1.	Clinker				Captive	Sea	184
2.	Additives like Gypsum, Fly Ash, Slag		2000000	6061	Purchase	Road	
	Fuel		60000	182	Purchase	Road	
<b>Total No. of Trucks deployed/day will be</b>							<b>184</b>
<b>Outgoing Product Transportation</b>							
<b>S. No.</b>	<b>Product</b>	<b>Quality Million TPA</b>	<b>Quantity TPA</b>	<b>Quantity TPD</b>	<b>Source</b>	<b>Mode of Transport</b>	<b>No. of vehicles (Truck/day)</b>
1.	Cement	2.0	2000000	6061	Captive	Road/Sea	179
<b>Total No. of Trucks deployed/day will be</b>							<b>363</b>

**Frequency of Vehicles:**

Total Capacity (Fuel, Clinker, Fly ash)	40, 60,000 TPA
No. of working days	330
Transportation of incoming and outgoing material	12303 Tons/day
Working hours per day	24 hours (3 shifts)
Truck/Tanker Capacity	34 Tons
Frequency of trucks/day (92 No. × 4 trips/day × 2 (up/down))	363 × 2
Frequency of trucks deployed/hr	16
Increase in PCU/hr	16 × 3 = 48

16. The mode of transportation mentioned in para 5.3 of the EIA is as follows:

**“5.3 ALTERNATIVE FOR TECHNOLOGY AND OTHER PARAMETERS**

xxx

xxx

xxx

<b>S. No.</b>	<b>Site Particular</b>	<b>Alternative Option 1</b>	<b>Alternative Option 2</b>	<b>Remarks</b>
1 to 6	xxx	xxx	Xxx	Xxx
7.	Road	Metallic Road	Kachcha Road	The road is well furnished. Most of

				the raw material and fuel will be transported through ship (sea route)
--	--	--	--	--

17. Under the hearing mitigation measures, table 2.13 is as follows:

**“Table 2.13: Aspects & Impacts Analysis**

Activity	Environmental Attribute	Cause	Impact Characteristics			
			Nature	Duration	Reversibility	Intensity and Significance
Vehicles Movement and utilities operation	Air quality	Exhaust Emissions i.e. NO <sub>x</sub> , SO <sub>2</sub> , Fugitive emission	Negative	Short Term	Reversible	Low, due to movement of vehicle only for loading and unloading of raw material. Provision of APC's.
	Noise Levels	Noise Generation	Negative	Short Term	Reversible	Low, due to limited activity
	Risk & Hazards	Accidents, collision of transport vehicles	Negative	Short Term	Reversible	Medium due to loss of property and injury to manpower.

18. Conclusions in the EIA report are:

**“11.5 Conclusion**

*Based on the EIA study conducted in Post Monsoon of 2018 (Oct. to Dec. 2018) and as per terms of reference given by SEAC, the following highlights emerge:*

- *There will be minimal pollution potential on air, water and noise environment, which, with the implementation of the mitigation measures and EMP, can be reduced considerably.*
- *The proposed project activities will have positive beneficial effect on the local population, economic output and other related facilities viz. employment, development of business, transportation etc.*
- *Risk assessment including emergency response plan and DMP has been prepared to handle any sort of emergencies.*
- *Looking to the overall project justification, process, pollution potential and pollution prevention measures/technologies installed by proponent, environmental management activities of proponent; the proposed project would be environmentally acceptable, in compliance with environmental legislation and standards.*

*Hence, looking to the overall project justification, process, pollution potential and pollution prevention, measures/technologies installed by proponent, environmental management activities of proponent, **it has been concluded that the proposed project would not have any considerable impacts on environment as well as socio-economic and ecological conditions of the project area. Hence proposed grinding unit at Shivrampur, Hazira is considered environmentally safe.***

19. Learned Counsel for the appellants has then referred to documents filed with IA No. 8/2020 and documents filed on 18.11.2020 by the intervener – Suvali Gram Panchayat. In para 15 of the reply filed by Suvali Gram Panchayat, it is mentioned that the project is in violation of Comprehensive General Development Control Regulations (CGDCR) notified by the State Government on 12.10.2017 under the Gujarat Town Planning and Urban Development Act, 1976. The CGDCR classify different zones for the permissible activities also specify negative list of activities. According to the said regulations, there is prohibition of Obnoxious & Hazardous industries in general industrial zone.

20. On being called upon, the learned Counsel for the project proponent as well as learned Counsel for the SEIAA were unable to show any discussion in the minutes of the SEAC or any material which may reflect application of mind to the assessment of impact of dust generation during the transportation and mitigation measures against the same. Beyond saying that provision has been made for covering the vehicles during transport and sprinkling of water, it has not shown as to how generation of dust and causing of noise pollution by movement of large number of heavy vehicles will be neutralized, given the carrying and load bearing capacity of the Panchayat road in question.

21. In view of above, we find that the precautionary principle, for which EIA is conducted, remains to be addressed. As held in Hanuman Laxman

Aroskar v. Union of India<sup>1</sup>, the object of EIA is to ensure that all concerns affecting the environment are duly taken care of. Thus, the impugned EC cannot be sustained until the environmental concerns are duly addressed. We are informed that the project has not yet commenced. Even learned Counsel for the project proponent and the SEIAA fairly accepted this factual position.

22. Accordingly, we refer the issue of assessment of carrying and load bearing capacity of the Panchayat road in question and evaluation of EIA and EMP prepared by the project proponent to the EAC of the MoEF&CC dealing with the cement plants, alongwith the representatives of CPCB, NEERI and IIT Mumbai. The CPCB will be the nodal agency for coordination and compliance. Coordination with the EAC may be through the MoEF&CC. The Committee may assess how generation of dust and causing of noise pollution by movement of large number of heavy vehicles will be neutralized, given the carrying and load bearing capacity of the Panchayat road in question. The Expert Committee may furnish its report to this Tribunal within three months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

23. The appellant, the Suveli Gram Panchayat and the project proponent may file their respective written submissions to the CPCB within two weeks for consideration by the Committee.

A copy of this order be forwarded to the MoEF&CC, CPCB, NEERI and IIT Mumbai by e-mail for compliance.

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<sup>1</sup> (2019) 15 SCC 401

List for further consideration on 14.07.2021.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

January 22, 2021  
Appeal No. 36/2020  
(Earlier Appeal No. 66/2019 (WZ))  
DV

**Report of the Special Expert Committee as per the Order dated 21/01/2021 of Hon'ble National Green Tribunal in Appeal No. 36/2020: Larsen & Toubro Limited Vs Sanghi Industries Limited & Ors.**

Reference is invited to the Order dated 21/01/2021 of Hon'ble National Green Tribunal (NGT) in Appeal No. 36/2020: Larsen & Toubro Limited Vs Sanghi Industries Limited & Ors. with respect to the proposed cement grinding unit of M/s. Sanghi Cement at Hazira, Gujarat for which prior Environment Clearance (EC) was accorded by State Level Impact Assessment Authority (SEIAA) Gujarat on 23/08/2019 under the provisions of the Environment Impact Assessment (EIA) Notification, 2006. The operative paragraph of the Order dated 21/01/2021 is reproduced below:

*“22. Accordingly, we refer the issue of assessment of carrying and load bearing capacity of the Panchayat road in question and evaluation of EIA and EMP prepared by the project proponent to the EAC of the MoEF&CC dealing with the cement plants, along with the representatives of CPCB, NEERI and IIT Mumbai. The CPCB will be the nodal agency for coordination and compliance. Coordination with the EAC may be through the MoEF&CC. The Committee may assess how generation of dust and causing of noise pollution by movement of large number of heavy vehicles will be neutralized, given the carrying and load bearing capacity of the Panchayat road in question.*

*The Expert Committee may furnish its report to this Tribunal within three months by e-mail at [judicialngt@gov.in](mailto:judicialngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.*

23. The appellant, the Suvali Gram Panchayat and the project proponent may file their respective written submissions to the CPCB within two weeks for consideration by the Committee. A copy of this order be forwarded to the MoEF&CC, CPCB, NEERI and IIT Mumbai by e-mail for compliance.

List for further consideration on 14.07.2021”.

2. In pursuance to the Order dated 21/01/2021 of Hon’ble NGT, meetings of Expert Committee were convened by the Ministry of Environment, Forest and Climate Change (MoEF&CC) on 13/04/2021, 17/05/2021 & 12/07/2021 through Video-Conferencing (VC). The Expert Committee specially comprised for the purpose consisted of Expert Appraisal Committee of Industry 1 dealing with the Cement Sector, experts from Indian Institute of Technology, Mumbai and National Environmental Engineering Research Institute (NEERI), Nagpur along with the representative from Central Pollution Control Board (CPCB) as directed by the Hon’ble NGT. The report was finalized in its meeting held on 12/07/2021 through video-conferencing. The meetings of the Special Committee were held under the Chairmanship of Dr. Chhavi Nath Pandey, Chairman of Expert Appraisal Committee of Industry 1 sector.

3. The following documents had been examined by the expert members:

- i. Documents submitted by M/s. Sanghi Industries Limited for obtaining Environment Clearance from SEIAA, Gujarat [Form I, Public Hearing proceedings, Form 2, additional information reply submitted by the project proponent, Final EIA report and EC dated 23/08/2019].

- ii. Written submissions received from Central Pollution Control Board (CPCB) and circulated by M/s. Sanghi Industries Limited, M/s. Larsen and Toubro and Suvali Gram Panchayat.
  - iii. Additional written submissions filed by L&T vide email dated 16/04/2021 [Documents indicating the forests around the proposed project site, Color maps indicating distance of the project site from the forests, mangroves and sea and Excerpts from National Wetland Atlas showing that the area around Hazira industrial area falls under the wetlands] and by M/s. SIL vide email dated 15/04/2021 [SUDA Application form and payment receipt, Note on noise and dust control measures due to the truck movement, Road map network of Surat City, Map showing location of the project site and consent to establish granted by GPCB], 01/07/2021 and 05/07/2021.
4. From the aforesaid documents submitted by CPCB, the Committee noted that following are the grounds of challenge by L&T and interveners viz. Suvali Gram Panchayat:
- i. EC granted by SEIAA, Gujarat to M/s. Sanghi Industries Limited (SIL) **[herein after referred as Project Proponent (PP)]** is for setting up of a 2.0 Million Tons Per Annum (MTPA) standalone cement grinding unit at Survey No. 125/1, 125/2, 126/1+2+3, Hazira Industrial Area, Village: Shivrampur, Taluka Choryasi, District Surat, Gujarat.
  - ii. Dust emission will occur due to movement of trucks.
  - iii. Transportation of cement and raw materials will cause disturbance to the peace of village life and damage to health.
  - iv. There is no provision in the EIA for parking space for the trucks.
  - v. Discrepancies in the EIA report:

- a. EIA report does not have potential of compliance with the environmental norms.
- b. Unaddressed public concerns with respect to increased air and water pollution raised during public hearing.
- c. About 1100 children studying in Navchetan Vidyalaya in Shivrampur village located at a distance of 1.3km from the plant, will also be adversely affected.
- d. Cement dust will affect the fertility (quality) of agricultural land & will also emanate into the water resources of village Suvali. People/ animals will suffer from disease due to air pollution.

5. Shri. Ayush Puri, Advocate representing Suvali Gram Panchayat in his submissions emphasized the following points for consideration of the Expert Committee:

- i. The sites of GIDC Pandesara and GIDC Sachin located in Surat were declared as severely polluted areas by an office order dated 11/11/2019 issued by the Gujarat Pollution Control Board (GPCB). The SIL project site is located at considerable distance of 14 km after buffer zone of 5 km from GIDC Pandesara and GIDC Sachin. The proposed unit should not be allowed to set up as it would cause further pollution in the area around Surat.
- ii. Land Survey no. 498-1, Village Suvali, and measuring 20 Acres i.e., approx. 80,000 sq. m., has been allotted to Marine Sector Commander, Hazira (Superintendence of Police) under Home Ministry of Gujarat for development of residential cum office complex of Marine Task Force, Hazira. The map is attached as Annexure 5 of the written submissions by the panchayat. However, the project though sanctioned has not yet come up. The aerial

distance of SIL project site to this residential complex is approx. 1.6 km in Suvali village.

- iii. Variable information submitted by the PP regarding coal consumption. Initially, it was stated that the coal requirement would be 252TPD. However, later the project proponent while submitting reply to the additional information sought by the SEAC, stated that they will use imported coal and requirement of the same would be to the tune of 6.9 TPH.
- iv. Substantial concerns were related to carrying and load capacity of the approach road that would be used by PP for transportation. It is the concern of the Panchayat that the particular road does not have the carrying capacity for transportation of 34 Ton trucks. Further, it was stated in the Draft EIA that the trucks deployed would be of 20 Ton capacity, however, the final EIA showed 34-ton truck capacity, thus there has been variation in the documents submitted by the PP.
- v. The EIA report avoids mention to facilities like disposal of discarded containers, allocation to finished storage area, loading and unloading area, parking area for trucks, canteen area, etc.
- vi. In the public hearing that was held for the proposed project at the project site, many villagers from adjoining villages raised several detailed queries which were either evaded or given incorrect assurances. The responses of SIL were unsatisfactory.

- vii. There is no application of mind in granting of EC and it has been granted in a mechanical manner.
- viii. The proposed facility is nearby a boarding school which has a strength of 1200 children and thus presence of such a unit in the vicinity would cause health hazards. The letter from the Medical officer of the Suvali Gram Panchayat has been annexed stating that large industries are located in area of Hazira, Mora, Suvali which have spread cancer, TB, skin diseases which have seriously affected the health of the people. Thus, no further industries should be set up. The Suvali village is 1.89 kms from the proposed SIL project site.

6. Shri. Raj Panjwani, Learned Senior Advocate made following written submissions on behalf of Larsen and Toubro.

- i. The proposed cement manufacturing unit is a red category industry based on CEPI score due to their high pollution levels. Since cement manufacturing is also one of the most obnoxious and polluting process, the unit needs to follow stringent checks and balances.
- ii. Failure to adhere to 'Precautionary Principle' would lead to causing of health hazards to nearby boarding school comprising 1100 students and a population of 3000 – 5000 people adjoining the project site. The boarding school is located less than a kilometer away from the unit. This concern has been raised by the local population vide some letters sent by them.
- iii. The Project Proponent has misrepresented/ concealed environment sensitivities like presence of mangrove forests, wetland and migratory birds in the project area, conversion of agricultural land for industrial purpose in

their pre- feasibility report, Form 1 and the impugned EC. The Project Proponent has denied any presence of sensitive flora and fauna within 15 kms of the proposed project location boundary as per the data submitted by them in Form – 1. The EIA report also fails to mention presence of any mangroves which as seen from the map are only 2 kms away. The Book titled ‘High in the Sky at Hazira’ by Essar has published that the Hazira Industrial area is home to 68 migratory species spending quarter of a year in the region.

- iv. The project proponent in their EIA report has stated that there are no forests within 10 kms radius of the project site, however, there is 17 sq.km forest area at a distance of 3 kms from the project site. L&T have made an application to the forest department seeking the area breakup of the wetlands, forests and mangroves in the Hazira Industrial Area.
- v. The Hazira industrial area has the city’s largest wetland covering 41.42% of the area. The distance of the proposed cement plant is 3.62 km from Arabian Sea and 0.89 kms from Tapi River as stated by the Project proponent in Form-1. The project proponent has not demonstrated in its EIA report any steps taken for the conservation of the wetlands surrounding the project. The plant is thus in violation of the rule 4 of the Wetlands Rules 2010 and 2017.
- vi. Inadequate land allotment has been done by the project proponent as they do not provide for finished products, storage area, loading and unloading area, product transfer area, parking areas for the used trucks and other amenities. This is in violation of the factories Act, 1948, which lays down the mandate for setting up of such amenities in the industrial project.

- vii. The EIA fails to take into consideration where the 363 trucks (Refer EIA @Page 301 –Table 4.17) would be parked for loading and unloading of materials. Further, the panchayat road, which is only 7.5mts in width would not be able to handle 363 trucks of 34 tonnes as it is a kaccha road as mentioned by the Project Proponent in its EIA report as the alternative route for transportation. Furthermore, no evaluation of the impact of trucks, primarily the dust generated by them while operating on the kaccha road has been done by them.
- viii. The impact of coastal mode of transportation used for supplying raw material and taking finished products by the project proponent has been done in the EIA, PFR, impugned EC.
- ix. The project proponent has failed in providing clarity with respect to green belt on the project site as they stated they will develop 33% green belt out of which green belt of width 6 mts - 8mts will be on the periphery. However, the plan of the project proponent is not substantiated by the layout plans as submitted by the Project proponent.
- x. Furthermore, the armoured system complex of L&T is a defense installation for the purpose of environmental sensitivity, as is mentioned in Report1 form B, which was not mentioned by the Project Proponent in its Form 1 and the EIA report. However, the Ministry of Defence in its affidavit has stated that the complex does not qualify for a Defense Establishment which is nothing but an erroneous stand taken by the Ministry of Defence.

- xi. The EIA placed on record by the project proponent states that it would require 278 Kilo Liter (KL) of water every day. However, no source of water, no pipelines are in place and no requisite authorization have been placed on record for the procurement of water from the irrigation department.
  - xii. That in 2017, Government of Gujarat issued a revised draft plan of the earlier notification dated 12/10/2017 laying down the Comprehensive General Development Regulations, 2017, under which various industrial zones have been classified, wherein cement qualifies as an obnoxious and hazardous industry. Furthermore, on 8/10/2020, Surat Development Authority (hereinafter 'SUDA') published the Sanctioned Development Plan, 2035 showing various categories including General Industrial Zone and Obnoxious / Hazardous Industrial Zone. The Proposed cement project site falls under the General Industrial Zone and thus it would be appropriate if a red category industry is not set up in the area.
  - xiii. That the Hon'ble NGT vide order dated 19/08/2019 in the matter titled 'Original Application No. 1038/2018, news item published in the Asian Age authored by Sanjay Kaw Titled 'CPCB to rank industrial units on pollution levels' directed that the viability of red category units be determined on the basis of the Precautionary Principle by an appropriate mechanism. Thus, keeping in view of the pollution that could be caused by such an industrial unit, such a plant should not be permitted.
7. Mr. Aniruddh Wadhwa, Advocate made following written submissions on behalf of M/s. SIL.
- i. The Consent to Establish was granted to the Unit by GPCB on 10/03/2019.

- ii. The TOR issued for EIA and MoEF&CC guidelines for obtaining EC prescribe the requirement by the Project Proponent to conduct an assessment of carrying and load bearing capacity of the proposed transportation route. However, the said study has been carried out and enclosed as Annexure 14 of the written submission.
- iii. The parking area in the said plant site is 4716 m<sup>2</sup>(nearby the packing plant) as stated in the traffic study report conducted by the project proponent. (As laid out in the parking layout plan).
- iv. The Project Proponent has submitted its application to Irrigation department for obtaining permissions for water. A letter to that effect was annexed.
- v. The panchayat road is a pucca road measuring 1.62 kms from NH-6 to the proposed grinding unit and has a carrying capacity 1250 Passenger Car Unit (PCU)s on which on an average 190 PCUs travel per hour.
- vi. Approach road (panchayat road) is more than 15 mts wide and the total PCU per day of the plant will be 363.
- vii. The speed limitations on all the trucks will be 10 kmph to control noise pollution within the plant and all trucks with valid Pollution Under Control (PUC) Certificate will only be operated by the unit along with creation of paved roads on the premises.

- viii. Raw material which is in solid form (i.e. clinker and gypsum), is proposed to be transported in trucks/ automated tippers completely covered in tarpaulin. Fly ash is proposed to be transported in blousers (specially designed closed cylindrical container trucks).
- ix. Green belt will be developed in an area of 33.98% as proposed in the layout plan, along the boundary of the proposed unit to further curb pollution.
- x. To control dust generation during transportation, measures such as water sprinkling and spray water over the roads and material for dust settlement will be undertaken regularly.
- xi. Proposed transportation route has the requisite load bearing capacity, is not adjacent to any village and the vehicular movement will have minimal impact on Suvali village.
- xii. State of the art energy efficient machinery will be installed wherein minimum pollution will be generated.
- xiii. Large-scale socio-economic development of the region will be done and thus the project will only create positive impact and will generate revenue and employment in the surrounding area.
- xiv. L&T had separately submitted representation to SEIAA pertaining to the issues against the Project Proponent for which point wise reply was submitted by the Project Proponent to SEIAA, answering all the queries raised by them. Only thereafter the EC was granted.

- xv. The land surrounding the Unit is mostly owned by L&T. The list of other existing industries in the study area is given below:

S.No.	Name of Industry	Aerial Distance from Appellant's Armor Unit - KM	Aerial Distance from the Proposed Unit (KM)
1.	L&T Defence	-	1.38
2.	L&T Heavy Engineering	1.81 km	1.41
3.	L&T MHPS Turbine Generators Pvt. Ltd.	0.90 km	1.24
4.	L&T Special Steel and Heavy Forging	1.01 km	1.03
5.	L&T Piping	0.33km	0.3
6.	Reliance	3.25 km	3.23
7.	NTPC	4.70km	4.97
8.	KRIBHCO	6.40km	5.50
9.	GAIL	6.00km	8.87
10.	ONGC	8.70km	9
11.	CAIRN India	1.80km	1.70
12.	Adani Wilmar	1.30 km	1
13.	Essar Steel	5.07 km	4.77
14.	Adani Port	7.20 km	9.5
15.	Hazira LNG & Port	6.56 km	6.56
16.	ABG Cement	4.7 km	5.15
17.	Ultratech Cement	8.6 km	8.55
18.	Ambuja Cement	9 km	9.12

- xvi. The project proponent uses state of the art Vertical Roller Mill Technology which is both energy as well as space efficient.

**8. Observations by the Expert Committee on the presentations and written submissions of Suvali Panchayat, L&T and SIL:**

- i. As per the available records, Surat with the Comprehensive Environment Pollution Index (CEPI) of 76.43 falls under the category of critically polluted

areas (Areas: Pandesara Cluster and Sachin cluster) The project site of M/s.SIL is located at a distance of 14 km from buffer zone of Pandesara Cluster and Sachin cluster. The Hon'ble Supreme Court vide its Order dated 22/09/2020 in Civil Appeal Diary number 19271/2020 imposed a stay on the operation of the impugned orders dated 10.07.2019, 23.08.2019 and 14.11.2019 passed by the National Green Tribunal, Principal Bench, New Delhi with respect to CEPI areas.

- ii. The Suvali village is located at a distance of 1.89 kms from the proposed SIL project site. It does not fall on the transportation route from highway to the SIL plant, nor located in downwind direction from the plant, hence is not likely to be affected by stack emissions from the plant.
- iii. Public hearing for the project under the provisions of the EIA Notification, 2006 was held on 22/03/2019. As per the proceedings, 117 participants attended the hearing.
- iv. As per the EC accorded on 23/08/2019, the issue of coal consumption has been taken into cognizance and as per condition no. 35, the imported coal consumption for the project is reported to be 182 MT/day. Further, as per condition no.13 of EC dated 23/08/2019, PP shall not use lignite and pet coke as a fuel.
- v. The learned counsel for Suvali panchayat also raised issues pertaining to concerns related to another village namely Shivarampur, but the learned counsel did not have any authorization from the village Panchayat to present their case.

- vi. The proposed project of M/s. SIL involves setting up of stand-alone cement grinding unit of 2 MTPA capacity. The major source of pollution from this unit will be particulate matter and fugitive dust emissions from handling raw materials which can be mitigated by adopting adequate environmental safeguards.
- vii. The land area envisaged for the project is 4.856 ha and it is sufficient for the proposed project activity of M/s. SIL.
- viii. PP has not addressed several aspects in the Form I inter-alia pre-construction site investigation, construction work, quantum of resources, solid and liquid waste generation, existence of vulnerable group and eco sensitive areas such as mangroves, hospitals in the study area with direction and distance, mitigation measures, occupational diseases etc.
- ix. As per the affidavit of the Ministry of Defence, the L&T complex does not qualify for a Defence Establishment.
- x. The concerns of L&T on SIL project were submitted to SEIAA on 5/4/2019 and 22/04/2019 which have been responded by the PP to SEIAA on 23/05/2019. Subsequently, on review of the submissions, the EC was accorded to the SIL on 23/08/2019 by SEIAA.
- xi. As per the Surat Urban Development Authority (SUDA) notification dated 8/10/2020, the proposed cement grinding unit project site falls under the General Industrial Zone and red category industry is not allowed to be set up

in the area. However, the EC to M/s. SIL was granted on 23/08/2019 which was prior to 8/10/2020 i.e. issuance of SUDA Notification. It may also be noted that the proposed unit is not an integrated cement plant. It is a grinding unit where, clinker (brought from outside), fly ash and slag (waste materials from power plants and steel plants) are ground and converted to a useful green cement. Clinkerization process makes the cement plants a red category industry due to pollution of particulate matter, SO<sub>2</sub>, NO<sub>x</sub> and Carbon Monoxide. In grinding units only particulate matter is emitted during grinding and that too much less than that in the clinkerization process.

- xii. PP has submitted an application to SUDA on 7/09/2019 for obtaining requisite permission as per the prevailing regulatory norms. The application is reportedly under process by SUDA and the approval is yet to be accorded.
- xiii. The impact on existing traffic was mentioned in the EIA report at page 97 and additional information was sought by SEIAA with respect to the transportation aspect. The material and finished product quantity along with number of trucks required are as below:

S.No.	Raw Material & Product	Quantity Million TPA	Quantity TPA	Quantity TPD	Source	Mode of Transport	No. of Vehicles (Truck/day)
1.	Clinker	2.0	20,00,000	6061	Captive	Sea	184
2.	Additives like Gypsum, Fly Ash, Slag				Purchase	Road	
3.	Fuel	0.06	60,000	182	Purchase	Road	
4.	Cement	2.0	20,00,000	6061	Captive	Road/Sea	179
<b>Total No. of Trucks Required</b>							<b>363</b>

xiv. As per the written submission made by the project proponent on 15/04/2021, and as per new recommendations of IRC (<https://thelibraryofcivilengineer.files.wordpress.com/2015/09/irc-sp-41.pdf>), the equivalent PCU factor for 4-6 Axle Truck/Trailer (fast moving) vehicle is 4.5. The modified equivalent PCU for proposed project will be as follows:

No. of trucks required per day = 363

Equivalent PCU factor for 4-6 Axle = 4.5

PCU per day for 363 Trucks =  $363 \times 4.5 = 1633.5$  per day or 68.06 say 68 PCU per hr. The modified traffic scenario considering 68 PCU per hr presented in table below:

**Modified Traffic Scenario in case of 68 PCU and LOS**

S.No	Road	Increased PCUs	Modified V (Volume in PCU per hr)	C (Capacity in PCU per hr)	Modified V/C Ratio	LOS (Level of Service)
1.	National Highway 6	$68 \times 60\% = 41$	$1421 + 41 = 1462$	3000	0.48	C
2.	State Highway 168	$68 \times 40\% = 27$	$743 + 27 = 786$	1250	0.62	D
3a.	Approach Road/Panchayat Road*	68	$190 + 68 = 258$	1250	0.21	B
3b.				900	0.28	B

\*For considering modified PCU factor of 4.5, the LOS value of Approach road / Panchayat Road (Sr. No. 3.a) will change from A to B i.e. Excellent to Very Good.

In this scenario, the impact can be further reduced by utilizing the trucks bringing clinker for cement dispatch to the sea route. As per the present market condition, about 118 trips can be reutilized (same truck will be used for clinker in up and cement in down) which will negate approx. 20 PCU per hour (actual

22). Thus only  $68-20 = 48$  PCU per hour will be the net impact as per the previous scenario of traffic.

PP has also made a provision for parking of trucks and trailers. The trucks and trailers would be covered with tarpaulins as mentioned in the EC granted by SEIAA.

- xv. In addition to the written submission referred at point xiv above, another study report of M/s. Multimedia Consultants has been made available to the Committee on 1/07/2021. As per the said report (**copy enclosed along with SIL written submission**) and considering 10 years design life, vehicle damage factor of 2.89 and growth rate of 5 %, the resulting traffic will be 2 MSA (Million Standard Axle) which is a miniscule increase to the existing traffic.
- xvi. It has been reported that the Panchayat Road is found to be having a carrying capacity of 1250 PCU per hour on which an average 190 PCUs travel per hour. 48 PCU per hour will be the net additional impact on the existing traffic due to the SIL project. SIL has submitted a traffic management plan and presented that the approach road (Panchayat Road) is “Pucca” (Metal tarred) and having a current width of more than 15 meters throughout the entire 1.2 kms stretch from the Highway to the plant.
- xvii. The Panchayat Road of 1.2 km only, for which the load bearing capacity was impugned by the L&T, was constructed by L&T Limited itself pursuant to directions of the Hon’ble High Court of Gujarat in Special Civil Appeal No 10850/2009 titled as “Sukhabhai Bhikhabhai Aahir & 29 others. Vs. Principal Secretary & 3 others”. Furthermore, the Panchayat Road has been disclosed

and sanctioned to be a 22-meter-long road under the sanctioned SUDA Development Plan. The Panchayat Road has been constructed pursuant to judicial directions and in accordance with applicable regulations and standards, is a 'Pacca' road and is in fact being used for movement of commercial vehicles such as the 34 tonner trucks proposed to be used by the SIL.

- xviii. The panchayat road under question is also being used by other industries existing in the area mentioned at paragraph 7(xvi) above for several years. It may be noted that this road is being used by heavy industries such as Larsen & Toubro.
- xix. The water requirement for the project is 278 KLD and as per the condition no. 28 of the EC dated 23/08/2019 necessary permission from the concerned Competent Authority has to be obtained for the water withdrawal.
- xx. Mangroves exist at a distance of 1.4km from the project site on the other bank of Tapi river. As per the provisions of Coastal Regulation Zone (CRZ), 2019, Mangroves (in case mangrove area is more than 1000 square meters), a buffer of 50 meters along the mangroves is required to be provided. In the present case, the distance of 1.4km is much more than the required buffer zone of 50 meters.
- xxi. No evidence or credible document has been made available by representative of Suvali Gram Panchayat as well as L&T in support of their contentions with respect to existence of notified wetlands in the project area, pollution & health

concerns and degradation of agricultural land due to the proposed standalone cement grinding unit of M/s. SIL.

## **9. Recommendations**

On the basis of observations, the Committee is of the considered view that the EC dated 23/08/2019 accorded by SEIAA can be sustained subject to the stipulation of the following additional conditions in order to further to safeguard the environment and address the concerns of appellants.

### **A. M/s. Sanghi Industries Limited**

- i. Particulate matter from the stacks shall not exceed 30 mg/Nm<sup>3</sup>.
- ii. M/s. SIL shall develop a green belt of 15 meters width around the boundary limits of its factory by planting native and high foliage trees with a tree density of 2500 trees per hectare.
- iii. Wheel Washing Facility at exit gate shall be provided and used.
- iv. CCTV Monitoring of Plant and Gates shall be carried out to ensure that all materials are transported in covered trucks having valid Pollution Under Control (PUC) Certificate.
- v. Coal will be stored in the covered shed and fly ash in silos.
- vi. All unpaved areas which are not covered by the green belt shall be covered by suitable form of vegetation such as lawn and landscaping etc.

- vii. M/s SIL shall use ultra-low NOx burner, flue gas recirculation and auto combustion control system.
- viii. All the industries in this area are likely to augment their respective capacities in future. This may, in future, require periodical maintenance and strengthening of the village panchayat road presently being used by all the industries in this area. It is therefore suggested that the Surat Urban Development Authority which is presently maintaining the road may be directed to ensure the periodic maintenance and strengthening of the village panchayat road in question in future.
- ix. The Stack height of coal combustion system shall be minimum 30 meters height.
- x. Noise level at the boundary wall shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Office of the Ministry as a part of six-monthly compliance report.

**Enclosures:**

1. Written submissions of Suvali Gram Panchayat
2. Written submission of L&T and additional submissions made on 16/04/2021
3. Written submission of SIL and additional submissions made on 15/04/2021, 1/07/2021 and 05/07/2021.

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Annexure - A - 1

ANNEXURE - A - 15  
(14)

S. M. SAIYAD, IFS  
MEMBER SECRETARY  
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT  
AUTHORITY  
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/3(b)/1155/2018

Date: 23 AUG 2019

By R P A D

Sub: Environment Clearance to M/s. Sanghi Industries Limited for setting up of stand-alone Cement grinding unit at Survey No. 125/1, 125/2 and 126/1+2+3, VIII.: Shivrampur, Ta.: Choryasi, Dist.: Surat. In Category 3(b) of Schedule annexed with EIA Notification dated 14/09/2006.

Time Limit

Ref: Your Proposal No. SIA/GJ/IND/30448/2018.

Dear Sir,

This has reference to your application along with Form-I dated 03/04/2019 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 23/05/2019 to the SEAC.

The proposal is for Environmental Clearance to M/s. Sanghi Industries Limited for setting up of stand-alone Cement grinding unit at Survey No. 125/1, 125/2 and 126/1+2+3, VIII.: Shivrampur, Ta.: Choryasi, Dist.: Surat. In Category 5(f) of Schedule annexed with EIA Notification dated 14/09/2006. It is a proposed unit for manufacturing following products, which falls in the category - 3(b) of the schedule of the EIA Notification-2006:

Sr. No.	Name of the Products	Quantity, MMT/Annum
1	Cement (OPC / PPC / PSC)	2.0

The project activity is covered in 5(f) and is of 'B' Category. Public hearing was conducted on 22/03/2019.

The SEAC, Gujarat vide their letter dated 15/07/2019 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 12/06/2019. The proposal was considered by SEIAA, Gujarat in its meeting held on 16/07/2019 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

**A. CONDITIONS:****CONSTRUCTION PHASE:**

- Water demand during construction phase shall be reduced by use of curing agents, super plasticizers and other best construction practices.
- Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
- All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
- First Aid Box shall be made readily available in adequate quantity at all the times.
- SIL (Sanghi Industries Ltd.) shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit.
- Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
- Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
- Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
- All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.
- Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.
- Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks,



Office : Gujarat Pollution Control Board, "Paryavaran Bhavan" Sector-10 A, Gandhinagar-382010  
Phone No.:- (079) 232-32152, 232-41514 Fax No.:- (079) 232-22784  
E-mail : msseiaagi@gmail.com, Website:- www.seiaa.gujarat.gov.in

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Ready Mix Concrete [RMC] and lead free paints in the project.

- l) Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.

#### **OPERATION PHASE:**

#### **A. 1 SPECIFIC CONDITION :**

1. Project proponent (Sanghi Industries Ltd.- SIL) shall procure raw materials like clinker for the proposed project from the authorized units having Environmental Clearance as per the EIA Notification 2006, CTE & CC&A from the concern authorities.
2. SIL shall abide by all the commitments and recommendations made in the EIA / EMP report prepared by Eco Chem Sales & Services, Surat and that during their presentation to the SEAC/SEIAA. The commitments made by SIL to the issue raised during public hearing shall be implemented by the proponent. Implementation of the mitigation plan and regular monitoring shall be carried out to ensure no any degradation of the environment, which adversely affect the Green belt, water, Health of Employees, product quality and business of neighboring units.
3. Complete Zero Liquid Discharge [ZLD] status shall be maintained all the time and there shall be no drainage connection from the premises.
4. SIL shall allocate the separate fund of Rs. 4.24 Crores i.e. 1.5 % of the capital investment for activities mentioned in EIA report under Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
5. SIL shall commission continuous ambient air quality monitoring station (CAAQMS) at appropriate location and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.
6. SIL shall develop minimum 33% green belt with native tree species in and around periphery of proposed project as per the prevailing guidelines of CPCB/MoEF&CC, New Delhi.
7. SIL shall provide boundary wall with adequate height for control of dusting and fugitive emission.
8. SIL shall install advance sprinkling system for raw material like fly ash, gypsum and coal handling system and finished product like cement handling system.
9. SIL shall strictly adhere with assurance that there shall not be any degradation of environment which adversely affects the green belt, Water, Health of employees, production quality and business of neighboring units.
10. SIL shall commission Dust extraction system with capacity of 11000 m3/Hr and fully enclosed system for unloading station within plant premises.
11. SIL shall adopt closed transportation system for loading/unloading and bulk cement in closed cement tanker and latest advance closed conveying system shall be installed for raw material and finished product transportation within production plant and loading/unloading station.
12. SIL shall strictly comply prevailing guidelines for coal and fly ash handling.
13. SIL shall not use lignite and Petcock as fuel.
14. SIL shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/08/2018 for Stand-alone Cement grinding units without Captive Power Plant as mentioned at Sr. no. xii.
15. SIL shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
16. SIL must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.
17. The National Ambient Air Quality Emission Standards Issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.
18. SIL shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
19. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
20. Appropriate and adequate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack/vent emission and fugitive emission standards.
21. PP shall ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use

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- regularly.
44. SIL shall use leak proof trucks/dumpers for carrying coal and other raw materials and shall cover them with tarpaulin. SIL shall use closed bulkers for carrying fly ash.
  45. SIL shall provide adequate wind shelter fence to avoid any escaping of dust from the premises.
  46. SIL shall have separate truck/bulkers parking area. The traffic management plan with parking facilities submitted before SEAC shall be implemented in letter and spirit.
  47. Numbers of trips (In & Out) shall not exceed 363 no.s per day for transport of cement and raw material during the operations of the grinding unit.
  48. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
  49. Stack/Vents of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
  50. Interlocking facility of the pollution control equipment and the equipment(s) to which it is attached should be provided in such a manner that in the event of pollution control equipment(s) not working, the respective unit(s) is shut down automatically.
  51. Regular periodic preventive maintenance of the air pollution control systems shall be carried out during the operation phase.
  52. The applicant shall carry out yearly performance evaluation of the air pollution control equipments through any reputed institute and furnish the reports in this regard to the Gujarat Pollution Control Board every year.
  53. The fugitive emission in the work zone environment and ambient air quality shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities including Director of Industrial Health and Safety as well as Gujarat Pollution Control Board from time to time. Following indicative guidelines shall be followed to reduce the fugitive emission.
    - a) Enclosure shall be provided at all loading and unloading operations.
    - b) Water shall be sprayed on all raw materials stock pile periodically to retain some moisture in top layer except wet gypsum to reduce the fugitive emission.
    - c) All transfer points shall be fully enclosed.
    - d) Accumulated dust on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.
    - e) Internal roads shall be either asphalted or paved properly to reduce the fugitive emission during vehicular movement.
    - f) The company shall install adequate dust collection and extraction system to control fugitive dust emission in various material handling areas. (eg. raw material loading, unloading, conveying, transporting, stacking, bagging and packing etc.) Guidelines / Code of Practice issued by the CPCB for prevention and control of the fugitive emission shall be followed.
  54. Regular monitoring of ground level concentration of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>x</sub> shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

**A. 4 SOLID / HAZARDOUS WASTE:**

55. All the hazardous waste management shall be taken care as mentioned below:

S.N.	Type of Waste	Source	Category as per Haz. Waste Rules, 2016	Quantity, MT/ Annum	Management of HW
1	Used Oil	Utilities & Operation	5.1	60 MT/Annum	Collection, Storage, Transportation and Disposed off in own cement plant at Sanghipuram

**A. 5 SAFETY:**

56. Proper ventilation shall be provided in the work area.
57. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.
58. First Aid Box shall be made readily available in adequate quantity in the unit.
59. Regular periodic work zone ambient air monitoring shall be carried out for measuring concentrations of cement dust, silica dust etc. through qualified industrial hygienist and its records shall be maintained.
60. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken on regular basis as per Factories Act & Rules.
61. All necessary safety measures shall be taken to avoid any kind of accident.
62. Training shall be imparted to all the workers on safety and health aspects.

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**A. 6 NOISE:**

63. The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures vibration dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.

**A. 7 CLEANER PRODUCTION AND WASTE MINIMISATION:**

64. The SIL shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
65. Efforts shall be made to use more fly ash in cement manufacturing without compromising the quality of the cement.

**A. 8 GREEN BELT AND OTHER PLANTATION:**

66. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
67. The SIL shall develop green belt within the factory premises as per the CPCB guidelines, consisting of at least three rows of trees of local species on periphery. However, if the adequate land is not available within the premises, the SIL shall take up adequate plantation at suitable open land on road sides and other open areas in nearby locality or schools in consultation with the Gram Panchayat / GPCB and submit an action plan of plantation for next three years to the GPCB.

**B. OTHER CONDITIONS:**

68. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/08/2018.
69. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
- The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
70. In the event of failure of any pollution control system adopted by the unit, the SIL shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
71. All the recommendations of the Corporate Responsibility of Environment Protection (CREP) shall be strictly followed.
72. All the environmental protection measures and safeguards recommended in the EIA / EMP report of the project submitted by SIL shall be implemented effectively and shall be complied in letter and spirit.
73. SIL shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
74. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
75. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Hazardous Wastes (Management, and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
76. The granting of Environment Clearance to the project by the SEIAA does not restrain or dilute any legal action to be initiated against SIL by any authority including the GPCB, for commencing the construction work and production without obtaining prior Environment Clearance.
77. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
78. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
79. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
80. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/



Office : Gujarat Pollution Control Board, "Paryavaran Bhavan" Sector-10 A, Gandhinagar-382010  
 Phone No.:- (079) 232-32152, 232-41514 Fax No.:- (079) 232-22784  
 E-mail : [msseiaagi@gmail.com](mailto:msseiaagi@gmail.com), Website:- [www.seiaa.gujarat.gov.in](http://www.seiaa.gujarat.gov.in)

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- GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
82. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
  83. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
  84. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  85. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
  86. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
  87. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
  88. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
  89. This environmental clearance is valid for seven years from the date of issue.
  90. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
  91. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,  
Yours sincerely,



(S. M. SAIYAD)  
Member Secretary

Issued to:

M/s. Sanghi Industries Limited  
10<sup>th</sup> Floor, Kataria Arcade, Off S G Highway  
PO: Makarba, Ahmedabad- 380051





o/c

BEFORE THE NATIONAL GREEN TRIBUNAL, WESTERN  
 ZONE BENCH, PUNE  
 (Appeal under Section 16 read with Section 18 of the National Green  
 Tribunal Act, 2010)  
 APPEAL NO. 66 OF 2019

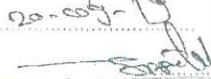
Larsen & Toubro Limited ... Appellant

Versus

Sanghi Industries Limited & Ors. .. Respondents

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NATIONAL GREEN TRIBUNAL  
 No. 179/19  
20-09-19  
 Sign: 

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APPEAL ON BEHALF OF THE APPELLANT ABOVE NAMED:

1. The Appellant states that the address of the Appellant is set out in the cause title above for the service of notices of this Appeal and that of their representative.
2. The Appellant states that the address of the Respondents is as given above for the services of the notices of the Appeal.
3. By way of the present Appeal under Section 16 of the National Green Tribunal Act, 2010 ("Act"), the Appellant seeks to challenge the Environmental Clearance bearing no. SEIAA/GUJ/EC/3(b)/1155/2018 dated August 23, 2019 ("Impugned EC") granted to Respondent No. 1 for proposed project of 2.0 Million TPA Standalone Grinding Unit with bulk and bag packing plant at Hazira Industrial Zone, Survey No. 125/1, 125/2, 126/1+2+3, Village Shivrapur, Tal. Choryasi, District- Gujarat, Surat ("Grinding Unit Project"). A copy of the Impugned EC dated August 23, 2019 is annexed hereto as Annexure-1.



FACTS:

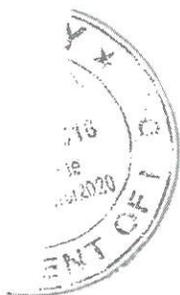
1. The Appellant is an Indian multinational company having its registered address as mentioned in the cause title above. The Appellant is one of the largest and most respected companies in India's private sector, with over 80 years of a strong, customer



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focused approach and a continuous quest for world-class quality, the Appellant has *inter alia* unmatched capabilities across Technology, Engineering, Construction and Manufacturing, and maintains a leadership in all its major lines of business.

2. Respondent No. 1 is a company engaged in cement manufacturing and has its address at the cause title above. Respondent No. 2 is a board constituted under the provisions of Section 4 of the Water (Prevention and Control of Pollution) Act, 1974 as well as Air (Prevention and Control of Pollution) Act, 1981. Respondent No. 2 is vested with the powers pertaining to the overall supervision and inspection of the industries, located all over the state of Gujarat. Respondent No. 3 is an authority under Respondent No. 2 who has granted the Impugned EC.
3. Respondent No. 1 is in the process of setting up the Grinding Unit Project.
4. The Appellant states that it already has an establishment just 1 km away from the proposed Grinding Unit Project, which manufactures ultra-critical equipment comprising Super Critical Turbine Generators, Nuclear equipment and K9 Vajra self-propelled Howitzer guns at Hazira Manufacturing Complex ("HZMC Project"). The HZMC Project has manufacturing units which covers modular fabrication, defence, nuclear reactors, shipbuilding, power equipment. The Appellant is currently executing some of the key defence and nuclear projects which are of primary national importance. The Appellant has already



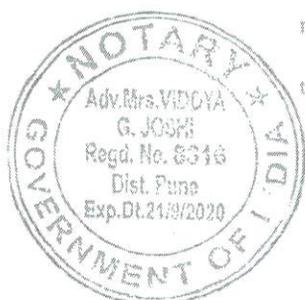
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acquired the necessary industrial licenses for the HZMC Project in 2007 and has been operating smoothly since then.

5. Recently, the Appellant became aware about the Grinding Unit Project of Respondent No. 1 which is only within 1 km radius of the HZMC Project and is located in the midst of HZMC Project.

6. In accordance with procedure, a public hearing for the Grinding Unit Project was held on March 22, 2019, wherein the Appellant also participated on account of the hazardous impact it would create on the HZMC Project. The Appellant raised several detailed queries during the public meeting, *inter alia*, comprising the methods and means which would be undertaken by Respondent No.1 to control the dust emission. The Appellant submits that the Grinding Unit Project would qualify as a major polluting project and therefore, was apprehensive in respect of the proposed Grinding Unit Project. The minutes of the public hearing dated March 22, 2019 is annexed hereto as **Annexure 2**.

7. Pursuant to the participation in the public meeting, out of abundant precaution, the Appellant also addressed three letters dated April 5, 2019, April 13, 2019 and April 22, 2019 subsequently to Respondent No. 3, ("Letters") raising their concerns in respect of the Grinding Unit Project. The Letters reflect the major concerns and impact which would be created on the HZMC Project and therefore, specifically request Respondent No. 3 to take the requisite actions regarding the proposed



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Grinding Unit Project. Copies of the Letters are annexed hereto as Annexure 3 "colly".

8. Notwithstanding the above, the Principal Bench, National Green Tribunal, passed an order on July 10, 2019 for remedial action against polluting industries wherein, *inter alia*, Surat was also identified as a Polluted Industrial Area (PIA) where the Comprehensive Environment Pollution Index (CEPI) score was 76.43 ("NGT Order"). Therefore, it is apparent that Surat, where the proposed Grinding Unit Project was proposed to be set up, would be construed to fall in the 'red' category due to its high pollution levels based on the CEPI score. The NGT Order also *inter alia* held that no industrial activities or expansion can be allowed until it falls within the prescribed parameters. A copy of the NGT Order dated July 10, 2019 is annexed hereto as Annexure-4.

9. However, to the shock and surprise of the Appellant, despite the various questions and issues raised by the Appellant with regard to the Grind Unit Project, Respondent No. 3 proceeded to grant the Impugned EC to Respondent No. 1 for the Grinding Unit Project in complete disregard of the huge hazard it would cause. This was also, in blatant violation and disregard of the NGT Order. A copy of the Impugned EC has been annexed at Annexure-1.

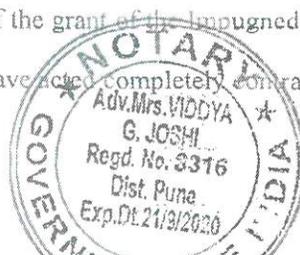


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10. In view of the aforesaid, the Appellant is constrained to approach this Hon'ble Tribunal u/s16 r/w 18 of the Act on grounds which has stated hereinunder which are without prejudice to one another:-

GROUNDS:

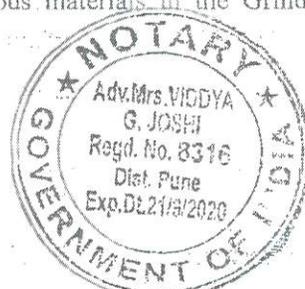
- a) Grant of the Impugned EC is in bad in law;
- b) Grant of Impugned EC is in violation of the NGT Order dated July 10, 2019 and is therefore perverse, illegal and bad in law;
- c) Respondent No. 3 has acted beyond its authority by granting the Impugned EC in view of the NGT Order dated July 10, 2019;
- d) Respondent No. 2 has failed to appreciate or consider the concerns raised by the Appellants by their Letters which amounts to a violation of the principles of natural justice and equity;
- e) The proposed Grinding Unit Project is directly surrounded by various manufacturing units of the Appellant and its hazardous activities will directly impact the Appellant's HZMC Project which is executing key defence and nuclear projects of national importance.
- f) In light of the grant of the Impugned EC, Respondent Nos. 2 and 3 have acted completely contrary to the provisions of



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law and the NGT Order dated July 10, 2019 in respect of no 'further' industrial activities to be permitted for red/orange category units;

- g) It is a trite law that when power is coupled with duty upon an authority which is vested with discretion then the authority has an obligation to use it in a manner that does not cause injustice to any party;
- h) The Appellant has defence manufacturing facilities of national importance of HZMC, i.e., self-propelled guns, nuclear reactors, super critical turbine generators, in that area which require a clean and dust free environment and therefore, the Grinding Unit Project cannot be sanctioned for an area which comprises of facilities which are of national importance;
- i) The cement and coal dust of the Grinding Unit Project will adversely impact the quality and on field performance of the Appellant's HZMC Project which is executing key defence and nuclear projects of national security;
- j) Respondent No. 3 has failed to appreciate that the grant of the Impugned EC will affect the community at large due to the hazard caused by the loading and unloading of coal, fly ash and other hazardous materials in the Grinding Unit Project;



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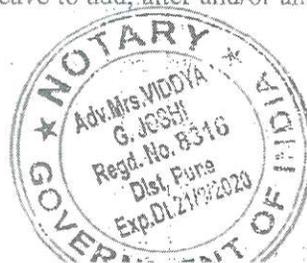
- k) In any event, the Grinding Unit Project falls under the 'red' category as per the categorization list released for industries in 2016, in view of the Pollution Index (PI) score and therefore, cannot be permitted to be set up and the Impugned EC could not have been granted by Respondent Nos. 2 and 3;
- l) The Respondent No. 2 has proceeded to grant the Impugned EC for the Grinding Unit Project in contravention of the directions passed by the Principal Bench in the case of *Babubhai Ramubhai Saini vs. Gujarat Pollution Control Board & Ors.* for closure of all coal gasifier industries;
- m) The Respondent No. 2 could not have issued the Impugned EC while the Principal Bench has already directed the Respondent No. 2 for closure of all coal based plants;
- n) Respondent Nos. 2 and 3 have failed to appreciate that the cement industry falls under the 17 (seventeen) categories of Highly Polluting Industries;
- o) Respondent No. 2 has overlooked the mandate it was required to carry out under the NGT Order dated July 10, 2019 and has proceeded to grant the Impugned EC in violation of the NGT Order dated July 10, 2019;



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- p) The Respondent No.1 has misled Respondent Nos. 2 and 3 by falsely and *mala fidely* stating in its Environmental Impact Assessment (EIA) Report submitted in March, 2019, on page 22, that there are no mangroves within the radius of 10 kms.
- q) The 'Form 1' submitted by Respondent No. 1 as per EIA Notification, 2006 contains false and misleading information in Part III, point no. 7 wherein the Respondent No. 1 has answered 'No' in respect of Defense Installations within the aerial distance of 15 kms;
- r) Without prejudice to the above, the conditions of the Impugned EC, i.e., condition no. 91 itself states "*Submission of any false or misleading information or data which is material to the screening or scoping or appraisal or decision on the application makes this environmental clearance cancelled.*"
- s) The EIA Report submitted by the Respondent No. 1 submitted in March 2019 does not consider various crucial aspects such as air emission calculations and therefore, the grant of the Impugned EC is merely on the basis of inadequate and piecemeal information.

11. The Appellant craves leave to add, alter and/or amend the present grounds of appeal.



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12. The Appellant craves leave to rely upon further documents, as and when required.

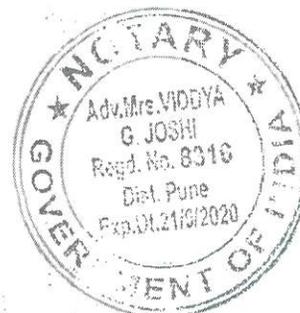
#### LIMITATION

The Impugned EC has been granted on August 23, 2019 and the Appellant is filing this appeal within limitation and in time as prescribed under Section 16 of the National Green Tribunal Act, 2010.

#### PRAYER

The Appellant therefore prays that:-

- A) This Hon'ble Tribunal be pleased to cancel the Impugned Environmental Clearance dated August 23, 2019;
- B) Pending the hearing and final disposal of the present Appeal, the Impugned Environmental Clearance dated August 23, 2019 may kindly be stayed and the Respondents be directed not to initiate any action in respect of the same or implement the same in any manner whatsoever;
- C) Ad-interim relief in terms of prayer clause (B) above;
- D) The Appellant undertakes to serve the Respondents for hearing on ad-interim relief as mandated under the provisions of Section 19 of the National Green Tribunal Act, 2010;
- E) Any other just and equitable order in the interest of justice may kindly be passed;



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F) Costs of the Appeal may kindly be provided for.

PUNE

DATE : 20/09/2019

*Joshi*

APPELLANT

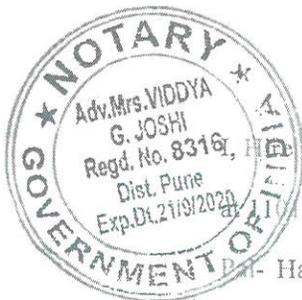


*[Signature]*

ADVOCATE FOR APPELLANT



VERIFICATION



Shah, aged 43 Years S/o Kirithbai Shah having address  
, Moon Building Rajhans Campus, Near Rajhans Multiplex,  
- Hazira Road, Adajan, Surat-395009 the Authorized Signatory of  
the Appellant having my office at Larsen & Toubro Limited, Central  
Administration, Gate No. 5, West Block, Hazira Manufacturing  
Complex, P.O. Bhattha Surat-394510 above named, do hereby state on  
solemn affirmation that whatever stated hereinabove is true and correct  
to the best of my knowledge, information and belief.

Solemnly Affirmed at Pune on this \_\_\_\_\_ day of September, 2019

BEFORE ME  
*Joshi V G*

Ad. Mrs. VIDDYA G. JOSHI  
NOTARY GOVT. OF INDIA

Noted and Registered  
at Sr. No. 1107/2019  
Date: 20/09/2019

*Joshi*



**BEFORE THE NATIONAL GREEN TRIBUNAL,  
WESTERN BENCH,  
AT PUNE**

**Appeal No. 66/2019**

**IN THE MATTER OF:**

M/S LARSEN & TURBO Ltd.

...APPLICANT

**VERSUS**

M/S SANGHI INDUSTRIES Ltd. & Ors.

...RESPONDENT

**COUNTER AFFIDAVIT / REPLY FOR AND ON BEHALF OF THE  
MINISTRY OF DEFENCE.**

**INDEX**

<u>S.NO</u>	<u>PARTICULARS</u>	<u>PAGE NO</u>
1.	Counter Affidavit / Reply for and on behalf of the Respondent, Ministry of Defence.	

Through:

**Place:** New Delhi  
**Date:** 11.07.2020

**ARDHENDUMAULI KUMAR PRASAD**  
Senior Central Government Standing Counsel  
National Green Tribunal  
A-52, SECTOR-17A, NOIDA, U.P. – 201301  
PH: 0120-2488800-01-02, 9311612800  
mail@ardhendumauli.com

**BEFORE THE NATIONAL GREEN TRIBUNAL,  
WESTERN BENCH,  
AT NEW DELHI**

**Appeal No. 66/2019**

**IN THE MATTER OF:**

M/S LARSEN & TURBO Ltd.

...APPLICANT

**VERSUS**

M/S SANGHI INDUSTRIES Ltd.

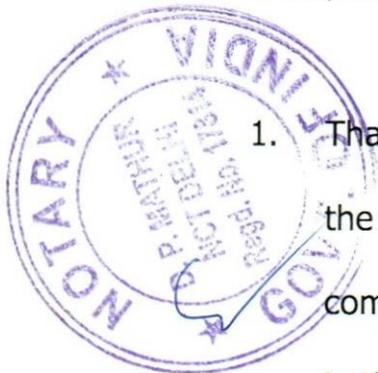
...RESPONDENT

**COUNTER AFFIDAVIT / REPLY FOR AND ON BEHALF OF THE  
MINISTRY OF DEFENCE.**

**MOST RESPECTFULLY SHOWETH:**

I Urmila Rawat, D/o Shri R.S. Rawat, aged about 51 Years, Presently posted as Under Secretary, Department of Defence Production. Presently at New Delhi, do hereby solemnly affirm and state as under:

1. That in my official capacity as stated above I am fully acquainted with the facts and circumstances of the case and therefore authorized and competent to swear this affidavit on behalf of the Ministry of Defence in the captioned matter on the basis of records thereof.
2. That I have read the Appeal and Annexures enclosed therewith and have fully understood the same and I state that same are incorrect, misleading, thus denied.
3. That at the outset, I deny each and every averment of the fact mentioned in the Appeal unless and until the same are expressly admitted hereinafter.



13 JUL 2020

4. That the deponent craves liberty to raise additional submission or file additional affidavits in case need arises during the course of arguments.

**PRELIMINARY SUBMISSIONS:**

5. That on the basis of the recommendations issued by the Department of Defence Production, Ministry of Defence, the Department of Industries and Internal Trade in the Ministry of Commerce and Industry, Government of India has issued an industrial licence to M/S L&T for manufacture of defence items.
6. That the industrial licensees have to open the facility based on the security clearance provided for the address specifically mentioned in the license. The licensee company is also required to obtain all clearances and approvals from the concerned state/local/district authorities. As part of the licensing conditions, security guidelines issued by Ministry of Defence have to be adhered to by the licensee in letter and spirit.
7. As regards the prohibited areas, Works of Defence Act 1903 (WODA 1903) is an act to provide for imposing restrictions upon use and enjoyment of land in the vicinity of works of defence in order to ensure safety and security of the works. As per the act, work or work of defence means any establishment, installation, assets etc. under Ministry of defence. The Land Wing in Department of defence handles the notification of WODA 1903 around the defence installations of Army and that does not relate to Defence manufacturing facilities. The L&T facility is defence manufacturing facility and Works of Defence Act 1903 (WODA 1903) does not relate to defence manufacturing facility.
8. It is respectfully submitted that as it is a dispute between two private companies it is submitted that the case should be decided on merits.



13 JUL 2020

**PARA WISE REPLY**

9. That the facts stated in Paragraphs 7-12 of the Appeal are factual position, it needs no comments.
10. That the facts stated in Para No. 13-21 are denied, in reply it is submitted that Respondent NO. 2-4 are to comment on these paragraphs, Ministry Of Defence needs no comments.

It is most respectfully submitted that the Appeal may kindly be disposed in accordance with the facts and circumstances of the cases and on the basis of replies filed by other respondents. The answering respondent may kindly be exempted from personal appearance.

**ATTESTED**

*[Signature]*  
13/07/2020  
NOTARY PUBLIC, DELHI NCR (INDIA)

13 JUL 2020

*[Signature]*  
11.07.2020  
**DEPONENT**

उर्मिला रावत/URMILA RAWAT  
अवर सचिव/Under Secretary  
रक्षा मंत्रालय, नई दिल्ली  
Ministry of Defence, New Delhi  
फ़ोन/Telephone:-

**(Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii)  
MINISTRY OF ENVIRONMENT AND FORESTS**

**New Delhi 14<sup>th</sup> September, 2006**

**Notification**

S.O. 1533 Whereas, a draft notification **under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 for imposing** certain restrictions and prohibitions on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification, being undertaken in any part of India<sup>1</sup>, unless prior environmental clearance has been accorded in accordance with the objectives of National Environment Policy **as approved by the Union Cabinet on 18<sup>th</sup> May, 2006** and the procedure specified in the notification, by the Central Government or the State or Union territory Level Environment Impact Assessment Authority (SEIAA), to be constituted by the Central Government in consultation with the State Government or the Union territory Administration concerned under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for the purpose of this notification, was published in the Gazette of India ,Extraordinary, Part II, section 3, sub-section (ii) vide number S.O. 1324 (E) dated the 15<sup>th</sup> September ,2005 inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the public;

And whereas, copies of the said notification were made available to the public on 15<sup>th</sup> September, 2005;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986, read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 and in supersession of the notification number S.O. 60 (E) dated the 27<sup>th</sup> January, 1994, except in respect of things done or omitted to be done before such supersession, the Central Government hereby directs that on and from the date of its publication the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to this notification entailing capacity addition with change in process and or technology shall be undertaken in any part of India only after the prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified hereinafter in this notification.

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<sup>1</sup>Includes the territorial waters

**2. Requirements of prior Environmental Clearance (EC):-** The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall hereinafter referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

- (i) All new projects or activities listed in the Schedule to this notification;
- (ii) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization;
- (iii) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range.

**3. State Level Environment Impact Assessment Authority:- (1)** A State Level Environment Impact Assessment Authority hereinafter referred to as the SEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of three Members including a Chairman and a Member – Secretary to be nominated by the State Government or the Union territory Administration concerned.

- (2) The Member-Secretary shall be a serving officer of the concerned State Government or Union territory administration familiar with environmental laws.
- (3) The other two Members shall be either a professional or expert fulfilling the eligibility criteria given in Appendix VI to this notification.
- (4) One of the specified Members in sub-paragraph (3) above who is an expert in the Environmental Impact Assessment process shall be the Chairman of the SEIAA.
- (5) The State Government or Union territory Administration shall forward the names of the Members and the Chairman referred in sub- paragraph 3 to 4 above to the Central Government and the Central Government shall constitute the SEIAA as an authority for the purposes of this notification within thirty days of the date of receipt of the names.
- (6) The non-official Member and the Chairman shall have a fixed term of three years (from the date of the publication of the notification by the Central Government constituting the authority).
- (7) All decisions of the SEIAA shall be unanimous and taken in a meeting.

**4. Categorization of projects and activities:-**

- (i) All projects and activities are broadly categorized in to two categories - Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man made resources.

(ii) All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;

(iii) All projects or activities included as Category 'B' in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the General Conditions (GC) stipulated in the Schedule, *will* require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In the absence of a duly constituted SEIAA or SEAC, a Category 'B' project shall be treated as a Category 'A' project;

#### **5. Screening, Scoping and Appraisal Committees:-**

The same Expert Appraisal Committees (EACs) at the Central Government and SEACs (hereinafter referred to as the (EAC) and (SEAC) at the State or the Union territory level shall screen, scope and appraise projects or activities in Category 'A' and Category 'B' respectively. EAC and SEAC's shall meet at least once every month.

(a) The composition of the EAC shall be as given in Appendix VI. The SEAC at the State or the Union territory level shall be constituted by the Central Government in consultation with the concerned State Government or the Union territory Administration with identical composition;

(b) The Central Government may, with the prior concurrence of the concerned State Governments or the Union territory Administrations, constitute one SEAC for more than one State or Union territory for reasons of administrative convenience and cost;

(c) The EAC and SEAC shall be reconstituted after every three years;

(d) The authorised members of the EAC and SEAC, concerned, may inspect any site(s) connected with the project or activity in respect of which the prior environmental clearance is sought, for the purposes of screening or scoping or appraisal, with prior notice of at least seven days to the applicant, who shall provide necessary facilities for the inspection;

(e) The EAC and SEACs shall function on the principle of collective responsibility. The Chairperson shall endeavour to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

#### **6. Application for Prior Environmental Clearance (EC):-**

An application seeking prior environmental clearance in all cases shall be made in the prescribed Form 1 annexed herewith and Supplementary Form 1A, if applicable, as given in Appendix II, after the identification of prospective site(s) for the project and/or activities to which the application relates, before commencing any construction activity, or preparation of land, at the site by the applicant. The applicant shall furnish, along with the application, a copy of the pre-feasibility project report except that, in case of construction projects or activities (item 8 of the Schedule) in addition to Form 1 and the Supplementary Form 1A, a copy of the conceptual plan shall be provided, instead of the pre-feasibility report.

## **7. Stages in the Prior Environmental Clearance (EC) Process for New Projects:-**

**7(i)** The environmental clearance process for new projects will comprise of a maximum of four stages, all of which may not apply to particular cases as set forth below in this notification. These four stages in sequential order are:-

- Stage (1) Screening (Only for Category ‘B’ projects and activities)
- Stage (2) Scoping
- Stage (3) Public Consultation
- Stage (4) Appraisal

### **I. Stage (1) - Screening:**

In case of Category ‘B’ projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project . The projects requiring an Environmental Impact Assessment report shall be termed Category ‘B1’ and remaining projects shall be termed Category ‘B2’ and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

### **II. Stage (2) - Scoping:**

(i) “Scoping”: refers to the process by which the Expert Appraisal Committee in the case of Category ‘A’ projects or activities, and State level Expert Appraisal Committee in the case of Category ‘B1’ projects or activities, including applications for expansion and/or modernization and/or change in product mix of existing projects or activities, determine detailed and comprehensive Terms Of Reference (TOR) addressing all relevant environmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought. The Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the Terms of Reference on the basis of the information furnished in the prescribed application Form1/Form 1A including Terms of Reference proposed by the applicant, a site visit by a sub- group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, Terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. All projects and activities listed as Category ‘B’ in Item 8 of the Schedule (Construction/Township/Commercial Complexes /Housing) shall not require Scoping and will be appraised on the basis of Form 1/ Form 1A and the conceptual plan.

(ii) The Terms of Reference (TOR) shall be conveyed to the applicant by the Expert Appraisal Committee or State Level Expert Appraisal Committee as concerned within sixty days of the receipt of Form 1. In the case of Category A Hydroelectric projects Item 1(c) (i) of the Schedule the Terms of Reference shall be conveyed along with the clearance for pre-construction activities .If the Terms of Reference are not finalized and conveyed to the applicant within sixty days of the receipt of Form 1, the Terms of Reference suggested by the applicant shall be deemed as the final Terms of Reference approved for the EIA studies. The approved Terms of

Reference shall be displayed on the website of the Ministry of Environment and Forests and the concerned State Level Environment Impact Assessment Authority.

(iii) Applications for prior environmental clearance may be rejected by the regulatory authority concerned on the recommendation of the EAC or SEAC concerned at this stage itself. In case of such rejection, the decision together with reasons for the same shall be communicated to the applicant in writing within sixty days of the receipt of the application.

### **III. Stage (3) - Public Consultation:**

(i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category 'A' and Category B1 projects or activities shall undertake Public Consultation, except the following:-

- (a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).
- (b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.
- (c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
- (d) all Building /Construction projects/Area Development projects and Townships (item 8).
- (e) all Category 'B2' projects and activities.
- (f) all projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.

(ii) The Public Consultation shall ordinarily have two components comprising of:-

(a) a public hearing at the site or in its close proximity- district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons;

(b) obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.

(iii) the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45(forty five ) of a request to the effect from the applicant.

(iv) in case the State Pollution Control Board or the Union territory Pollution Control Committee concerned does not undertake and complete the public hearing within the specified period, and/or does not convey the proceedings of the public hearing within the prescribed period

directly to the regulatory authority concerned as above, the regulatory authority shall engage another public agency or authority which is not subordinate to the regulatory authority, to complete the process within a further period of forty five days,.

(v) If the public agency or authority nominated under the sub paragraph (iii) above reports to the regulatory authority concerned that owing to the local situation, it is not possible to conduct the public hearing in a manner which will enable the views of the concerned local persons to be freely expressed, it shall report the facts in detail to the concerned regulatory authority, which may, after due consideration of the report and other reliable information that it may have, decide that the public consultation in the case need not include the public hearing.

(vi) For obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity, the concerned regulatory authority and the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) shall invite responses from such concerned persons by placing on their website the Summary EIA report prepared in the format given in Appendix IIIA by the applicant along with a copy of the application in the prescribed form , within seven days of the receipt of a written request for arranging the public hearing . Confidential information including non-disclosable or legally privileged information involving Intellectual Property Right, source specified in the application shall not be placed on the web site. The regulatory authority concerned may also use other appropriate media for ensuring wide publicity about the project or activity. The regulatory authority shall, however, make available on a written request from any concerned person the Draft EIA report for inspection at a notified place during normal office hours till the date of the public hearing. All the responses received as part of this public consultation process shall be forwarded to the applicant through the quickest available means.

(vii) After completion of the public consultation, the applicant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the applicant to the concerned regulatory authority for appraisal. The applicant may alternatively submit a supplementary report to draft EIA and EMP addressing all the concerns expressed during the public consultation.

#### **IV. Stage (4) - Appraisal:**

(i) Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the Final EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance. This appraisal shall be made by Expert Appraisal Committee or State Level Expert Appraisal Committee concerned in a transparent manner in a proceeding to which the applicant shall be invited for furnishing necessary clarifications in person or through an authorized representative. On conclusion of this proceeding, the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.

(ii) The appraisal of all projects or activities which are not required to undergo public consultation, or submit an Environment Impact Assessment report, shall be carried out on the basis of the prescribed application Form 1 and Form 1A as applicable, any other relevant

validated information available and the site visit wherever the same is considered as necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

(iii) The appraisal of an application shall be completed by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within sixty days of the receipt of the final Environment Impact Assessment report and other documents or the receipt of Form 1 and Form 1 A, where public consultation is not necessary and the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee shall be placed before the competent authority for a final decision within the next fifteen days. The prescribed procedure for appraisal is given in Appendix V ;

**7(ii). Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:**

All applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product –mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

**8. Grant or Rejection of Prior Environmental Clearance (EC):**

(i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

(ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days.

(iii) In the event that the decision of the regulatory authority is not communicated to the applicant within the period specified in sub-paragraphs (i) or (ii) above, as applicable, the

applicant may proceed as if the environment clearance sought for has been granted or denied by the regulatory authority in terms of the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

(iv) On expiry of the period specified for decision by the regulatory authority under paragraph (i) and (ii) above, as applicable, the decision of the regulatory authority, and the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be public documents.

(v) Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons.

(vi) Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

#### **9. Validity of Environmental Clearance (EC):**

The “Validity of Environmental Clearance” is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted under sub paragraph (iv) of paragraph 7 above, to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects (item 8 of the Schedule), to which the application for prior environmental clearance refers. The prior environmental clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects (item 1(c) of the Schedule), project life as estimated by Expert Appraisal Committee or State Level Expert Appraisal Committee subject to a maximum of thirty years for mining projects and five years in the case of all other projects and activities. However, in the case of Area Development projects and Townships [item 8(b)], the validity period shall be limited only to such activities as may be the responsibility of the applicant as a developer. This period of validity may be extended by the regulatory authority concerned by a maximum period of five years provided an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form 1, and Supplementary Form 1A, for Construction projects or activities (item 8 of the Schedule). In this regard the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee as the case may be.

#### **10. Post Environmental Clearance Monitoring:**

(i) It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.

(ii) All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority.

**11. Transferability of Environmental Clearance (EC):**

A prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written “no objection” by the transferor, to, and by the regulatory authority concerned, on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases.

**12. Operation of EIA Notification, 1994, till disposal of pending cases:**

From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27<sup>th</sup> January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such suppression to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I, or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification.

[No. J-11013/56/2004-IA-II (I)]

(R.CHANDRAMOHAN)  
JOINT SECRETARY TO THE GOVERNMENT OF INDIA

**SCHEDULE**

(See paragraph 2 and 7)

**LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE**

Project or Activity		Category with threshold limit		Conditions if any
		A	B	
<b>1</b>		<b>Mining, extraction of natural resources and power generation (for a specified production capacity)</b>		
(1)	(2)	(3)	(4)	(5)
<b>1(a)</b>	Mining of minerals	<p>≥ 50 ha. of mining lease area</p> <p>Asbestos mining irrespective of mining area</p>	<p>&lt;50 ha</p> <p>≥ 5 ha .of mining lease area.</p>	<p>General Condition shall apply</p> <p><u>Note</u> Mineral prospecting (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey</p>
<b>1(b)</b>	Offshore and onshore oil and gas exploration, development & production	All projects		<p><u>Note</u> Exploration Surveys (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey</p>
<b>1(c)</b>	River Valley projects	<p>(i) ≥ 50 MW hydroelectric power generation;</p> <p>(ii) ≥ 10,000 ha. of culturable command area</p>	<p>(i) &lt; 50 MW ≥ 25 MW hydroelectric power generation;</p> <p>(ii) &lt; 10,000 ha. of culturable command area</p>	General Condition shall apply
<b>1(d)</b>	Thermal Power Plants	<p>≥ 500 MW (coal/lignite/naphta &amp; gas based);</p> <p>≥ 50 MW (Pet coke diesel and all other fuels -)</p>	<p>&lt; 500 MW (coal/lignite/naphta &amp; gas based);</p> <p>&lt;50 MW</p> <p>≥ 5MW (Pet coke ,diesel and all other fuels )</p>	General Condition shall apply

(1)	(2)	(3)	(4)	(5)
1(e)	Nuclear power projects and processing of nuclear fuel	All projects	-	
2		<b>Primary Processing</b>		
2(a)	Coal washeries	≥ 1 million ton/annum throughput of coal	<1million ton/annum throughput of coal	General Condition shall apply  (If located within mining area the proposal shall be appraised together with the mining proposal)
2 (b)	Mineral beneficiation	≥ 0.1million ton/annum mineral throughput	< 0.1million ton/annum mineral throughput	General Condition shall apply  (Mining proposal with Mineral beneficiation shall be appraised together for grant of clearance)

<b>3</b>				
<b>Materials Production</b>				
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>
<b>3(a)</b>	Metallurgical industries (ferrous & non ferrous)	a) Primary metallurgical industry All projects  b) Sponge iron manufacturing $\geq 200$ TPD  c) Secondary metallurgical processing industry  All toxic and heavy metal producing units $\geq 20,000$ tonnes /annum  -	Sponge iron manufacturing $<200$ TPD  Secondary metallurgical processing industry  i.) All toxic and heavy metal producing units $<20,000$ tonnes /annum  ii.) All other non-toxic secondary metallurgical processing industries  $>5000$ tonnes/annum	General Condition shall apply for Sponge iron manufacturing
<b>3(b)</b>	Cement plants	$\geq 1.0$ million tonnes/annum production capacity	$<1.0$ million tonnes/annum production capacity. All Stand alone grinding units	General Condition shall apply



जहाँ है हरियाली ।  
वहाँ है खुशहाली ॥

IL&FS | Environment

# TECHNICAL EIA GUIDANCE MANUAL FOR CEMENT INDUSTRY

Prepared for  
The Ministry of Environment and Forests  
Government of India



by  
IL&FS Ecosmart Limited  
Hyderabad

August 2010

## 3.2 Scientific Aspects

### 3.2.1 Industrial process

The cement manufacturing process involves mining, crushing, grinding of raw materials (principally limestone and clay), blending of raw meal, calcining the materials in a rotary kiln, cooling the resulting clinker, mixing the clinker with gypsum, and milling, storing, and bagging the finished cement.

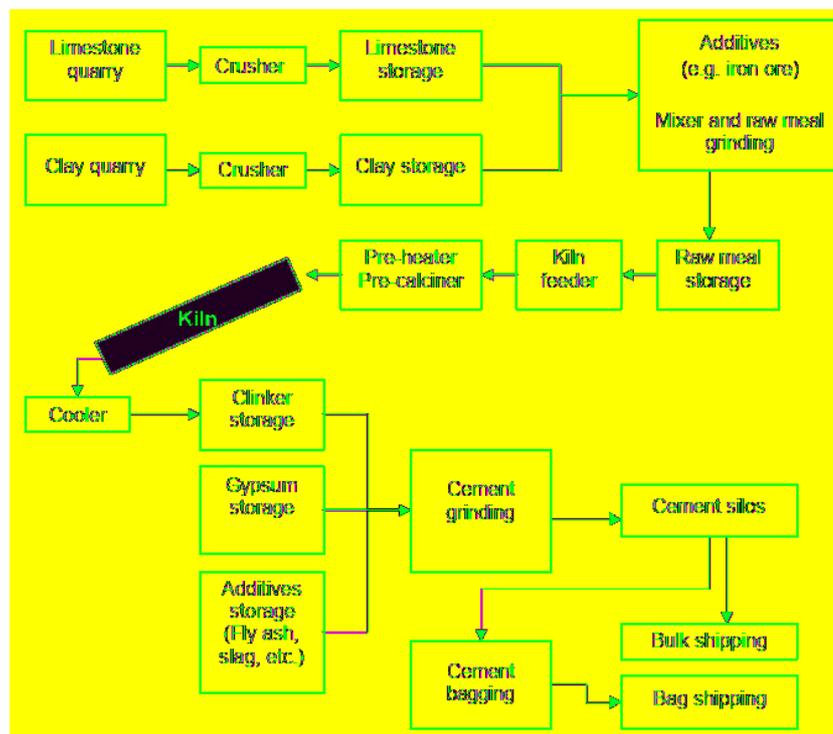
The raw materials used to make cement may be divided into four basic components: lime (calcareous), silica (siliceous), alumina (argillaceous), and iron (ferriferous). Approximately 1450 kilograms (kg) of dry raw materials are required to produce one tonne of cement. Approximately 35% of the raw material weight is removed as carbon dioxide (CO<sub>2</sub>) and watervapour.

The basic chemistry of cement manufacturing process begins with the decomposition of clay minerals into SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> on the one hand, and of calcium carbonate (CaCO<sub>3</sub>) at about 900 °C to leave calcium oxide (CaO, lime) liberating CO<sub>2</sub>, on the other hand. The latter process is known as calcination. This is followed by the clinkering process, in which the CaO reacts at high temperature (typically 1450 °C) with silica, alumina, and ferrous oxide to form the silicates, aluminates, and ferrites of calcium. The resultant clinker is then ground together with gypsum and other additives to produce cement.

There are four main process routes for the manufacture of cement

- **DRY PROCESS** — The raw materials are ground and dried to raw meal in the form of a flowable powder. The dry raw meal is fed in to the pre-heater or precalciner kiln or, more rarely, to a long dry kiln.
- **SEMI-DRY PROCESS** — Dry raw meal is palletized with water and fed into a grate preheater before the kiln or to a long kiln equipped with crosses.
- **SEMI-WET PROCESS** — the slurry (see wet process below) is first dewatered in filter presses. The filter cake is extruded into pellets and fed either to a grate pre-heater or directly to a filter cake drier for raw meal production.
- **WET PROCESS** — The raw materials (often with high moisture content) are ground in water to form a pumpable slurry. The slurry is either fed directly into the kiln or first to slurry drier.

In the dry process, the moisture content of the feed material can be up to 8 % in case of ball mill or roller press and up to 15 % in case of grinding operation with vertical roller mills (VRM). The dried materials are then pulverized into a powder and fed directly into a rotary kiln. Usually, the kiln is a long, nearly horizontal (slope < 3 – 4 %), steel cylinder with a refractory brick lining. The kilns rotate about the longitudinal axis. The pulverized raw materials are fed into the upper end and travel slowly to the lower end. The kilns are fired from the lower end so that hot gases pass upward through the raw material. Drying, decarbonation, and calcining are accomplished as the material travels through the heated kiln, finally burning to incipient fusion and forming the clinker. The clinker is cooled, mixed with about 5% gypsum by weight and ground to the final product fineness and particle size distribution (PSD).



**Figure 3-3: Cement Manufacturing Process (dry SP/PC Kiln)**

In the wet process, slurry is made by adding water to the initial grinding operation. Proportioning may take place before or after the grinding step. After the materials are mixed, the excess water is removed and final adjustments are made to obtain the desired composition. The final homogeneous mixture is fed to the kilns as slurry of 30 to 40 % moisture or as a wet filtrate of about 20 % moisture. The burning, cooling, addition of gypsum, and storage are carried out as in the dry process.

The choice of process to a large extent is determined by the moisture content of the raw materials. Wet processes are more energy consuming, and thus more expensive. Plants using semi-dry processes are likely to convert to dry process technologies whenever expansion or major improvement is required. Normally, plants using wet or semi-wet processes only have access to moist raw materials. The following sub-processes are in all processes:

- Winning of raw materials
- Raw materials storage and preparation
- Fuels storage and preparation
- Clinker burning
- Cement grinding and storage
- Packing and dispatch

**State-of-Art Cement Plant**

The core equipment in different sections of a State-of-Art dry process cement plant is as under;

### Pyroprocessing

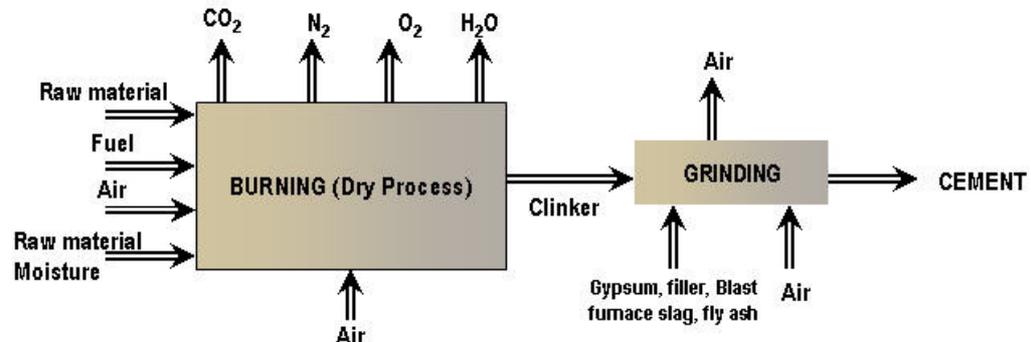
- Cement kiln with l/d  $\approx$  12, two supports,
- Five or six-stage preheater with low pressure drop,
- Low NO<sub>x</sub> precalcinator with pre-combustion chamber, amenable to burning secondary fuels,
- Low primary air, high momentum,, multi-channel burner,
- Grate cooler with high heat recuperation efficiency ( $\approx$  78 percent) and low air requirement ( $\approx$  1.6 Nm<sup>3</sup>/kg clinker).
- Improved drives (5000 – 10000 kW).

### Size reduction

- Double rotor impact crushers or twin roll crushers for limestone,
- Vertical roller mills / Horomill for raw grinding,
- VRM for coal / Pet-coke grinding,
- Roller press for slag grinding,
- Roller press and ball mill for finish grinding,
- High efficiency separators, static-dynamic separator for cement grinding.

### 3.2.2 Raw material inputs and pollution outputs in the production line

The typical raw material inputs and pollution outputs of a cement manufacturing process is shown in Figure 3.4.



**Figure 3-4: Cement Manufacturing Process – Inputs and Outputs**

Naturally occurring calcareous deposits such as limestone, marl or chalk provide the source for calcium carbonate. Silica, iron oxide and alumina are found in various ores and minerals, such as sand, shale, clay, bauxite and iron ore. In Indian cement plants, siliceous impurities in limestone and ash contained in coal provide silica, alumina and ferrous phases, and clay minerals are seldom added as raw material. Fly ash from Thermal Power stations, blast furnace slag, and calcium carbonate-bearing sludge can also be used as partial replacements for the natural raw materials, depending on their physical and chemical characteristics.

The main environmental issues associated with cement projects primarily include the following:

- Air Emissions including dust
- Exploitation of natural resources for raw materials
- Energy consumption and fuels

- Wastewater
- Solid waste generation
- Noise
- Vibration

### A. Consumption of raw materials

Cement manufacturing is a high volume process. The figures in Table 3-3 indicate typical average consumptions of raw materials for the production of cement in India.

**Table 3-3: Raw Material Consumption of Cement**

Materials	Relative mass, %
<b>Cement Clinker / OPC</b>	
Limestone	150
Clay component / Sandstone	< 5
Bauxite	2 – 4
Iron ore / Roasted Pyrite	1 – 3
Mineralisers	< 1
Coal, including Pet-coke	20
Gypsum or other Sulphates	5
<b>Blended Cements</b>	
Fly Ash	15 – 25 #
Granulated Slag	35 – 50 #
Source: CPCB	

NOTE:

# -Indian Standard IS: 1489 permits addition of up to 35 % of fly ash in the manufacture of PPC, however, 15 to 25 % is common. IS: 455 permits addition of granulated slag up to 70 % in the manufacture of PSC. However, the industry norm is up to 50 %.

### B. Energy consumption

The dominant use of thermal energy in cement manufacture is as fuel for the kiln. The main uses of electricity are in the mills (finish grinding and raw grinding), drives, and the fans (kiln/raw mill and cement mill) which together account for more than 80% of electrical energy usage. On average, energy costs - in the form of fuel and electricity- represent about 40 – 45% of the total production cost involved in producing a tonne of cement. Both, thermal and electrical energy comprise about half each of this overall energy cost.

The theoretical thermal energy required for the chemical reactions involved in clinker formation is about 400 kCal/kg of clinker. Table 3-4 shows the energy consumption in Indian cement sector. Whereas tables 3-5 and 3-6 show the specific thermal energy consumption in various kiln systems and specific electric energy consumption respectively.

**Table 3-4: Thermal and Electrical Consumption in Dry Process Cement Plants in India**

	Best	Average
Thermal energy, (kCal/kg of clinker)	663	723
Electrical Energy (kWh/ tonne cement)	63	82
Source: CMA, (2006 – 2007)		

**Table 3-5: Specific Thermal Energy Consumption in Indian Cement Sector**

Kiln Process	Thermal heat Consumption (kCal / kg Clinker)
Wet Process with Internals	1300-1400
Long dry process with Internals	1100-1200
4-stage Cyclone Preheater	775 - 800
4-Stage Cyclone Preheater Plus Calciner	750-775
5-Stage Cyclone Preheater Plus Calciner plus high Efficiency cooler	690-725
6-Stage Cyclone Preheater Plus Calciner plus high Efficiency cooler	670 - 690
Source: NCB Operational Norms, 2005	

**Table 3-6: Specific Electric Energy Consumption (kWh/t of Material)**

S. No.	Section	Range
1	Mining	0.5 – 1.0
2	Crushing – Limestone	0.8 – 1.2
	Coal / Pet-coke	0.8 – 1.5
3	Raw Material Grinding - Ball mill	17 – 26
	VRM	12 – 20
	Roller Press	14 – 18
4	Coal / Pet-coke Grinding – Ball Mill	25 – 30
	VRM (Coal)	20 – 23
	VRM (Pet-coke)	30 – 35
5	Pyroprocessing - PC Kilns	20 – 28
	SP Kilns	25 – 30
6	Cement Grinding – Ball Mill	28 – 38
	VRM	20 – 23
	Roller Press (Semi Finish mode)	24 – 30
7	Slag Grinding – Roller Press	28 – 30 (Finish Mode)

S. No.	Section	Range
8	Packing and Dispatch	1.0 – 2.0
Source: NCB Operational Norms, 2005		

### C. Air emissions

Dust and gaseous emissions are the main pollutants during operation of the cement plant. Air emissions in cement manufacturing process are generated by the handling and storage of raw, intermediate and final materials, and by the operation of kiln systems, clinker coolers, and mills. Air emissions are mainly gaseous or in the form of particles loaded by adsorbed gases; the latter can be regarded as a constituent of dust.

The main releases from the production of cement are releases to air from the kiln system. These are derived from the physical and chemical reactions involving the raw materials and the combustion of fuels. The main gaseous pollutants relevant to cement manufacturing are:

- Oxides of nitrogen (NO<sub>x</sub>) and other nitrogen compounds;
- Sulphur dioxide (SO<sub>2</sub>) and other sulphur compounds;
- Carbon oxides (CO and CO<sub>2</sub>)

Cement plant operation and abatement techniques for air pollution generally focus on these three pollutants. Other pollutants also to be considered in relation to the production of cement, especially with secondary fuels are:

- volatile organic compounds (VOC)
- polychlorinated dibenzodioxins and dibenzofurans (PCDDs and PCDFs)
- metals and their compounds
- Hydrogen Fluoride
- Hydrochloric Acid (HCl)

Other emissions, the effect of which is normally slight and/or local, are waste, noise and odour.

In all kilns the solid material moves counter currently to the hot combustion gases. This counter current flow affects the release of pollutants, since it acts as a built-in circulating fluidized bed. Many components that result from the combustion of the fuel or from the transformation of the raw material into clinker remain in the gas phase only until they are absorbed by, or condensed on, the raw material flowing counter currently.

The adsorptive capacity of the material varies with its physical and chemical state. This in turn depends on its position within the kiln system. For instance, material leaving the calcinations stage of a kiln has high calcium oxide content and therefore has a high absorptive capacity for acid species, such as HCl, HF and SO<sub>2</sub>.

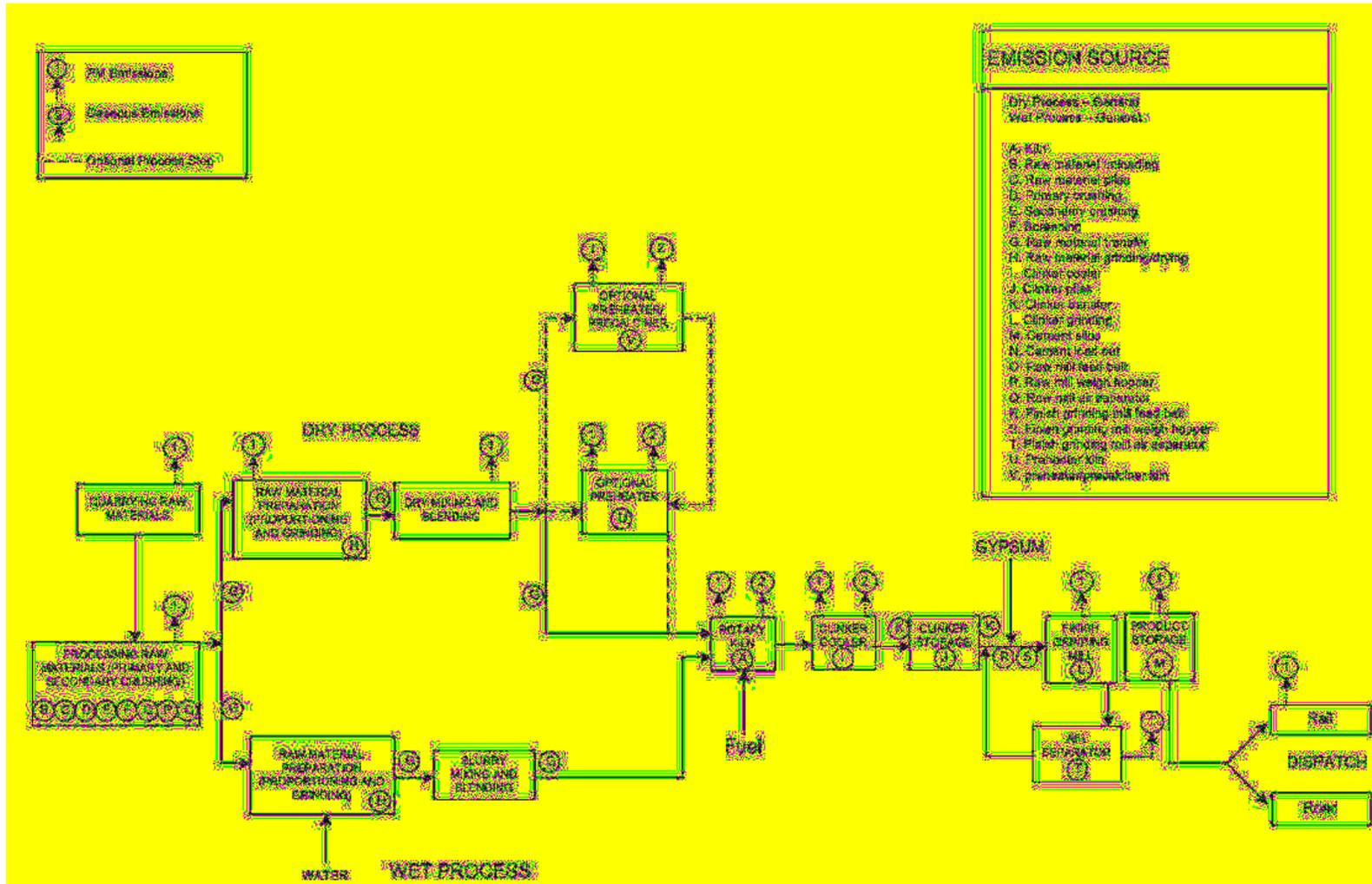


Figure 3-5: Point Sources from a Cement Manufacturing Process

## D. Particulate matter (dust)

Traditionally, the emission of dust particularly from kiln stacks has been the main environmental concern in relation to cement manufacture. Dust is generated at all stages in cement manufacturing process. The dust generation in cement plant is basically from the stacks of various sections like crusher, raw mill, coal mill, kiln, clinker cooler, cement mill and packing plant. These are known as process dust or point sources, while dusts arising from material handling, storage and transportation *etc.*, is known as fugitive dust emission. The design and reliability of modern electrostatic precipitators and bag filters ensure dust releases can be reduced to levels where they cease to be significant.

Fugitive dust emissions can arise during the storage and handling of materials and solid fuels, and also from road surfaces. Particulate releases from packing and dispatch of clinker/cement can also be significant. The impact of fugitive emissions can cause increase in levels of dust locally, whereas the process dust emissions (generally from high stacks) can have impact on the air quality over a much larger area. The sources of fugitive dust generation are given in Table 3-7. Tables 3-8 and 3-9 shows PM emission factors for various sections of plants employing dry process and wet processes respectively.

**Table 3-7: Sources of Fugitive Dust Emission**

Section	Source
Limestone quarry	Drilling, blasting, loading transportation to crushers and to stacker/reclaimer
Crusher	Unloading, crushing, screening, conveying <i>etc.</i>
Pre-blending and storage	Open stockpile
Raw mill	Drying of materials, feeding to grinding system
Blending and homogenization	Filling and discharge of silos
Kiln	Kiln feed
Coal mill	Conveying and feeding of coal
Clinker cooler	Conveying of clinker
Cement mill	Conveying and feeding of clinker, gypsum <i>etc.</i>
Packing plant	Bagging, conveying and loading
Handling of waste dust	Disposal of dust
Unpaved roads	Vehicular movement

**Table 3-8: PM Emission Factors with and without APCD for Cement Manufacturing Industries in India (Dry Type)**

S. No.	Section	Sub Section	Emission Factor in kg/ tonne of Clinker Produced	
			Without APCD	With APCD
1.	Kiln	Kiln, Raw mill & Clinker Cooler	94	0.98
2.	Grinding	Cement mill & Coal mill	257	0.21

S. No.	Section	Sub Section	Emission Factor in kg/ tonne of Clinker Produced	
			Without APCD	With APCD
3.	Others	Packing, Raw mill silo, Cement mill silo	7	0.01
<b>Total</b>			<b>358</b>	<b>1.20</b>

**Table 3-9: PM Emission factors with and without APCD for Cement Manufacturing Industries in India (Wet Process)**

S. No.	Section	Sub Section	Emission Factor in kg/ tonne of Clinker Produced	
			Without APCD	With APCD
1.	Kiln	Kiln, Raw mill & Clinker Cooler	174	0.20
2.	Grinding	Cement mill & Coal mill	123	0.02
3.	Others	Packing, Raw mill silo, Cement mill silo	6	0.03
<b>Total</b>			<b>303</b>	<b>0.25</b>
<b>Source: CPCB COINDS</b>				

### Oxides of nitrogen

The combustion air in the kiln system contains nearly 79 % of Nitrogen. NO<sub>x</sub> is formed during combustion,. Nitrogen oxide as NO comprises 90 % or more of oxides of Nitrogen emitted from cement kiln stack, and balance of NO<sub>x</sub> consists of NO<sub>2</sub>. At the burning zone, having high gas temperature ( $\approx 1850^{\circ}\text{C}$ ), NO<sub>x</sub> forms by direct oxidation of atmospheric Nitrogen. At relatively lower temperature ( $\approx 1200^{\circ}\text{C}$ ) in the Calciners, formation of thermal NO<sub>x</sub> ceases. Any Nitrogen contained in the fuel used can be oxidized to NO<sub>x</sub> at any of the combustion temperature that exits in the kiln system.

Prompt NO<sub>x</sub> is formed by fuel-derived radicals such as CH and CH<sub>2</sub>, reacting with atmospheric N<sub>2</sub> in hydrocarbon flames. NO is then formed by subsequent oxidation. Once HCN and CN are formed, they can also lead to formation of NO. Prompt NO<sub>x</sub>, formed through such mechanisms, is a minor component of total NO<sub>x</sub> emissions from a precalcinator kiln system. Table 3-10 shows NO<sub>x</sub> emission factors and emission concentrations for different types of processes/ kilns.

**Table 3-10: NO<sub>x</sub> Emission Factors and Concentrations**

Process/Kiln Type	Type of Control	NO <sub>x</sub> Emission Factor (kg/ tonne of clinker)	NO <sub>x</sub> concentration (mg/Nm <sup>3</sup> )
PH/PC kilns	None	0.4-4.0	200-2000
	SNCR	0.4-0.8	200-400
PH kilns	None	1.3-5. 5	650-2550
Long dry kilns	None	3.1-5. 8	1550-2650
Wet kilns	None	1.8-6.2	900-3000

## Sulphur dioxide

Sulphur may occur in small amounts in raw materials for cement manufacturing, and also in fuels, particularly pet-coke. The release of oxides of sulphur is attributed to combustion and counter-current flow of solid materials and hot combustion gases. SO<sub>2</sub> generation is mainly from the readily volatile sulphur compounds, in the form of either Sulphide or organic compounds. This takes place at about 300 – 600 °C in the upper cyclone stages of the preheater system. Sulphur, which is not readily volatile, is liberated at about 900 °C at the kiln inlet region and is reabsorbed in the lower region of the preheater.

Cement manufacturing process has in-built de-sulphurisation mechanism. From the raw materials, lime and alkali react with sulphur compounds and trap it in the clinker. Nearly 70 to 90 % of sulphur gets trapped in this way, and only 10 to 30% would appear in the stack gases. The emission factor and concentrations in the flue gas reported by different agencies are represented in the Table 3-11 below.

**Table 3-11: SO<sub>2</sub> Emission Factors and Concentrations**

Process/ kiln type	Type of control	Oxides of sulphur emission factor (kg/ tonne of clinker)	Oxides of Sulphur Concentration (mg/Nm <sup>3</sup> )
PH kilns and PH/ PC kilns	None	BDL-0.50	BDL-150
Long dry kilns	None	4.9	2450
	Dry Scrubbers	< 0.80	< 400
	Activated coke	< 0.1	< 50
Wet kilns	None	2. 6-4.9	1300-2450

## Carbon oxides

Formation of CO<sub>2</sub> is due to;

- Decarbonation of Calcium carbonate into CaO and CO<sub>2</sub>. Calcination of one tonne of limestone gives rise to 0.44 T of CO<sub>2</sub>.
- Burning of fossil fuels in the kiln, and
- Electricity used in various services, *e.g.* fans, motors, captive power generation *etc.*

As a rough estimate, total CO<sub>2</sub> emission per T of cement range from 0.85 to 1.15 T, the approximate contribution being;

- Calcination – 50 – 55 %,
- Fuel combustion – 40 – 50 %,
- Electricity – 0 – 10 %.

CO – Carbon mono-oxide forms due to insufficient supply of oxygen in the air – fuel mix. Since complete combustion of fuel is always attempted with excess air, normally, no trace of CO should be found in the exit gas; in any case, it is not allowed to exceed 1000 ppm.

## Volatile organic compounds (VOC)

VOCs are aliphatic or aromatic hydrocarbons with low molecular weight. Poly aromatic hydrocarbons (PAH) containing three or more benzene rings are atmospheric pollutants that result from incomplete combustion of organic matter in fuels. These polluting substances are likely to be present only if high calorific value waste fuels (described later) containing such compounds is used. The probability of VOCs appearing in exhaust gases is low, as they are oxidized in low temperatures, much below those prevailing even in Calciners. The organic matter is released between temperatures of 400 and 600°C. The VOC content of the exhaust gas from cement kilns typically lies between 10 and 100 mg/Nm<sup>3</sup>, in rare cases emissions can reach as much as 500 mg/Nm<sup>3</sup> because of the raw material characteristics.

## Dioxins and furans

Dioxins and furans are formed while using waste derived fuels (WDF), when chlorine in wastes in the form of precursors such as PVC, NaCl or chlorobenzenes combine with other chemicals at low temperatures. The formation of dioxins occurs only in the presence of a precursor and under reducing conditions when incomplete combustion takes place.

It has been reported that dioxin and furan emission concentrations are low regardless of the type of fuel used and measurements carried out by VDZ (German Cement Industry) showed that cement kilns can comply with an emission level of 0.1 TEQ/Nm<sup>3</sup>, which is the limit prescribed for hazardous waste incineration plants as per European countries' legislations.

## Heavy metals and other air pollutants

The transfer behaviour of heavy metals in cement manufacturing process depends on their volatility, and is generated from the use of raw materials, fossil fuels, and WDF. Metal compounds can be categorized into three classes, based on the volatilities of the metals and their salts:

- Metals which are or have compounds that are refractory or non- or low-volatile: Ba, Be, Cr, As, Ni, V, Al, Ti, Ca, Fe, Mn, Cu and Ag;
- Metals that are or have compounds that are semi-volatile: Sb, Cd, Pb, Se, Zn, K and Na;
- Metals that are or have compounds that are volatile: Hg and Tl.

Low-volatile heavy metals tend to become incorporated in very stable chemical compounds in the clinker. However, concern has been expressed about presence of Nickel and Vanadium in stack emissions, when pet-coke is used as fuel. Semi-low volatile heavy metals tend to volatilize in the hottest section of the kiln i.e., burning zone. These are only partly integrated into the clinker. They condense at lower temperatures on the dust particles, which are removed from the gas stream in the dust collector. Only Mercury is volatile enough to remain in the vapour phase in significant amount. Presence of chlorine can cause some heavy metals to volatilize at far lower temperatures than normal. In such cases, higher proportion of metals leaves the kiln through the stack and they are not controlled through use of filters.

The experience in European Cement Industries, particularly Germany, emphasises that the conditions prevailing during clinker burning process, in contrast to dedicated

incineration plants, constitutes a material conversion process, and ensure low concentrations of trace elements in the exhaust gas. Emission concentrations produced during the use of alternate fuels are mostly considerably lower than limits specified in German 17. BImSch V (Schneider, VDZ, 2000). According to them, the heavy metal input induced by alternative fuels does not become relevant until levels are significantly higher than those observed at the present time. Mercury is the only element that may require input to be limited in individual cases.

## **Wastewater**

Wastewater in cement plants results mainly from surface run off and utility operations for cooling purposes in different phases of the process (e.g., bearings, kiln rings) and causes no substantial contribution to water pollution. Process wastewater with high pH and suspended solids may be generated in some operations. The storage and handling of fuels is a potential source of contamination of soil and groundwater. Stormwater flowing through pet-coke, coal, and waste material stockpiles exposed to the open air may become contaminated.

## **Solid wastes**

Sources of solid waste in cement manufacturing include clinker production waste, mainly composed of spoil rocks, which are removed from the raw materials during the raw meal preparation. Another potential waste stream involves the kiln dust removed from the bypass flow and the stack, if it is not recycled in the process.

Filtrate from the filter presses used in the semi-wet process is fairly alkaline and contains suspended solids.

Limited waste is generated from plant maintenance (e.g., used oil and scrap metal). Other waste materials may include alkali or chloride / fluoride containing dust buildup from the kiln.

## **Noise**

Noise pollution is related to several cement manufacturing phases, including raw material extraction; grinding and storage; raw material, intermediate and final product handling and transportation; and operation of exhaust fans.

## **Vibration**

Mining activities, especially use of explosives for blasting give rise to ground vibration and fly rocks. Suitable buffer zones, at least 300m from the site of blast is recommended.

## **Odour**

Odour emissions are very rarely a problem with a well operated plant. If the raw material contains combustible components (kerogens) which do not burn when they are heated in the preheater, but instead only pyrolise, emissions of hydrocarbons can occur. This hydrocarbon emission can be seen above the stack as a 'blue haze' or plume and can cause unpleasant smell around the cement plant under unfavourable weather conditions.

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 1038/2018

News item published in "The Asian Age" Authored by Sanjay Kaw  
Titled "CPCB to rank industrial units on pollution levels"

Date of hearing: 10.07.2019

**CORAM:**           **HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**  
**HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER**  
**HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER**  
**HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant(s):           NONE

For Respondent (s):           Mr. Pradeep Misra, Advocate for UPPCB  
Mr. TVS Raghavendra Sreyas, Advocate for  
APPCB  
Mr. Dhanajay Bajjal, Advocate for TSPCB  
Mr. Jogy Scaria, Advocate for KSPCB  
Ms. Sakshi Popli, Advocate for DPCC  
Mr. Rajkumar, Advocate for CPCB

**ORDER**

1. The issue for consideration is the remedial action against the polluting industries in the identified polluting industrial clusters. The Tribunal, vide order dated 13.12.2018, treated the news item published in "The Asian Age" dated 06.12.2018 authored by Mr. Sanjay Kaw titled "CPCB to rank industrial units on pollution levels" as an application in view of substantial question of environment which could be dealt with by the Tribunal under Sections 14, 15 and 20 of the National Green Tribunal Act, 2010.
2. We may note the background of the issue briefly. The Central Pollution Control Board (CPCB) in exercise of its statutory functions under the Air (Prevention and Control of Pollution) Act, 1981 (the Air

Act), the Water (Prevention and Control of Pollution) Act, 1974 (the Water Act) and the Environment (Protection) Act, 1986 (the EPA Act) carried out the physical study of the industrial clusters in the country with reference to the Comprehensive Environmental Pollution Index (CEPI) which includes weightages on nature of pollutants, ambient pollutant concentrations, receptors (number of people affected) and additional high risk element. On the basis of the study jointly carried out by the CPCB and State PCBs in 2009-10, 88 industrial clusters were notified as Polluted Industrial Areas (PIAs). These PIAs were ranked as 'critically polluted area' (CPA), 'severely polluted area' (SPA) and 'other polluted areas' (OPAs), depending upon the CEPI scores of each of these industrial areas. Where the CEPI score crossed 70, the areas are designated as CPAs, where the index was between 60-70, they are designated as SPAs and those below 60 as OPAs. As per the CPCB's monitoring of industrial clusters based on CEPI-2009, 43 industrial clusters in 16 cities were identified as CPAs and 32 were identified as SPAs. The CPAs and SPAs were to bring the pollution levels within the norms by formulating and implementing an action plan with short term and long term measures within one year or more. New units in the said areas were prohibited but such ban was later on lifted.

3. In 2016, the criterion for determining CEPI was revised. CPCB revised its CEPI criteria and laid out components which included, scale of industrial activity, scale of exceedance of environmental quality (level of exposure), health related statistics and compliance status of industries.
4. On 26.04.2016, the CPCB issued directions under Section 18 of the Air Act and the Water Act to the SPCB of Andhra Pradesh, Telangana,

Uttar Pradesh, Karnataka, Punjab, Jharkhand, Haryana, Gujarat, Govt. of NCT Delhi, Tamil Nadu, Maharashtra, Madhya Pradesh, Rajasthan, Chhattisgarh, West Bengal, Kerala, requiring continuous environmental quality monitoring in all CPAs and SPAs, installation of Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Continuous Water Quality Monitoring Stations (CWQMS) for CEPI score evaluation as per revised formulae and to formulate their action plans before 15.06.2016. The polluting sources were required to be notified in public domain on websites, environmental quality data was also to be placed in public domain, State Governments were to notify the scaled maps of the industrial areas. The object of placing such data in public domain was to give warning for bringing the pollution levels within the prescribed limits. The polluted clusters were to be kept in mind for permitting setting up of further industries or expanding of the existing industries.

5. Based on the CEPI-2016 criterion, CPCB carried out further monitoring in the year 2017-18 where it was found that number of identified polluted industrial clusters went up to 100. The said number includes 38 critically polluted, 31 severely polluted and remaining 31 as other polluted areas.
6. The Tribunal vide order dated 13.12.2018 directed all the State Pollution Control Boards/Committees (PCCs) to finalize time bound action plans within three months so as to bring all polluted industrial clusters within the safe parameters under the provisions of the Air Act and the Water Act. The SPCBs and CPCB were free to take coercive measures, including recovery of compensation for damages to the environment on 'Polluter Pays' principle and also to adopt precautionary measures on 'Precautionary' principle. The CPCB was

directed to serve a copy of the above mentioned order to all the SPCBs who were to furnish the same to the respective Chief Secretaries of the States for necessary action. The MoEF&CC was directed to take steps on the basis of report of the CPCB. Action taken reports were to be furnished by the CPCB and the MoEF&CC to this Tribunal before 31.05.2019. In the States, action plans were to be prepared by Committees headed by the Chief Secretaries.

7. Ill effects of industrial pollution on the environment and public health are well acknowledged. This has made it necessary to strictly apply the principles of 'Sustainable Development' and permit any activity to be carried out without degrading the environment. The statutory scheme under the Air Act, the Water Act and the EPA Act provides for standards for air and water quality which must be maintained and violation thereof is a criminal offence<sup>1</sup>. Any violation has to be visited with stopping of polluting activity, prosecution and compensation for restoration of environment. Accordingly, in the order dated 13.12.2018 this Tribunal observed:

*"5. Purpose of economic development in any region is to provide opportunities for improved living by removing poverty and unemployment. While industrial development invariably creates more jobs in any region, such development has to be sustainable and compliant with the norms of environment. In absence of this awakening or tendency for monitoring, industrialization has led to environmental degradation on account of industrial pollution. It is imperative to ensure that steps are taken to check such pollution to uphold statutory norms. Adequate and effective pollution control methods are necessary.*

*6. Dust, smoke, fume and toxic gas emissions occur as a result of highly polluting industries such as thermal power plants, coal mines, cement, sponge iron, steel and ferrous alloys, petroleum and chemicals unless right technology is used and precaution taken. Industry specific clusters have not only become hazardous but*

<sup>1</sup> Section 7 read with Section 15 of the EPA Act, Section 24 read with Section 41 and Section 45A of the Water Act, Section 21 and Section 22 read with Section 37 of the Air Act.

also cause irreparable damage to our ecology and environment, often breaching the environment's carrying capacity, adversely affecting public health.

7. *In Karnataka Industrial Areas Development Board vs. C. Kenchappa & Ors<sup>2</sup>*, the Hon'ble Supreme Court observed, as guiding rules for Sustainable Development, that humanity must take no more from nature than man can replenish and that people must adopt lifestyles and development paths that work within the nature's limit. In *Vellore Citizens Welfare Forum Vs. Union of India*, the Hon'ble Supreme Court recognized the Precautionary Principle and explained that environmental measures by the State Government and the statutory authorities must anticipate, prevent and attack the causes of environmental degradation.
8. This Tribunal has applied the same principles in deciding matters before it in terms of Section 20 of the National Green Tribunal Act 2010.
13. The action plan to be prepared in the States may be done by the Committee constituted by the Chief Secretary within one month from today as several Departments may be involved in the exercise. The final preparation of the action plan including its execution may be overseen by the Chief Secretary of the concerned State, along with the other connected major environmental issues of the States, such as pollution of river stretches, non-attainment cities in terms of air quality and solid waste management, utilization of treated sewage, covered by order of this Tribunal dated 20.09.2018 in Original Application No. 673/2018, News Item Published in 'The Hindu' authored by Shri. Jacob Koshy titled "More river stretches are now critically polluted: CPCB", order dated 08.10.2018 in Original Application No. 681/2018, News Item Published In 'The Times of India' Authored by Shri. Vishwa Mohan Titled "NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around August 15", order dated 20.08.2018 in Original Application No. 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 and order dated 27.11.2018 in Original Application No. 148/2016, Mahesh Chandra Saxena Vs. South Delhi Municipal Corporation & Ors. The Chief Secretary will take meetings on all these issues once in three months (quarterly) and will forward Report to NGT by e-mail."

8. We may also note that on 16.01.2019, while considering the issue of compliance of Solid Waste Management Rules, 2016 and other Waste Management Rules in O.A. No. 606/2018, Compliance of MSW Rules, 2016, the Tribunal required the presence of the Chief Secretaries in

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<sup>2</sup> (2006) 6 SSC 383

person after monitoring the subjects mentioned in the said order which included polluted industrial clusters.

9. Accordingly, the Chief Secretaries appeared before this Tribunal and filed their respective versions on the subject. They have been asked to take necessary steps to enforce the environment norms and furnish periodical reports to this Tribunal. The directions include monitoring of important environmental issues including the issue of polluted industrial clusters by a Central Monitoring Committee with representatives from the Central Government and the Chief Secretaries of the States, undertaking carrying capacity study of the areas where violation of environmental norms is established, training programme of the officers concerned with the enforcement of the environmental norms, preparation of annual environmental plan for the country giving status of gaps in compliance of environmental norms.<sup>3</sup> The Tribunal noted the private studies which may need to be verified assessing the number of deaths and diseases from pollution<sup>4</sup>:

*“38. Death attributable to pollution to be 2.51 million in 2015, highest in the world. Air pollution, the number of deaths in India from ambient air pollution was 1.09 million, while deaths from household air pollution from solid fuels were 0.97 million. In the case of water pollution, 0.5 million deaths were caused by unsafe water source, while unsafe sanitation caused 0.32 million deaths. Deaths from air pollution were a result of diseases such as heart disease, stroke, lung cancer, and chronic obstructive pulmonary disease (COPD). Pollution has been responsible for the most non-communicable disease deaths. India ranks a dismal 110 of 149 countries on the Sustainable Development Index. With rapid urbanization, the country is facing massive waste management challenge. Over 377 million urban people live in 7,935 towns and cities and generate 62 million tonnes of municipal solid waste per annum. Only 43 million tonnes (MT) of the waste is collected, 11.9 MT is treated and 31 MT is dumped in landfill sites. An alarming 80% of India’s surface water is polluted. Indian cities generate 10 billion gallons or 38 billion litres of municipal waste water every day, out of which only 29% of it is treated.*

*40. In case extent of convictions for the environment related offences do not correspond to the extent of crime, paradigm shift in*

<sup>3</sup> O.A 606/2018, order dated 17.05.2019, at para 27

<sup>4</sup> *Ibid*

*policies and strategies for implementation of law may need to be considered. Similarly, the mechanism for recovery of compensation may need to be revised on that pattern. Such review of policy cannot be left to the Local Bodies or the Pollution Control Boards but has to be at highest level in the State and further review at the national level. As noted in some of the studies, the ranking of the country in compliance of environmental norms needs to be brought to respectable higher position which may be possible only if there is change in policies and strategies for implementation of necessary norms at every level in right direction. The scale of compensation needs to be suitably revised so that the same is deterrent and adequate to meet the cost of reversing the pollution.”*

10. Some of the States have also filed their reports in the present proceedings apart from the reports of the Chief Secretaries mentioned above. Further, a report has also been filed by the CPCB. According to the CPCB report, order dated 13.12.2018 stands served to all the State PCBs and the PCCs. The CPCB with the concurrence of MoEF&CC carried out environmental quality monitoring in 21 States across the country in respect of the said 100 industrial clusters based on the revised CEPI-2016, by engaging the services of approved laboratories. The said reports have been analysed. Further information has been sought from the State PCBs/ PCCs. Comprehensive exercise and consultative process has been undertaken and CEPI scores of all the 100 Polluted Industrial Areas (PIAs) were submitted to MoEF&CC on 11.01.2019 and the MoEF&CC replied in letter dated 25.02.2019 that there are some gaps in the information. Further information relating to such gaps were sought from the States by the MoEF&CC. Thereafter, updated CEPI scores for all 100 PIAs have been submitted by CPCB to MoEF&CC on 10.04.2019. The CPCB has also prepared a protocol and submitted the same to the MoEF&CC on 17.05.2019 for consideration and appropriate action.
11. During the hearing today, a copy of the letter dated 17.05.2019 was handed over by the Learned Counsel for the CPCB, indicating the

latest CEPI scores for 100 polluted industrial areas/clusters monitored during 2018. The said scores are as follows:

**The CEPI Scores in descending order for Industrial Areas/Clusters monitored during 2018**

Sl. No.	Name of Polluted Industrial Areas (PIAs)	Air	Water	Land	* CEPI Score	# Status of Environment
1.	Tarapur(Maharashtra)	72.00	89.00	59.25	93.69	Ac_Wc_Ls
2.	Najafgarh-Drain basin including Anand Parbat, Naraina, Okhla, Wazirpur(Delhi)	85.25	86.00	55.75	92.65	Ac_Wc_Ls
3.	Mathura(Uttar Pradesh)	86.00	81.00	45.00	91.10	Ac_Wc_Ln
4.	Kanpur(Uttar Pradesh)	66.00	85.00	45.00	89.46	Ac_Wc_Ln
5.	Vadodara(Gujarat)	82.00	80.75	48.75	89.09	Ac_Wc_Ln
6.	Moradabad(Uttar Pradesh)	76.00	71.50	68.75	87.80	Ac_Wc_Lc
7.	Varanasi-Mirzapur(Uttar Pradesh)	67.50	80.00	39.63	85.35	Ac_Wc_Ln
8.	Bulandsahar-Khurza(Uttar Pradesh)	79.50	76.00	36.75	85.23	Ac_Wc_Ln
9.	Gurgaon(Haryana)	70.00	80.00	36.75	85.15	Ac_Wc_Ln
10.	Manali (Tamil Nadu)	59.75	72.25	71.75	84.15	As_Wc_Lc
11.	Panipat(Haryana)	66.00	72.75	60.00	83.54	Ac_Wc_Lc
12.	Firozabad(Uttar Pradesh)	76.00	72.00	32.50	81.62	Ac_Wc_Ln
13.	Udham Singh Nagar (Uttarakhand)	33.00	79.50	26.00	81.26	An_Wc_Ln
14.	Jodhpur (Rajasthan)	67.00	66.00	65.00	81.16	Ac_Wc_Lc
15.	Pali (Rajasthan)	66.00	65.00	65.50	80.48	Ac_Wc_Lc
16.	Ankleshwar (Gujarat)	72.00	57.50	51.00	80.21	Ac_Ws_Ls
17.	Gajraula Area(Uttar Pradesh)	71.00	70.00	45.00	80.14	Ac_Wc_Ln
18.	Vapi (Gujarat)	66.00	75.00	30.00	79.95	Ac_Wc_Ln
19.	Siltara Industrial Area (Chhattisgarh)	76.00	51.75	31.75	79.94	Ac_Ws_Ln
20.	Bhiwadi (Rajasthan)	66.50	71.00	44.75	79.63	Ac_Wc_Ln
21.	Vellore -North Arcot (Tamil Nadu)	49.00	75.00	35.75	79.38	An_Wc_Ln
22.	Sanganer Industrial Area (Rajasthan)	65.00	71.88	39.50	79.10	Ac_Wc_Ln
23.	Byrnihat (Assam)	67.00	70.50	39.50	78.31	Ac_Wc_Ln
24.	Peenya(Karnataka)	41.00	66.00	70.00	78.12	An_Wc_Lc
25.	Jaipur (Rajasthan)	61.88	71.88	31.75	77.40	Ac_Wc_Ln
26.	Surat (Gujarat)	46.00	68.25	56.00	76.43	An_Wc_Ls
27.	Chandrapur (Maharashtra)	75.00	23.75	23.75	76.41	Ac_Wn_Ln
28.	Agra(Uttar Pradesh)	60.00	66.88	47.00	76.22	Ac_Wc_Ln
29.	Pattancheru Bollaram	56.00	70.00	32.25	75.42	As_Wc_Ln

	(Telangana)					
30.	Jalandhar (Punjab)	53.50	66.88	44.50	74.76	As_Wc_Ln
31.	Ludhiana (Punjab)	53.50	71.00	16.00	73.48	As_Wc_Ln
32.	Tiruppur (Tamil Nadu)	33.00	65.00	64.00	72.39	An_Wc_Lc
33.	Ghaziabad(Uttar Pradesh)	57.50	66.00	32.25	72.30	As_Wc_Ln
34.	Mettur (Tamil Nadu)	41.25	19.38	69.38	71.82	An_Wn_Lc
35.	KIADB Industrial Area, Jigini, Anekal (Bengaluru)	52.00	66.00	28.25	70.99	As_Wc_Ln
36.	Vatva(Gujarat)	57.00	66.00	25.50	70.94	As_Wc_Ln
37.	Raipur (Chhattisgarh)	67.00	45.75	25.00	70.77	Ac_Wn_Ln
38.	Rajkot(Gujarat)	51.75	61.50	45.75	70.62	As_Wc_Ln
39.	Aurangabad(Maharashtra)	45.00	65.38	28.75	69.85	An_Wc_Ln
40.	Dombivali (Maharashtra)	62.00	63.50	27.25	69.67	Ac_Wc_Ln
41.	Nashik(Maharashtra)	56.50	60.00	42.00	69.49	As_Wc_Ln
42.	Batala (Punjab)	63.00	62.75	25.50	68.92	Ac_Wc_Ln
43.	Noida(Uttar Pradesh)	59.75	62.75	27.00	68.76	As_Wc_Ln
44.	Baddi(Himachal Pradesh)	63.00	63.75	19.75	68.26	Ac_Wc_Ln
45.	Vijayawada(Andhra Pradesh)	60.50	49.25	38.75	68.04	Ac_Wn_Ln
46.	Bandel (West Bengal)	59.50	47.00	42.75	67.64	As_Wn_Ln
47.	Ramgarh(Jharkhand)	56.75	50.00	46.25	66.75	As_Ws_Ln
48.	Kukatpally (Telangana)	43.75	61.00	32.00	66.46	An_Wc_Ln
49.	Ib-Valley (Orissa)	48.75	59.00	36.75	66.35	An_Ws_Ln
50.	Tuticorin (Tamil Nadu)	29.75	46.00	61.00	66.34	An_Wn_Lc
51.	Navi Mumbai(Maharashtra)	56.00	63.00	16.00	66.32	As_Wc_Ln
52.	Meerut(Uttar Pradesh)	52.00	65.00	6.00	66.09	As_Wc_Ln
53.	Parwanoo(Himachal Pradesh)	19.00	61.88	53.75	65.77	An_Wc_Ls
54.	Kala Amb(Himachal Pradesh)	17.00	64.00	27.75	65.70	An_Wc_Ln
55.	Bidar(Karnataka)	31.00	60.00	45.50	65.64	An_Wc_Ln
56.	Durgapur (West Bengal)	62.50	43.50	18.75	65.56	Ac_Wn_Ln
57.	Aligarh(Uttar Pradesh)	56.25	61.88	11.88	64.42	As_Wc_Ln
58.	Hajipur(Bihar)	57.50	41.13	39.25	64.36	As_Wn_Ln
59.	Hazaribagh(Jharkhand)	61.00	20.00	41.00	64.20	Ac_Wn_Ln
60.	Coimbatore (Tamil Nadu)	47.25	53.75	45.25	63.64	An_Ws_Ln
61.	Singrauli (UP & MP)	45.00	57.25	27.75	62.59	An_Ws_Ln
62.	Cuddalore (Tamil Nadu)	25.00	58.25	41.25	62.56	An_Ws_Ln
63.	Faridabad(Haryana)	55.25	53.75	28.75	62.17	As_Ws_Ln
64.	Bhavnagar (Gujarat)	61.00	15.50	15.50	61.94	Ac_Wn_Ln
65.	Howrah (West Bengal)	60.50	20.00	16.00	61.76	Ac_Wn_Ln
66.	Paradeep (Orissa)	43.00	57.50	17.00	60.61	An_Ws_Ln
67.	Erode (Tamil Nadu)	34.13	47.00	52.75	60.33	An_Wn_Ls
68.	Saraikele (Jharkhand)	57.75	17.50	34.00	60.26	As_Wn_Ln

69.	Kattedan(Telangana)	42.25	50.75	45.25	60.17	An_Ws_Ln
70.	Dhanbad(Jharkhand)	43.00	57.50	12.50	59.78	An_Ws_Ln
71.	Indore(Madhya Pradesh)	18.50	56.88	20.75	58.53	An_Ws_Ln
72.	Bhadravati(Karnataka)	45.00	52.00	30.00	58.48	An_Ws_Ln
73.	Mandideep (Madhya Pradesh)	56.00	55.25	10.00	58.43	As_Ws_Ln
74.	Mangalore(Karnataka)	15.00	54.50	54.25	58.20	An_Ws_Ls
75.	Barajamda(Jharkhand)	51.88	25.63	46.75	57.64	As_Wn_Ln
76.	Korba (Chhattisgarh)	43.75	17.75	54.00	57.57	An_Wn_Ls
77.	Ahmedabad(Gujarat)	53.50	48.50	16.00	57.11	As_Wn_Ln
78.	Haridwar (Uttarakhand)	50.75	52.38	13.75	55.70	As_Ws_Ln
79.	Asansol (West Bengal)	54.00	16.25	13.75	55.03	As_Wn_Ln
80.	Chembur(Maharashtra)	52.25	50.75	10.00	54.67	As_Ws_Ln
81.	Morbi (Gujarat)	51.00	47.25	14.00	54.24	As_Wn_Ln
82.	Mandi Govindgarh (Punjab)	23.75	53.75	1.50	53.91	An_Ws_Ln
83.	Raichur(Karnataka)	32.75	47.88	32.50	53.42	An_Wn_Ln
84.	West Singhbhum(Jharkhand)	51.88	25.88	11.25	53.28	As_Wn_Ln
85.	Greater Kochin (Kerala)	47.38	35.88	29.50	52.94	An_Wn_Ln
86.	Pimpari-Chinchwad(Maharashtra)	52.00	6.25	5.25	52.16	As_Wn_Ln
87.	Gwalior (Madhya Pradesh)	50.00	43.13	7.75	51.67	As_Wn_Ln
88.	Junagarh (Gujarat)	47.00	25.00	35.00	51.64	An_Wn_Ln
89.	Jajpur (Orissa)	43.50	26.25	41.25	49.62	An_Wn_Ln
90.	Nagda -Ratlam (Madhya Pradesh)	12.00	47.00	28.00	48.78	An_Wn_Ln
91.	Jamshedpur(Jharkhand)	46.00	19.25	20.25	48.10	An_Wn_Ln
92.	Mahad(Maharashtra)	41.00	35.75	29.00	47.12	An_Wn_Ln
93.	Bhillai-Durg (Chhattisgarh)	43.00	32.75	19.75	46.69	An_Wn_Ln
94.	Angul Talchar (Orissa)	44.75	13.25	23.00	46.43	An_Wn_Ln
95.	Haldia (West Bengal)	45.00	35.00	3.75	45.72	An_Wn_Ln
96.	Vishakhapatam (Andhra Pradesh)	27.25	12.75	42.75	44.74	An_Wn_Ln
97.	Dewas (Madhya Pradesh)	28.00	31.63	31.75	37.79	An_Wn_Ln
98.	Jharsuguda (Orissa)	36.00	21.50	8.75	37.20	An_Wn_Ln
99.	Digboi (Assam)	23.50	25.25	6.50	26.39	An_Wn_Ln
100.	Pithampur (Madhya Pradesh)	13.50	19.50	6.75	20.23	An_Wn_Ln

12. Question for consideration is whether mere making of action plans obviates the requirement of enforcing the law. Continued polluting activities are criminal offences under the law of the land. The rule of law requires prohibiting such activities to safeguard the environment and the innocent victims<sup>6</sup>.
13. The answer has to be in the negative. Once the industrial clusters have been notified as polluting, while action plans may certainly be prepared, the polluting activity, which is a criminal offence, cannot be allowed to be continued. The essence of rule of law is that no activity which is against the law is allowed to continue and the person violating the law is punished according to law.<sup>7</sup> Thus merely requiring improvement does not obviate the need for punishing the law violators/polluters; stopping polluting activity and recovering compensation for the damage already caused so as to recover the cost of restoration<sup>8</sup> is the mandate of law. This having not been done, the Tribunal is under a duty to direct the statutory regulators to perform their functions and take steps forthwith for stopping polluting activities, initiating prosecutions against the polluters and assessing and recovering compensation from such identified polluters at least for five years which is the period specified under Section 15(3) of the National Green Tribunal Act, 2010.

<sup>5</sup> Under Section 5 of the EPA Act, Section 31A of the Air Act and Section 33A of the Water Act, the power of Board to give directions includes the power to direct the closure, prohibition or regulation of any industry, operation or process; or the stoppage or regulation of the supply of electricity or water or any other service.

<sup>6</sup> [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(18\)30261-4/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(18)30261-4/fulltext) stating 1.24 million deaths in India in 2017, which were 12.5% of the total deaths, were attributable to air pollution, including 0.67 million from ambient particulate matter pollution and 0.48 million from household air pollution.

<sup>7</sup> Goa Foundation Vs. Union of India and Ors., (2014) 6 SCC 590, at para 72-75, the Supreme Court noted the power that rests with the Pollution Control Board under Section 31 A of the Air Act and Section 33 A of the Water Act and directed that the authorities should take stringent actions in line with these power in cases of polluting industries.

<sup>8</sup> Tirupur Dyeing Factory Owners Association Vs. Noyyal River Ayacutdars Protection Association & Ors., (2009) 9 SCC 737, in paras 26, 27, 33 & 34, the Supreme Court emphasis on developmental activities to be such that it does not compromises with the ability of the future generation to meet their needs and in this regard, authorities are to take into consideration the macro effect of wide-scale land and environmental degradation caused by absence of remedial measures.

14. We reiterate that economic development is not to be at the cost of health of the public and in violation of law of the land. Unless the polluting industries tackle the problem they have created, their operations have to be stopped/suspended.<sup>9</sup> Reference may be made to the judgement in the case of *Indian Council for Enviro Legal Action & Ors. Vs. Union of India & Ors.*<sup>10</sup>:

*“Respondents 4 to 8 have earned the dubious distinction of being categorised as “rogue industries”. They have inflicted untold misery upon the poor, unsuspecting villagers, de-spoiling their land, their water sources and their environment – all in pursuance of their private profit. They have forfeited all claims of any consideration by this Court. Accordingly, we herewith order the closure of all plants and factories of Respondents 4 to 8 located in Bichhri village. The RPCB is directed to seal all factories/units/plants of the said respondents forthwith.”*

15. We may note that this Tribunal has dealt with cases of industrial pollution and exercising its jurisdiction under Sections 14, 15 and 20 of the NGT Act, 2010 directed the regulatory authorities to prohibit polluting activities, prosecute the polluters and assess and recover compensation. In the case of Morbi Industrial Cluster<sup>11</sup>, which ranks at 81 based on its CEPI score, (where air pollution is critical though overall index places it in OPA), the Tribunal noted the air quality as shown in the inspection report furnished in the said case, to be as follows:

*“Ambient Air Quality Status: As per National Green Tribunal committee report average ambient air quality (7 Stations) monitored PM10 = 552.66 µg/m<sup>3</sup>, PM2.5 = 289.61 µg / m<sup>3</sup>, SO<sub>2</sub> = 152.81 µg / m<sup>3</sup>. Compared to that, Average ambient air quality monitored (4 Stations) in last 3 months (Aug- 18 to Nov-18) is PM10 = 199.1 µg / m<sup>3</sup>,*

<sup>9</sup> M.C Mehta (Badkhal and Surajkund Lakes Matters) vs. Union of India & Ors., (1997) 3 SCC 715 at para 10 & 11, where the Supreme Court prohibited any construction activities around the said lakes on account of precautionary principle to protect these lakes; Vellore Citizens Welfare Forum Vs. Union of India & Ors., (1996) 5 SCC 647 at para 9, where the Supreme Court discussed the rights guaranteed under Article 21 of the Constitution of India and directed that all tanneries which have not obtained the consents will be not reopened and that no new tanneries will be permitted to be open in the prohibited area.

<sup>10</sup> (1996) 3 SCC 212 at para 70.

<sup>11</sup> Order dated 06.03.2019 in Original Application No. 20/2017 (WZ), Babubhai Ramubhai Saini Vs. Gujarat Pollution Control Board & Ors.

*PM2.5 = 60.6 µg /m<sup>3</sup>. Though not meeting with standards, this shows improvement in air quality of Morbi-Wankner Region.”*

16. Since the industries in the said area were operating in violation of Air Act, having adverse consequences on health and environment, applying the Sustainable Development and Precautionary principles, the Tribunal directed the GPCB to close all the coal gasifier industries and take steps for prosecution of such industries which violated the law and recover compensation for the damage to the public health to be assessed by a Joint Committee of GPCB, CPCB and NEERI, taking into account the cost of restoration of the environment and the element of deterrence.<sup>12</sup>

17. The Tribunal observed:

*“ 22. Purpose of economic development in any region is to provide opportunities for improved living by removing poverty and unemployment. While industrial development invariably creates more jobs in any region, such development has to be sustainable and compliant with the norms of environment. In absence of this awakening or tendency for monitoring, industrialization has led to environmental degradation on account of industrial pollution. It is imperative to ensure that steps are taken to check such pollution to uphold statutory norms. Adequate and effective pollution control methods are necessary.*

*23. We may also note that as per data compiled by the CPCB Morbi Wankaner is one of the polluted industrial clusters. Vide order dated 13.12.2018 in Original Application No. 1038/2018, this Tribunal considered the subject matter of critically polluted industrial clusters and directed preparation of action plans by the respective States for remedying the situation.*

*24. Even though, this area is polluted but not ‘critically polluted’, the same may not be covered by the said order, but the fact remains that there is high amount of pollution as shown by the latest report of the GPCB quoted above in para no. 13. PM10 is equal to 552.66 and PM2.5 is equal to 289.61. Stringent*

<sup>12</sup> Order dated 06.03.2019 in Original Application No. 20/2017 (WZ), Babubhai Ramubhai Saini Vs. Gujarat Pollution Control Board & Ors.

*measures are, thus, required in the interest of protection of environment and public health.*

25. *Accordingly, we allow the applications and direct the GPCB to close all coal gasifiers industries and units operating with the help of coal gasifiers without prejudice to such units switching over to non-coal gasifiers or PNG or technology consistent with the above report. The GPCB must initiate immediate steps for prosecution of the industries which have operated in violation of law and recover compensation for causing damage to the environment and public health. This amount may be assessed by a Committee with representatives of CPCB, GPCB and NEERI. The CPCB will be the nodal agency for coordination and compliance. The Committee may suggest restoration plan.”*

18. The Tribunal also considered the case of pollution in the Taloja industrial area<sup>13</sup> which finds mention under the title ‘Navi Mumbai’ at rank 51 based on its CEPI score. High level of pollution was found on the basis of joint inspection conducted by the CPCB and the Maharashtra PCB dated 02.01.2018, as the CETP was not functioning properly. The Maharashtra State PCB gave notice to 92 industries for closure. Apart from requiring the CETP operators to deposit a sum of Rs. 10 crores as compensation, steps were required to be taken to remedy the pollution. The Tribunal held that only option was to permit only such industries to function which had stand alone ETP and are fully compliant with the norms and to close the industries which were non-compliant.<sup>14</sup>

19. The Tribunal directed as follows:

*“13. In view of above undisputed position that pollution is still continuing, the only option is to shut down the industries which are source of pollution till remedial action is taken. Learned Counsel for the MIDC as well as MPCB are unable to provide any other solution. It is made clear that mere fact that MIDC has assigned the work to a contractor does not absolve MDIC of its responsibility of operating CETP as per norms.*

<sup>13</sup> O.A No. 125/2018, Arvind Pundalik Mhatre v. Ministry of Environment and Forest & Climate Change & Ors.

<sup>14</sup> O.A No. 125/2018, Arvind Pundalik Mhatre Vs. Ministry of Environment and Forest & Climate Change & Ors., order dated 09.04.2019

14. Accordingly, we direct the MPCB to forthwith suspend the Consent to Operate to the industries in the area not meeting the norms and permit them to operate only after remedial steps are taken. Steps in this direction be taken within two weeks from today. Whether a particular industry is complying or not complying with the norms is the matter to be decided by the MPCB in accordance with law. Action taken report be furnished to the Committee and the Committee may take a final call in the matter, in case of any surviving issue.”

20. Taking cognizance of the untreated effluents being discharged by textile units in Tronica city, Loni area, Ghaziabad, the Tribunal in *Rashid Ali Warsi Vs. UPSIDC & Ors.*<sup>15</sup>, directed closure of 53 units until the time CETP was made functional. Thereafter, vide order dated 13.11.2018, the Tribunal allowed operation of only those units which were later found to be achieving the norms.

21. The Tribunal in the case of *M.C Mehta vs. Union of India & Ors.*<sup>16</sup> dealt with the issues regarding continuous illegal discharge of untreated sewer and industrial effluents in Ganga and its tributaries and the connecting drains, apart from the dumping of solid waste, hazardous waste, plastic waste, muck and other wastes. The Tribunal after noting that leather industries at Jajmau, Banthar and Unnao were discharging untreated effluents in the river Ganga, directed that activities of such industries must be straightaway closed till they comply with the norms.<sup>17</sup>

22. In view of water pollution caused by absence/dysfunctional CETPs/ETPs/STPs, the Tribunal has, in the case of *Aryavart Foundation Vs. M/s Vapi Green Enviro Ltd. & Ors.*<sup>18</sup>, directed all defaulting industries, other than green and white category, connected

<sup>15</sup> Order dated 25.05.2018

<sup>16</sup> O.A 200/2014, order dated 14.05.2019

<sup>17</sup> *Ibid* at Para 16 & 17

<sup>18</sup> O.A 95/2018, order dated 11.01.2019

with CETP, to make deposits with the CPCB towards interim environmental compensation, pending assessment of actual compensation and further action <sup>19</sup>, on the following scale:

- (i) Large Industries – Rs. 1 crore each
- (ii) Medium Industries – Rs. 50 Lakhs each
- (iii) Small Industries – Rs. 25 Lakhs each

23. In the present case, in view of massive exercise already done by CPCB, it is not necessary to require any further verification about the existence of pollution in the said PIAs. The Tribunal can direct that the polluting activities cannot be allowed to continue till adequate measures are taken as the Tribunal is bound to apply the 'Sustainable Development'<sup>20</sup>, 'Precautionary'<sup>21</sup> and 'Polluter Pays'<sup>22</sup> principle under Section 20 of the National Green Tribunal Act, 2010 to protect the environment and the victims. The statutory regulatory bodies can be required to straightaway identify the particular industrial units in the said PIAs that are causing pollution, particularly those units which fall under the red and orange category and take action against them by way of closing the polluting activity, initiating prosecution and assessing and recovering compensation. Pending such assessment, interim compensation may be recovered on the scale adopted by this Tribunal in the case of Vapi industrial area<sup>23</sup>.

<sup>19</sup> Para 55, of O.A 95/2018, order dated 11.01.2019

<sup>20</sup> M.C Mehta Vs. Union of India (1997) 2 SCC 353, where the Supreme Court of India held – The development of industry is essential for the economy of the country, but at the same time the environment and the ecosystems have to be protected. The pollution created as a consequence of development must be commensurate with the carrying capacity of our ecosystem.

<sup>21</sup> M.C Mehta vs. Union of India & Ors., (2009) 6 SCC 142, at para 23, 30 & 46, the Supreme Court addressed the issue of wide threat to forest ecology vis-à-vis the mining activities in the Aravalli hills and explained that it is important to evoke the precautionary principle to impose complete ban on mining in the Aravalli Range in state of Haryana.

<sup>22</sup> Indian Council for Enviro Legal Action & Ors. Vs. Union of India & Ors., (1996) 3 SCC 212 Para 16, Vellore Citizens Welfare Forum Vs. Union of India & Ors. (1996) 5 SCC 647 Para 12-18 – holding that "Polluter Pay" principle is 'accepted principle and part of environmental law of the country, even without specific statute. M.C Mehta Vs. Union of India & Ors., W.P (C) No. 13029/2015 order dated 24.10.2017 of the Supreme Court of India., O.A 95/2018, order dated 11.01.2019 & O.A No. 593/2017, order dated 03.08.2018: The Tribunal directed CPCB to take penal action against those accountable for failure in setting up CETPs/STPs/STPs and to recover compensation for damage to the environment,

<sup>23</sup> *Supra* 15

24. CPCB has compiled data of industrial clusters which are polluting in terms of air, water and other norms together. Under the law, even air pollution or water pollution or other pollution, are independent offences. The sustainable development and precautionary principle require any polluting activity to be prohibited and compensation recovered for damage caused from polluters. If there is air pollution, actionable under the Air Act, even if there is no violation of Water Act or EPA Act, such pollution cannot be ignored. There has to be prosecution, stopping of polluting activity and recovery of compensation for restoration of the environment. We have seen that even when norms of air, water and other pollution are being violated, prosecution, stopping of polluting activities and recovery of compensation is not taking place for which there is no justification. Likewise action to prohibit polluting activity, initiating prosecution and recovery of compensation is required not merely for the PIAs based on violation of norms under all the heads, but also for areas where air, water or other pollution is found individually. Thus areas not covered by PIAs are also required to be governed by our directions for enforcing the law by way of stopping polluting activity and taking other steps. The fact that such pollution is taking place is evidenced by there being acknowledged pollution in the form of 351 polluted river stretches<sup>24</sup> and 102 non-attainment cities<sup>25</sup>.
25. CPCB must compile data of polluted industrial areas not confined to more than one parameters as is now being done, but also with respect to polluted areas based on water, air or other pollution individually. Compiling data for categorizing areas as polluted areas based on water pollution alone, or air pollution or other pollution

<sup>24</sup> O.A. 673/2018, News Item Published in 'The Hindu' authored by Shri. Jacob Koshy titled "More river stretches are now critically polluted: CPCB", Order dated 20.09.2018

<sup>25</sup> O.A. 681/2018, News Item Published In 'The Times of India' Authored by Shri. Vishwa Mohan Titled "NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around August 15" order dated 08.10.2018

alone may be a step in the right direction. Let this be now done in the next three months, with the assistance of State PCBs/PCCs or other experts. In this regard we may note that dealing with the industrial water pollution, this Tribunal directed the CPCB to compile its monitoring report with reference to 97 CETPs installed in different states as this was linked to 100 PIAs also.<sup>26</sup>

26. Needless to state that there is no right to carry on business in violation of pollution norms and right of statutory authorities is coupled with duty. Such right, does not carry any unlimited discretion of not taking action when pollution norms are violated.

27. In view of the material compiled by the CPCB, with the assistance of SPCBs/PCCs, in respect of polluted industrial areas, where action is not being taken by statutory authorities, the Tribunal has to exercise its jurisdiction of directing performance of statutory functions and duties by the State boards/committees, following similar direction by the Apex Court<sup>27</sup>.

28. Accordingly, we direct the CPCB in coordination with all State PCBs/PCCs to take steps in exercise of statutory powers under the Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974, Environment (Protection) Act, 1986 or any other law to prohibit operation of polluting activities in the said CPAs and SPAs within three months and furnish a compliance report to this Tribunal. The Central Pollution Control Board, in coordination with the State Boards/PCBs may make

<sup>26</sup> O.A No. 593/2017, order dated 19.02.2019, Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors.

<sup>27</sup> M.C Mehta (Calcutta Tanneries' Matter) Vs. Union of India & Ors., (1997) 2 SCC 411, at para 17, the Supreme Court directed the Board to take action against defaulting tanneries which, including those which had not complied with the conditions under Water Act as mentioned in their consents. In M.C Mehta Vs. Union of India & Ors., (2004) 6 SCC 588, paras 37,48, 51,7 69, the Supreme Court passed direction on closure of industrial units which were illegally operating and were in violation of the Master Plan.

assessment of compensation to be recovered from the said polluting units for the period of last 5 years, taking into account the cost of restoration and cost of damage to the public health and environment and the deterrence element. The scale of deterrence may be related to the period and the frequency of defaults. Such other factors as may be found relevant may also be taken into account. No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms. Pending assessment of compensation, interim compensation be recovered at the scale adopted by this Tribunal in the case of Vapi Industrial area as mentioned in para 22 above.

29. We further direct CPCB, with the assistance of SPCBs/PCCs or other experts, to compile information with regard to polluted industrial areas based on water pollution norms separately, air pollution norms separately and other pollution norm separately and notify such information on public domain within three months. On completing this exercise, action against identified individual polluters may be initiated on the same pattern on which direction have been issued in para 28 and furnish a report to this Tribunal in this regard also, before the next date.
30. We direct the MoEF&CC to take steps for enforcement of action plan for improvement of the situation.
31. We may also mention that hearing individual industrial unit is not considered necessary for passing the above order as the CPCB/State

PCBs must exercise their respective statutory powers by following the procedure prescribed under the statute even without intervention of this Tribunal. The Tribunal is only requiring such statutory bodies to perform their duties to uphold the law without going into an individual case<sup>28</sup>. Direction is with reference to data compiled, or to be compiled, by the said bodies only.

32. It is made clear that white and green or non-polluting industries which are not causing any pollution will not be affected by this order except that the parameters thereof may be monitored with a view to see that under the garb of label of white/green or otherwise, the polluting activity is not continued.

33. We direct that the CPCB will be at liberty to have an appropriate panel of Experts to augment its capacity, in case the available manpower is found to be inadequate to execute the above order and for this purpose utilise the environment funds available under the environmental compensation head. In this regard, reference may also be made to order dated 22.01.2019, of this Tribunal in O.A No. 101/2019, *Central Pollution Control Board Vs. Assam State Pollution Control Board & Ors.* which enables CPCB to utilise the environment fund for the purpose.

34. Let a compliance report be filed by the CPCB after three months but before the next date by email on [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).

List for further consideration on 05.11.2019.

<sup>28</sup> M.C Mehta Vs. Union of India & Ors., (2001) 3 SCC 756, at para 8, the Supreme Court repeated the stand that in re M.C Mehta Vs. Union of India (1998) 6 SCC 63, the Court had passed directions to all bus operators in Delhi to make a shift from diesel and other fuels to CNG, the Supreme Court's directions are all *in rem* and not *in personam*.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

July 10, 2019  
Original Application No. 1038/2018  
AK



Item Nos. 03 &amp; 04

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

I.A. No. 479/2019  
IN  
Original Application No. 1038/2018  
WITH  
Review Application No. 44/2019  
IN  
Original Application No. 1038/2018

News item published in "The Asian Age" Authored by Sanjay Kaw  
Titled

"CPCB to rank industrial units on pollution levels"

WITH

Union of India

Applicant(s)

Versus

News item published in "The Asian Age" Authored  
by Sanjay Kaw Titled "CPCB to rank industrial units  
on pollution levels"

Respondent(s)

Date of hearing : 19.08.2019

Date of uploading of order : 23.08.2019

**CORAM:** HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicants in the Review  
Application and the I.A. :

Mr. Rajkumar, Advocate for CPCB  
Mr. Attin Shankar Rastogi and Ms.  
Suman Kharb, Advocates for  
MoEF&CC

**ORDER**

1. This order will dispose of Review Application No. 44/2019 filed by the Ministry of Environment, Forest and Climate Change (MoEF&CC) for

review of the order of this Tribunal dated 10.07.2019 and I.A. No. 479/2019 filed by the Central Pollution Control Board (CPCB) for clarification of the said order.

2. Order dated 10.07.2019 dealt with the issue of remedial action against polluting industries in the identified polluting industrial clusters. The CPCB had carried out study of industrial clusters in the country with reference to the Comprehensive Environmental Pollution Index (CEPI) which includes weightages on nature of pollutants, ambient pollutant concentrations, receptors (number of people affected) and additional high-risk element. On the basis of the above study in 2009-10, 88 industrial clusters were notified as Polluted Industrial Areas (PIAs). These PIAs were ranked as 'critically polluted area' (CPA), 'severely polluted area' (SPA) and 'other polluted areas' (OPAs), depending upon the CEPI scores of each of these industrial areas. The CEPI criteria was revised in 2016 and, based on the CEPI-2016 criteria, CPCB carried out further monitoring in the year 2017-18 where it was found that number of identified polluted industrial clusters went up to 100. The said number includes 38 critically polluted, 31 severely polluted and remaining 31 as other polluted areas.
3. The Tribunal vide order dated 13.12.2018 directed all the State Pollution Control Boards (SPCBs)/Committees (PCCs) to finalize time bound action plans within three months so as to bring all polluted industrial clusters within the safe parameters under the provisions of

the Air Act and the Water Act. The SPCBs and CPCB were free to take coercive measures, including recovery of compensation for damages to the environment on 'Polluter Pays' principle and also to adopt precautionary measures on 'Precautionary' principle. The CPCB was directed to serve a copy of the above mentioned order to all the SPCBs who were to furnish the same to the respective Chief Secretaries of the States for necessary action. The MoEF&CC was directed to take steps on the basis of report of the CPCB. Action taken reports were to be furnished by the CPCB and the MoEF&CC to this Tribunal before 31.05.2019. In the States, action plans were to be prepared by Committees headed by the Chief Secretaries.

4. The matter was thereafter considered on 10.07.2019. From the letter dated 17.05.2019 produced during the hearing, the Tribunal noted the CEPI Score for 100 PIAs monitored during 2018 and held that while strategies may be worked out for reducing the pollution load in the industrial clusters in question, the statutory regulators must perform their functions in the light of 'sustainable development' and 'precautionary' principle of stopping polluting activities and taking other coercive measures. It was observed:

*"23. In the present case, in view of massive exercise already done by CPCB, it is not necessary to require any further verification about the existence of pollution in the said PIAs. The Tribunal can direct that the polluting activities cannot be allowed to continue till adequate measures are taken as the Tribunal is bound to apply the 'Sustainable Development'<sup>1</sup>,*

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<sup>1</sup> M.C Mehta Vs. Union of India (1997) 2 SCC 353, where the Supreme Court of India held – The development of industry is essential for the economy of the country, but at the same time the environment and the ecosystems have to be protected. The pollution created as a consequence of development must be commensurate with the carrying capacity of our ecosystem.

*'Precautionary'<sup>2</sup> and 'Polluter Pays'<sup>3</sup> principle under Section 20 of the National Green Tribunal Act, 2010 to protect the environment and the victims. The statutory regulatory bodies can be required to straightaway identify the particular industrial units in the said PIAs that are causing pollution, particularly those units which fall under the red and orange category and take action against them by way of closing the polluting activity, initiating prosecution and assessing and recovering compensation. Pending such assessment, interim compensation may be recovered on the scale adopted by this Tribunal in the case of Vapi industrial area<sup>4</sup>.*

*24. CPCB has compiled data of industrial clusters which are polluting in terms of air, water and other norms together. Under the law, even air pollution or water pollution or other pollution, are independent offences. The sustainable development and precautionary principle require any polluting activity to be prohibited and compensation recovered for damage caused from polluters. If there is air pollution, actionable under the Air Act, even if there is no violation of Water Act or EPA Act, such pollution cannot be ignored. There has to be prosecution, stopping of polluting activity and recovery of compensation for restoration of the environment. We have seen that even when norms of air, water and other pollution are being violated, prosecution, stopping of polluting activities and recovery of compensation is not taking place for which there is no justification. Likewise action to prohibit polluting activity, initiating prosecution and recovery of compensation is required not merely for the PIAs based on violation of norms under all the heads, but also for areas where air, water or other pollution is found individually. Thus areas not covered by PIAs are also required to be governed by our directions for enforcing the law by way of stopping polluting activity and taking other steps. The fact that such pollution is taking place is evidenced by there being acknowledged pollution in the form of 351 polluted river stretches<sup>5</sup> and 102 non-attainment cities<sup>6</sup>.*

<sup>2</sup> M.C Mehta vs. Union of India & Ors., (2009) 6 SCC 142, at para 23, 30 & 46, the Supreme Court addressed the issue of wide threat to forest ecology vis-à-vis the mining activities in the Aravalli hills and explained that it is important to evoke the precautionary principle to impose complete ban on mining in the Aravalli Range in state of Haryana.

<sup>3</sup> Indian Council for Enviro Legal Action & Ors. Vs. Union of India & Ors., (1996) 3 SCC 212 Para 16, Vellore Citizens Welfare Forum Vs. Union of India & Ors. (1996) 5 SCC 647 Para 12-18 – holding that "Polluter Pay" principle is 'accepted principle and part of environmental law of the country, even without specific statute. M.C Mehta Vs. Union of India & Ors., W.P (C) No. 13029/2015 order dated 24.10.2017 of the Supreme Court of India., O.A 95/2018, order dated 11.01.2019 & O.A No. 593/2017, order dated 03.08.2018: The Tribunal directed CPCB to take penal action against those accountable for failure in setting up CETPs/STPs/STPs and to recover compensation for damage to the environment,

<sup>4</sup> *Supra* 15

<sup>5</sup> O.A. 673/2018, News Item Published in 'The Hindu' authored by Shri. Jacob Koshy titled "More river stretches are now critically polluted: CPCB", Order dated 20.09.2018

<sup>6</sup> O.A. 681/2018, News Item Published In 'The Times of India' Authored by Shri. Vishwa Mohan Titled "NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around August 15" order dated 08.10.2018

25. CPCB must compile data of polluted industrial areas not confined to more than one parameters as is now being done, but also with respect to polluted areas based on water, air or other pollution individually. Compiling data for categorizing areas as polluted areas based on water pollution alone, or air pollution or other pollution alone may be a step in the right direction. Let this be now done in the next three months, with the assistance of State PCBs/PCCs or other experts. In this regard we may note that dealing with the industrial water pollution, this Tribunal directed the CPCB to compile its monitoring report with reference to 97 CETPs installed in different states as this was linked to 100 PIAs also.<sup>7</sup>

26. Needless to state that there is no right to carry on business in violation of pollution norms and right of statutory authorities is coupled with duty. Such right, does not carry any unlimited discretion of not taking action when pollution norms are violated.

27. In view of the material compiled by the CPCB, with the assistance of SPCBs/PCCs, in respect of polluted industrial areas, where action is not being taken by statutory authorities, the Tribunal has to exercise its jurisdiction of directing performance of statutory functions and duties by the State boards/committees, following similar direction by the Apex Court<sup>8</sup>.”

5. In the light of above findings, the Tribunal in its order dated 10.07.2019 directed:

“28. Accordingly, we direct the CPCB in coordination with all State PCBs/PCCs to take steps in exercise of statutory powers under the Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974, Environment (Protection) Act, 1986 or any other law to prohibit operation of polluting activities in the said CPAs and SPAs within three months and furnish a compliance report to this Tribunal. The Central Pollution Control Board, in coordination with the State Boards/PCBs may make assessment of compensation to be recovered from the said polluting units for the period of last 5 years, taking into account the cost of

<sup>7</sup> O.A No. 593/2017, order dated 19.02.2019, Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors.

<sup>8</sup> M.C Mehta (Calcutta Tanneries' Matter) Vs. Union of India & Ors., (1997) 2 SCC 411, at para 17, the Supreme Court directed the Board to take action against defaulting tanneries which, including those which had not complied with the conditions under Water Act as mentioned in their consents. In M.C Mehta Vs. Union of India & Ors., (2004) 6 SCC 588, paras 37,48, 517 69, the Supreme Court passed direction on closure of industrial units which were illegally operating and were in violation of the Master Plan.

restoration and cost of damage to the public health and environment and the deterrence element. The scale of deterrence may be related to the period and the frequency of defaults. Such other factors as may be found relevant may also be taken into account. No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms. Pending assessment of compensation, interim compensation be recovered at the scale adopted by this Tribunal in the case of Vapi Industrial area as mentioned in para 22 above.

29. We further direct CPCB, with the assistance of SPCBs/PCCs or other experts, to compile information with regard to polluted industrial areas based on water pollution norms separately, air pollution norms separately and other pollution norm separately and notify such information on public domain within three months. On completing this exercise, action against identified individual polluters may be initiated on the same pattern on which direction have been issued in para 28 and furnish a report to this Tribunal in this regard also, before the next date.

30. We direct the MoEF&CC to take steps for enforcement of action plan for improvement of the situation.

...

32. It is made clear that white and green or non-polluting industries which are not causing any pollution will not be affected by this order except that the parameters thereof may be monitored with a view to see that under the garb of label of white/green or otherwise, the polluting activity is not continued."

6. We have heard learned Counsel for the MoEF&CC and the CPCB in support of their review application and application for clarification respectively.
7. Case of the MoEF&CC in seeking review is that the MoEF&CC is yet to take a final view in the matter of protocol to be followed by the States/UTs for implementation of the action plan for environmental improvement of CPAs after considering the report of the CPCB, as noted in para 10 of the order dated 10.07.2019. Current CEPI

framework may need to be reviewed. CEPI score is to be used as a warning tool for formulating an action plan to restore environment quality. MoEF&CC will require six months for policy framework and one year for implementation and till then ban on expansion/setting up new industries may be kept in abeyance.

8. Case of CPCB in seeking clarification is that certain SPCBs/PCCs are not clear whether even compliant 'red' and 'orange' industries are to stop their operations and whether non-industrial 'red' and 'orange' category projects of public utility are also to be prohibited. Further, the units which have sought consent to establish (CTE) by abating the pollution or where EC and CTE is already granted are to be covered by order of this Tribunal. Industrial Associations have represented that compliant industries should not be affected and those who have already paid compensation should not be required to pay compensation again. CEPI score does not reflect contribution of individual sectors such as industrial, vehicular, generator sets, municipal and other solid wastes etc. separately which exercise was required to be undertaken.
9. We have given due consideration to the submissions. As regards the plea of MoEF&CC that CEPI policy framework will be finalized and implemented in six months and one year, we are of the view that the order of the Tribunal does not in any manner debar the MoEF&CC to take the proposed steps. However, pendency of such steps can be no justification for not enforcing the existing pollution norms and

applying the 'Sustainable' 'Precautionary' and 'Polluter Pays' principles on the basis of data available.

10. What the Tribunal has directed is *inter alia* to "identify the particular industrial units in the said PIAs that are causing pollution, particularly those units which fall under the 'red' and 'orange' category and take action against them by way of closing the polluting activity, initiating prosecution and assessing and recovering compensation"<sup>9</sup>. No ground whatsoever has been shown to review the said direction. Further direction of the Tribunal is that "No further industrial activities or expansion be allowed with regard to 'red' and 'orange' category units till the said areas are brought within the prescribed parameters or till carrying capacity of area is assessed and new units or expansion is found viable having regard to the carrying capacity of the area and environmental norms."<sup>10</sup> Objection to this direction is that there may be 'red' or 'orange' category units which may not in any manner add to the pollution. If it is so, all that is required is to determine viability of such units on 'Precautionary' principle by an appropriate mechanism. Reasons for doing so are that the area as per data available is polluted and 'red' and 'orange' category have higher potential for pollution. There is no absolute bar to such units being set up if they are found to be viable. This clarification should take care of any possible apprehension that the order of the Tribunal will obstruct any legitimate industrial activity. The MoEF&CC can forthwith devise an appropriate mechanism to ensure that new

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<sup>9</sup> Para 23

<sup>10</sup> Para 28

legitimate activity or expansion can take place after due precautions are taken in the areas in question by 'red' and 'orange' category of units.

11. Coming to the apprehension of the CPCB, it is clear from paras 28 and 32 of the order reproduced above that action has to be taken only against polluting activities. If any unit is compliant with the norms, such unit is not affected. There is no basis for apprehension that compensation may have to be paid twice. The provisions of Air Act, Water Act and EPA Act and the rules or other environment norms are to be enforced not only against the industrial units but also against every polluting activity whether the same has already been set up or is yet to be set up in terms of provisions of the law in question. This being the undisputed legal position, no further clarification remains necessary.

The applications stand disposed of accordingly.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

August 19, 2019  
I.A. No. 479/2019 In O.A. No. 1038/2018  
With  
Review Application No. 44/2019 In O.A. No. 1038/2018  
DV



Gujarat Pollution Control Board  
Paryavaran Bhavan, Sector-10-A  
Gandhinagar

Office Order

**Sub: Mechanism for environmental management of critically and severally Polluted Area and considerations of activities/Projects in such areas in compliance to Hon'ble NGT order dated 23/08/2019 in the matter of O.A. No. 1038/2018-reg.**

With reference to CPCB letter no. CPCB/IPC-VII/CEPI/NGT/2019 dated 25/10/2019 mechanism prepared by MoEF&CC for grant Consent to Establishment/Consent to Operate to those projects / activities of Red / Orange categories located in CPAs/ SPAs which are not covered under the provisions of the EIA notification,2006 are delineated.

Accordingly, it is required to prescribe the additional conditions deemed fit in the CTE / CTO of the projects / activities of Red/ Orange categories in the CPAs / SPAs of Gujarat.

After detailed discussion with industries associations of the CPA / SPAs of Gujarat and consultation with other stakeholders, it is decided to prescribe following additional conditions (deemed fit on case to case basis) considering the framework given in the letter of CPCB dated 25/10/2019.

These additional conditions will be applicable to the following CPAs/ SPAs of the Gujarat. Considering the mechanism, the 5 km from the boundary of each CPA/ SPA should be considered as the area of influence and the additional conditions stipulated for the new / expansion project will be made applicable to all such projects in this area. Map of the respective areas obtained from BISAG is enclosed herewith as Annexure-1.

1. Vapi GIDC Estate
2. Sachin & Pandesara GIDC Estate (Considering monitoring carried out by CPCB in these areas)
3. Ankleshwar Cluster (Ankleshwar and Panoli GIDC estate)
4. Nandesari GIDC & PCC Area (Considering monitoring carried out by CPCB in these areas)
5. Vatva- Narol

6. Aji GIDC estate (Rajkot)  
7. Chitra GIDC estate (Bhavnagar)

**Specific Conditions stipulated in Critically Polluted Areas (CPA) / Severely Polluted Areas (SPA).**

**Additional conditions under Air Act:**

- a) Unit shall adhere to stringent air pollutants standards i.e. 80 % of existing flue gas and process emission standards in the CPA.  
b) Unit shall adhere to stringent air pollutants standards i.e. 90 % of existing flue gas and process emission standards in the SPA.  
c) Following air pollution control measures shall be provided for the flue gas emission sources like Boiler, Thermic Fluid Heaters etc. (As Applicable)

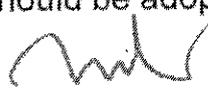
<b>Stipulated APCM in Red / Orange category industrial units of CPA/ SPA</b>	
<b>Steam generation capacity (in TPH)</b>	<b>Type of APCM</b>
Less than 1	Multi Cyclone
1 to <3	Multi Cyclone + Water Scrubber
3 to <6	Bag filter + Water Scrubber
≥ 6	ESP+ Water Scrubber

- d) Unit shall provide at least two stage scrubbing system of appropriate media for the control of the process gas emission.  
e) Unit shall install and commission Continuous Emission Monitoring System- CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with GPCB/CPCB server (In case of large and medium red category industries)  
f) All common facilities shall install CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with GPCB/CPCB server to the Stacks provided with Common Multiple Effect Evaporator (CMEE), Common Spray Dryer, Common incinerator etc.  
g) The unit shall adhere to Sector specific guidelines/ SOP published by GPCB / CPCB from time to time for effective fugitive emission control. (like guidelines for: Stone crushing units, Coal handling units, spent solvent handling and management, spent acid management, Decontamination of drums, containers etc.)

- h) Unit shall take adequate measures to control odour nuisance from the industrial activities which may include measures like- use of masking agent with atomizer system (water curtain), closed / automatic material handling system, containment of the odour vulnerable areas etc.
- i) Unit shall not use Pet-coke, furnace oil, LSHS as a fuel.
- j) Unit shall adopt sectoral Best Available Technology-BAT (Like Use of Induction Furnace, Electric Arc Furnace instead of Cupola furnace in foundry industry, Caustic Recovery System in Cotton Textile units etc.)
- k) Unit shall provide green belt of 40% of the plot area, using concept of the social forestry and development of green belt outside project premises in adjacent areas.
- l) Unit shall provide Wall to Wall carpeting in vehicle movement areas within premises to avoid dusting.

**Additional conditions under the Water Act:**

1. Unit shall only use treated effluent for preparation of lime and other slurry in ETP. No fresh water shall be utilized in ETP.
2. In the case, if the Industry is not a member of CETP and domestic waste water generation is more than 10 KLPD, industry shall install STP of adequate capacity and treated sewage shall be reused / recycled to the maximum extent.
3. In case of Large and Medium Red Category industry, the unit shall install system for continuous monitoring of effluent quality / quantity as per CPCB guidelines for relevant parameters (like pH, Flow, Temperature, TOC/COD, NH<sub>3</sub>-N etc.) and shall be connected to GPCB server. In case, if the industry is a member of CETP, unit shall install flow meter.
4. If the water consumption of the unit is more than 50 KLPD, Unit shall submit detailed water harvesting plan (off site).
5. The unit shall explore Techno-Economic feasibility of Zero Liquid Discharge (ZLD) and if feasible, ZLD should be adopted.



**Additional conditions under the Hazardous Waste Management Rules:**

1016

1. Unit shall strictly carry out handling, storage and disposal of fly-ash, slag, red-mud, de-inking sludge etc. (High Volume- Low Effect Wastes) as per prevailing guidelines and its disposal at designated locations approved by the Board.
2. Industry shall dispose its hazardous wastes through co-processing, pre-processing to the extent possible prior its disposal to incineration/ landfill as per provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
3. Industry shall strictly comply with all the measures specified in guidelines for spent solvent management, spent acid management, and other guidelines/directions published from time to time by GPCB and/or CPCB, etc.
4. Unit shall carry out transportation of hazardous wastes through GPS mounted vehicles only.

**Other General Conditions:**

1. Unit shall submit report of compliance of the conditions of EC every year to the Board prepared by third party.
2. Unit shall enhance CER fundallocation to at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.

You are required to prescribe relevant additional conditions as above henceforth while granting CTE / CTO of Red / Orange categories located in CPAs/ SPAs.

  
(N.M. Tabhani)  
Member Secretary

No. GPCB/P-1/CEPI-12/ 526552

Date: 11.11.2019

To,

1. All Unit Heads
2. All Regional Officers... For necessary action please.

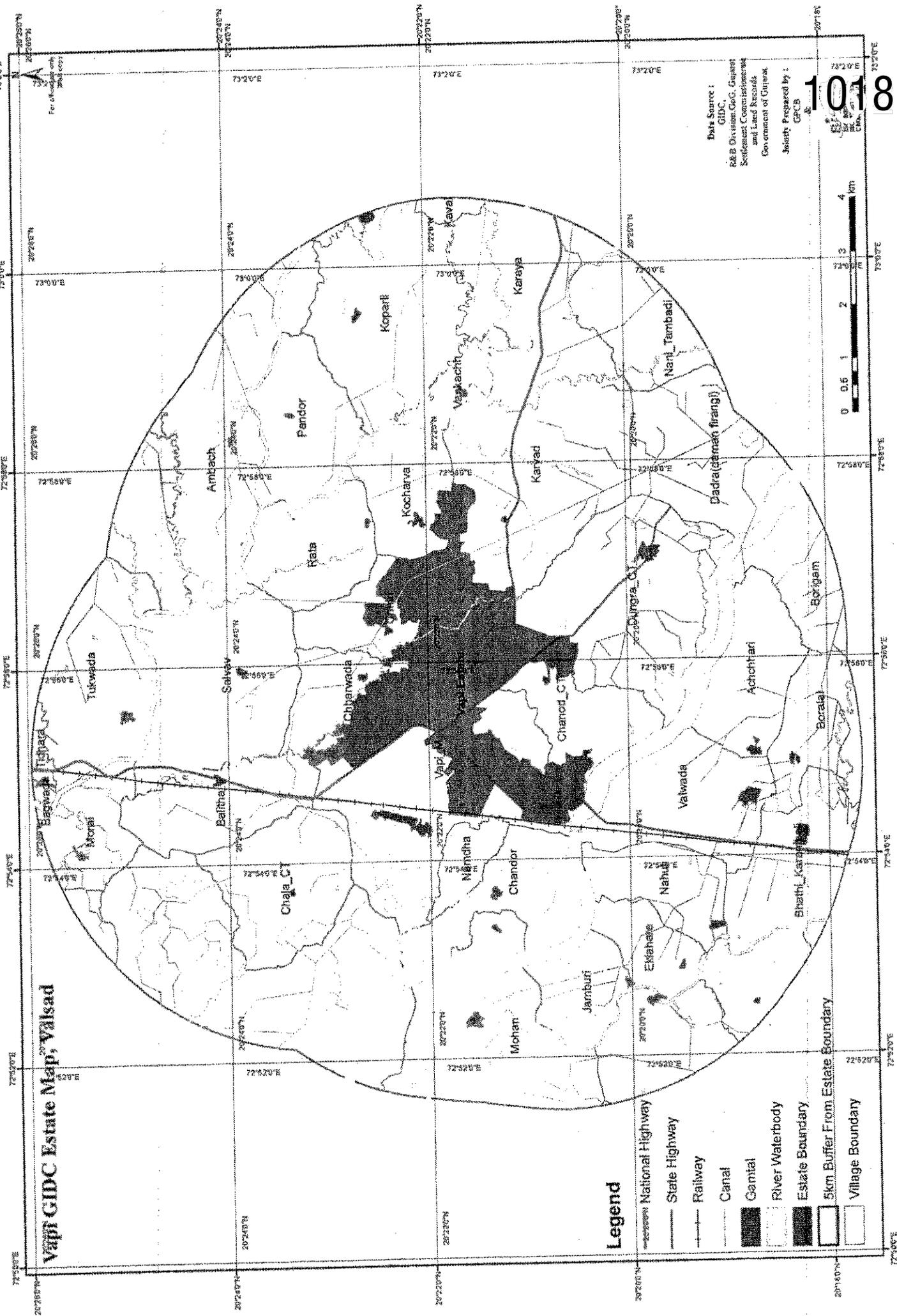
**Copy to:**

1. Chairman Office
2. Member Secretary Office
3. All Vigilance Officers... for necessary action
4. Respective File
5. IT Cell-for display on Board Website.



1491/C

# Vapi GIDC Estate Map, Valsad



Data Source :  
 GIDC,  
 R&B Division Co-G. Gujarat  
 Settlement Commissioner  
 and Land Records  
 Government of Gujarat  
 Jointly Prepared by :  
 GPCB

# 1018

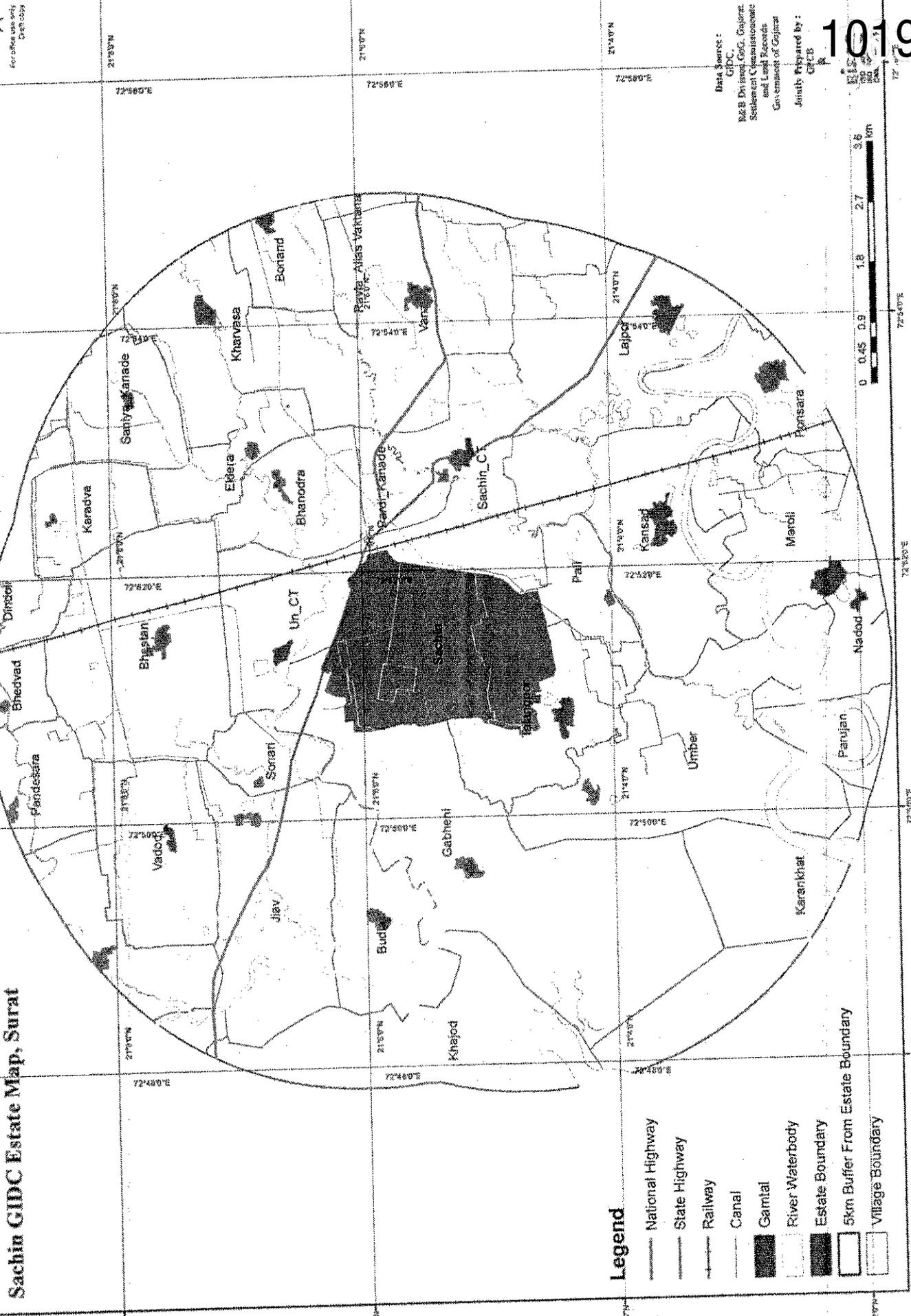


## Legend

- National Highway
- State Highway
- Railway
- Canal
- River Waterbody
- Estate Boundary
- 5km Buffer From Estate Boundary
- Village Boundary

10/19

# Sachin GIDC Estate Map, Surat



### Legend

- National Highway
- State Highway
- Railway
- Canal
- Gamtal
- River Waterbody
- Estate Boundary
- 5km Buffer From Estate Boundary
- Village Boundary

Base Sources :  
 GIDC  
 B.S. Division, G.S. Office,  
 Settlement Commission  
 and Land Records  
 Government of Gujarat

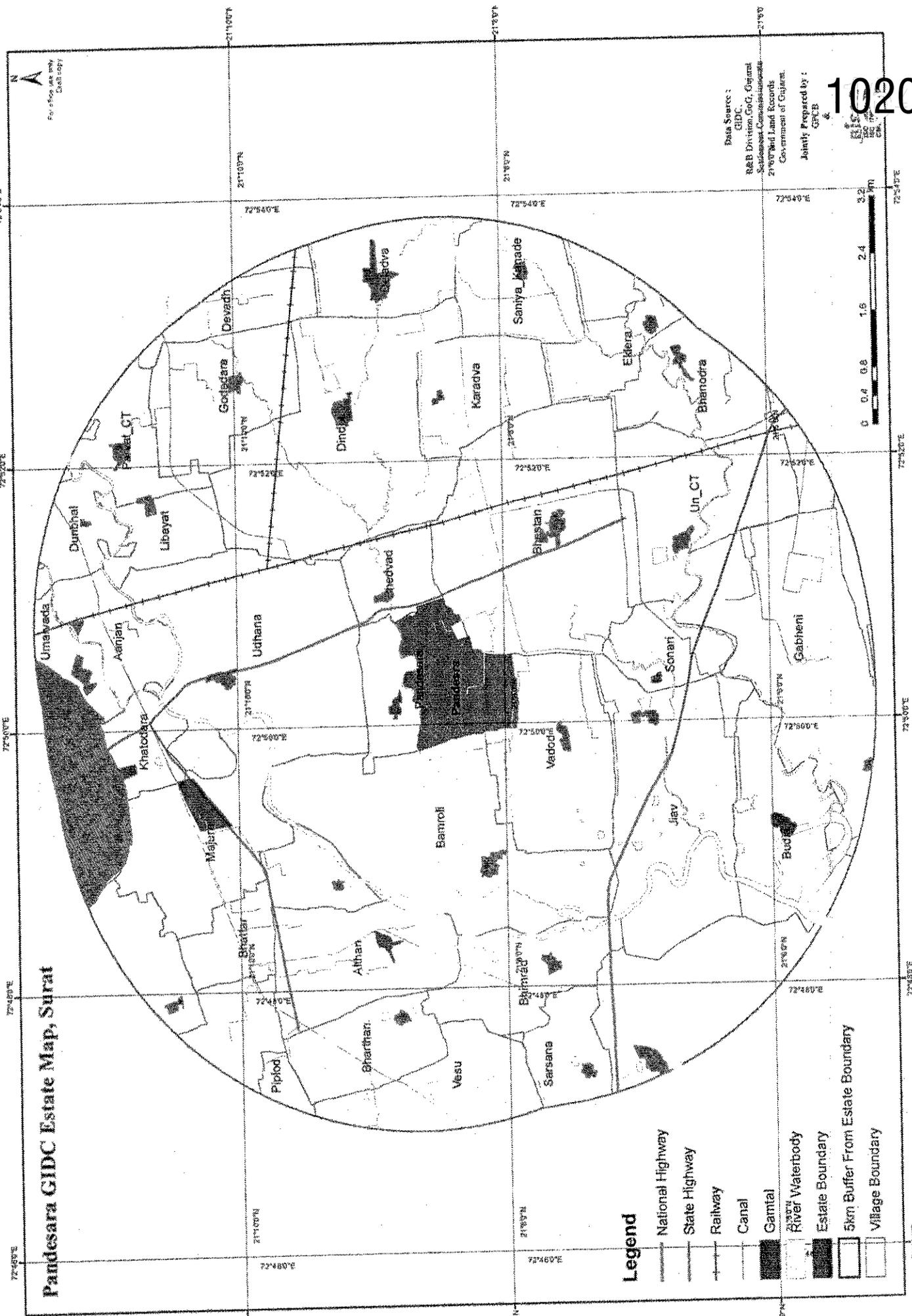
Jointly Prepared by :  
 GIDC

10/19



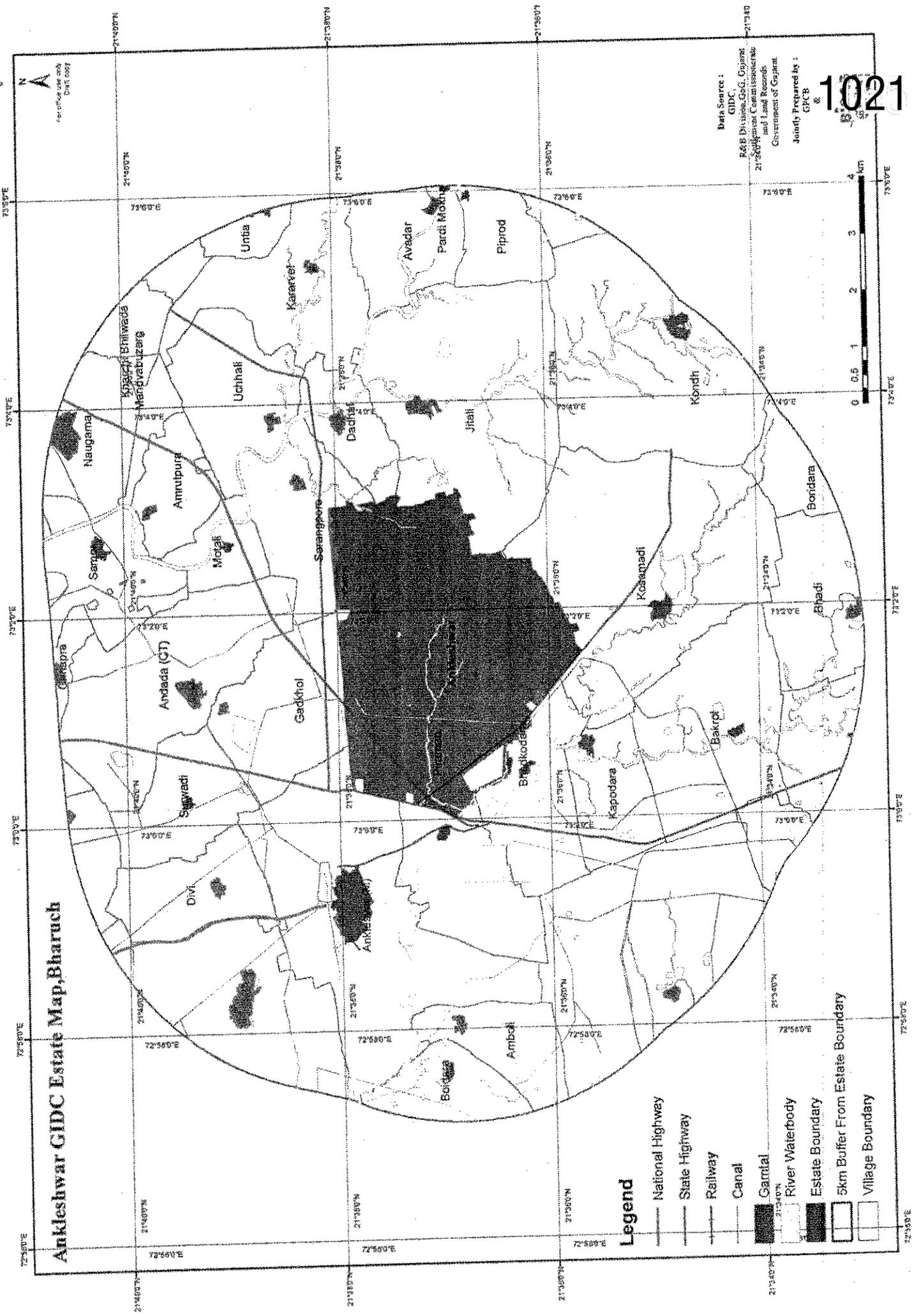
1020

# Pandesara GIDC Estate Map, Surat



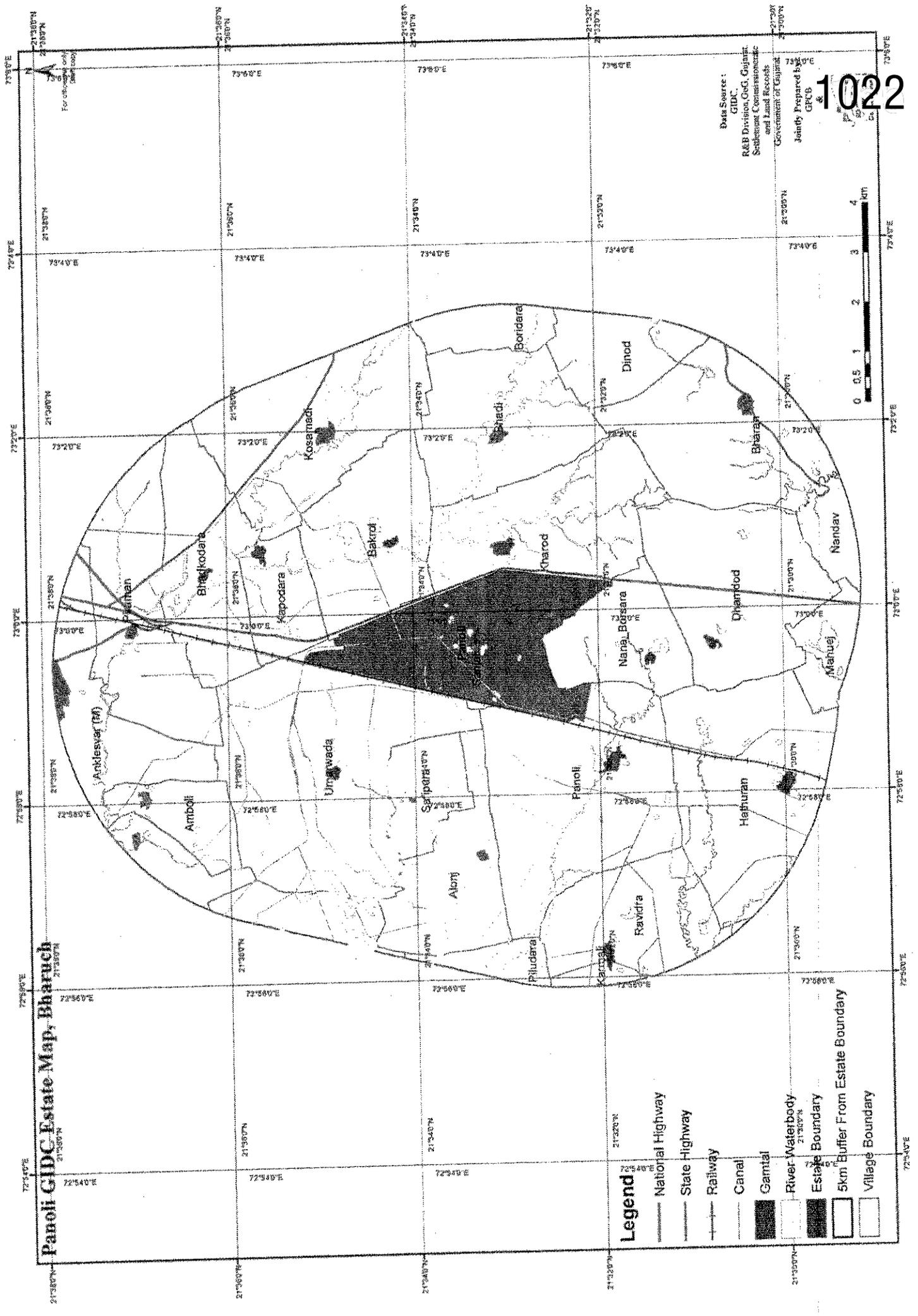
1020

137/c



10516

# Panolli GIDC Estate Map, Bharuch

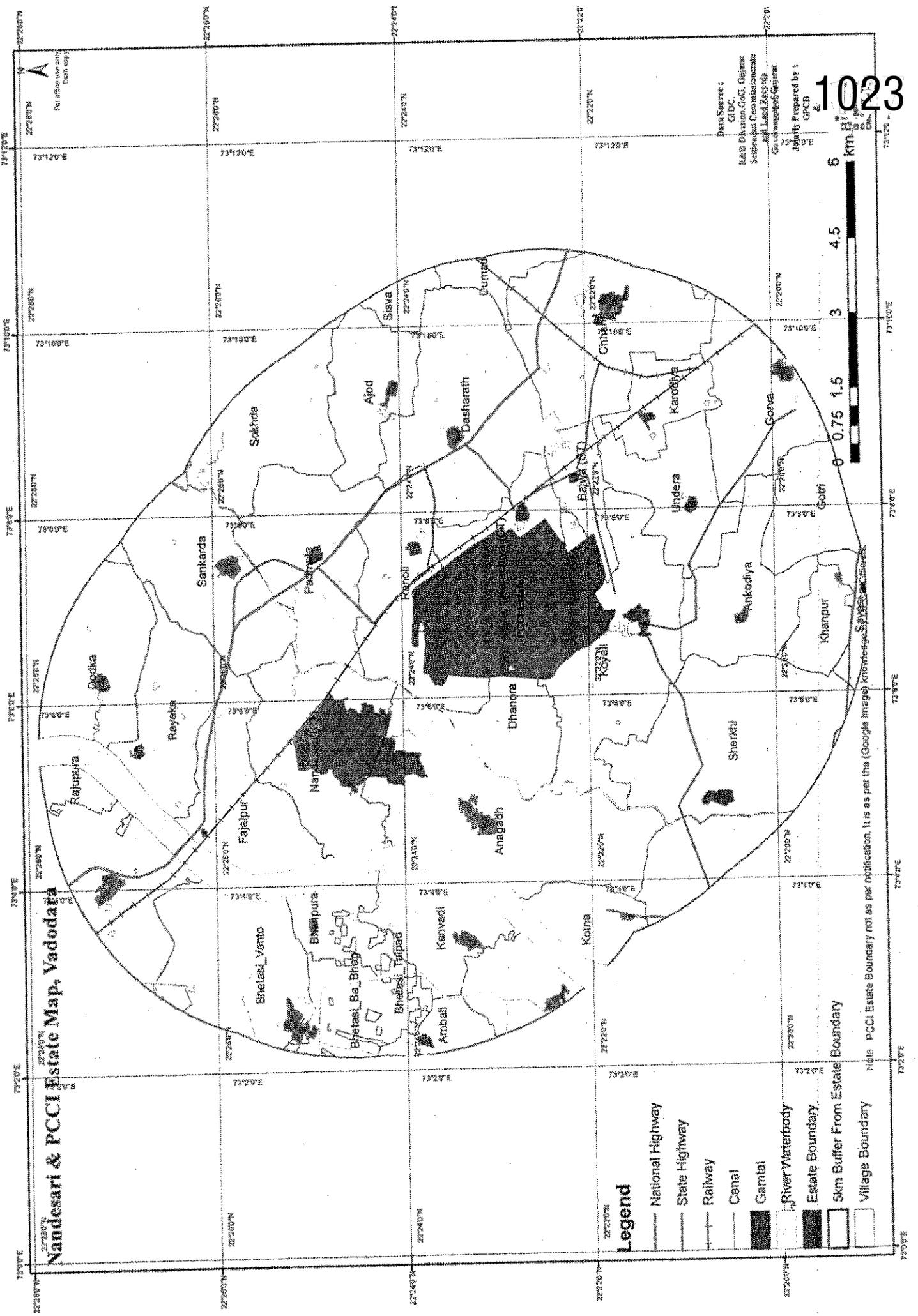


Data Source:  
GIDC  
R&B Division, G.S.G. Gupnat,  
Soil Survey, Conservation  
and Land Records  
Government of Gujarat

Jointly Prepared by  
GIDC  
&  
1022

139/c

1023

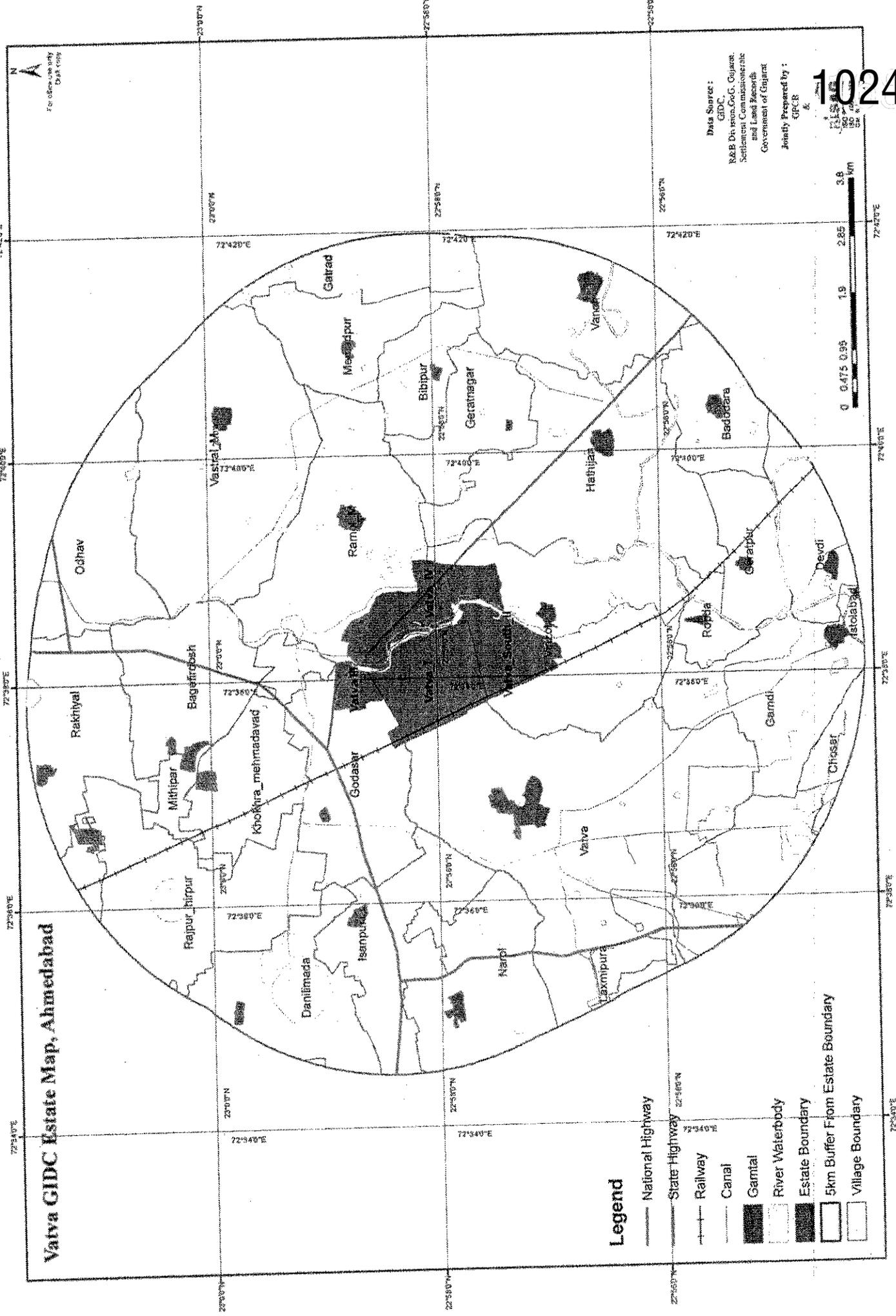


Data Source :  
 G.D.C.  
 R.A.S. Division, God. Gijana  
 Sakhada Comantmentar  
 and Land Record  
 Go. Changanp66 Genrat

Prepared by :  
 GPCB

15/1/C

# Vatva GIDC Estate Map, Ahmedabad



Data Source:  
 GIDC,  
 R&E Division, G.C. Gujarat,  
 Settlement Commission rate  
 and Land Records  
 Government of Gujarat  
 Jointly Prepared by:  
 GPCR

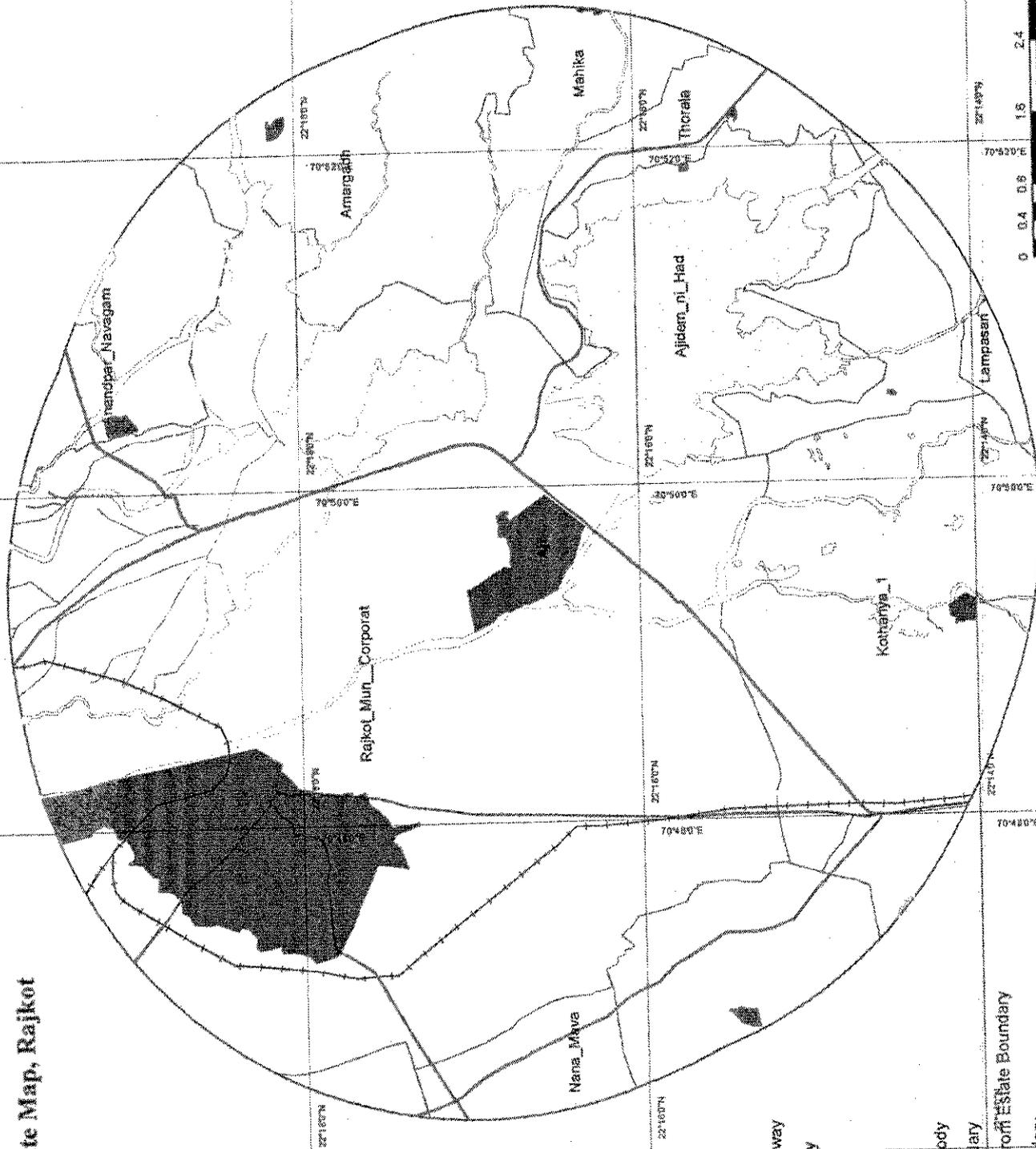
# 1024



135/c

# Aaji GIDC Estate Map, Rajkot

for details see the  
Distribution



## Legend

- National Highway
- State Highway
- Railway
- Canal
- Garital
- River Waterbody
- Estate Boundary
- 5km Buffer Forr Estate Boundary
- Village Boundary

Data Source :  
GIDC  
R&B Division-546, Gujarat  
Settlement Commissioner  
and Land Records  
Government of Gujarat

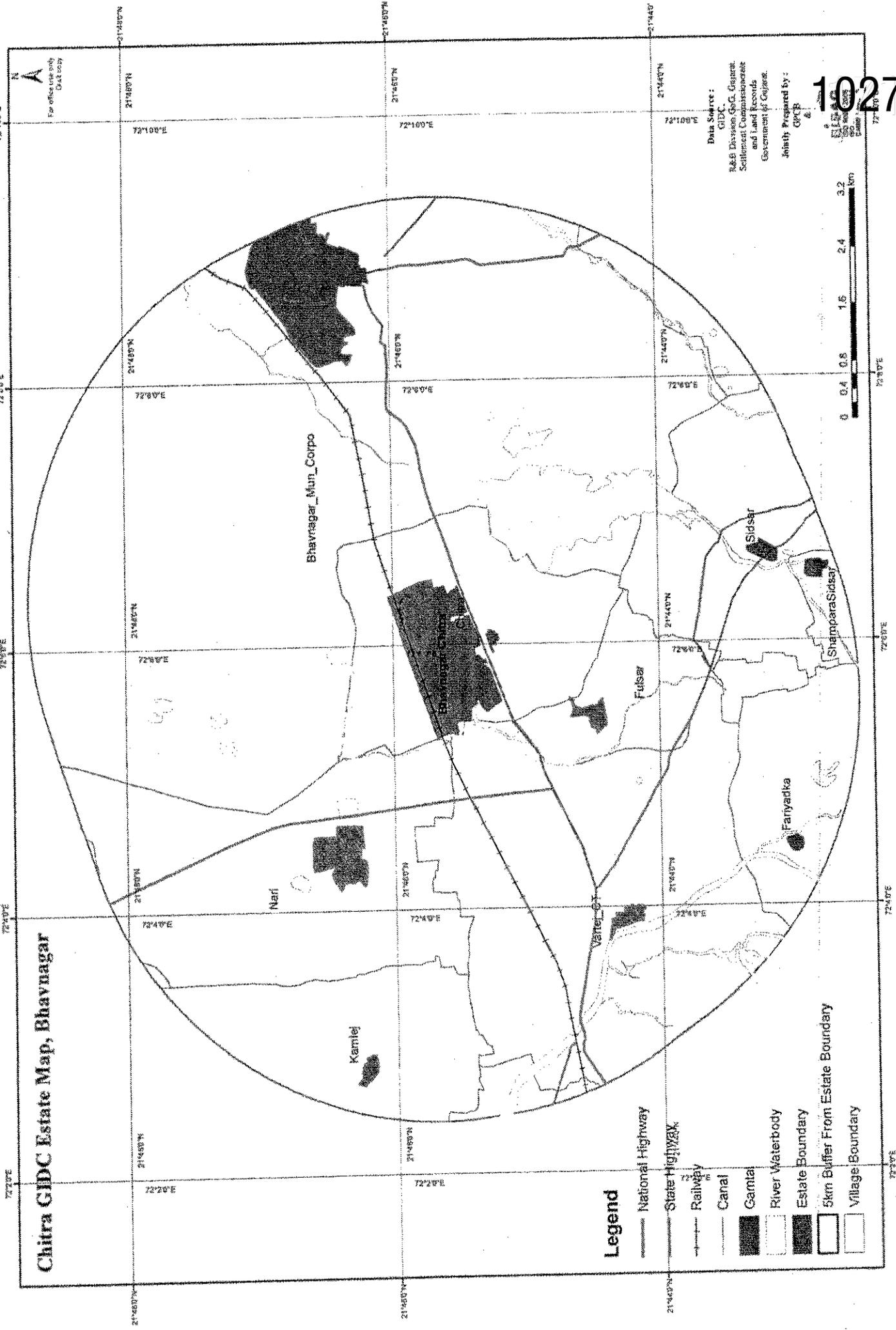
Jointly Prepared by :  
GRCB  
&  
GIDC

# 1026



133/c

1027



# Chitra GIDC Estate Map, Bhavnagar

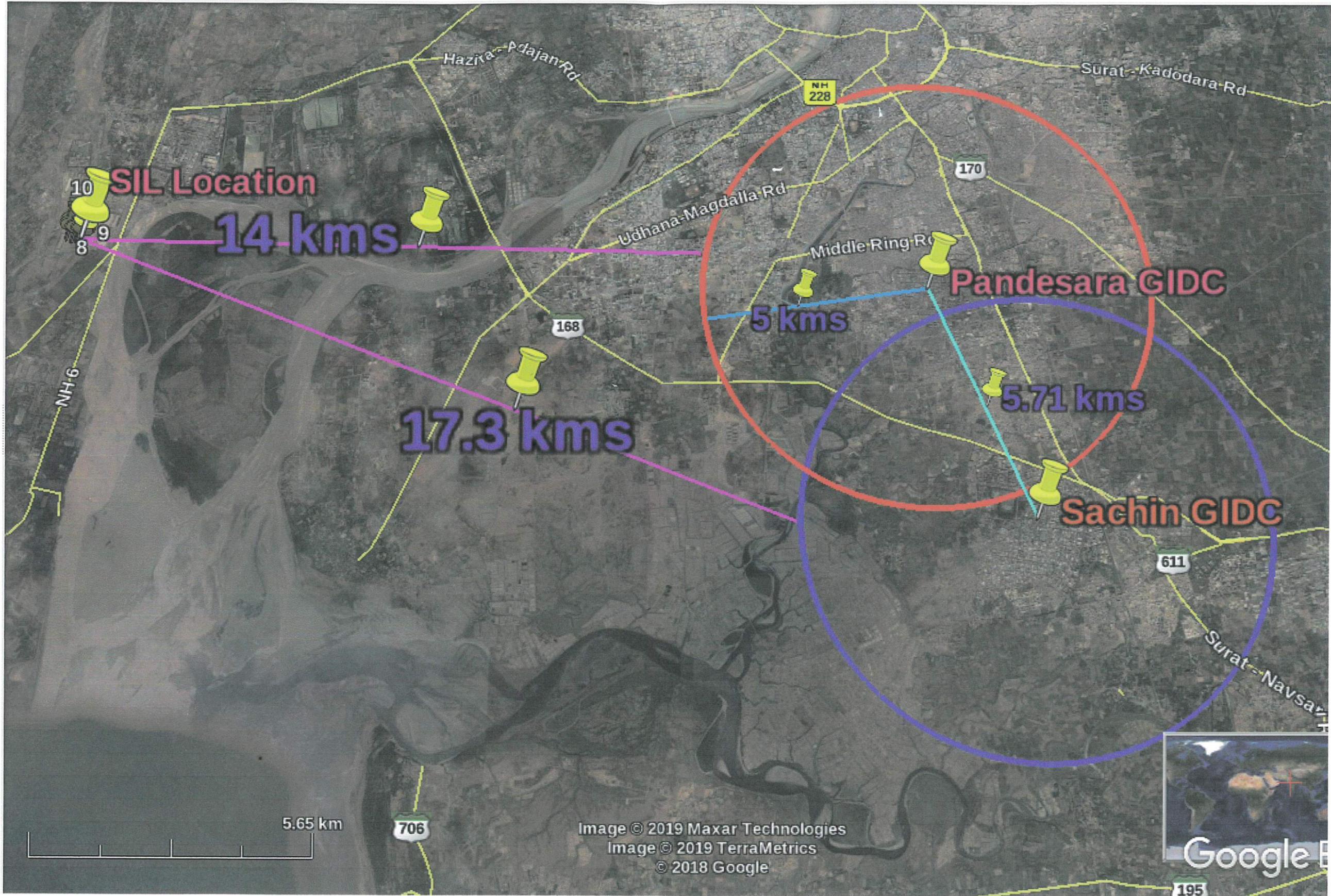
## Legend

- National Highway
- State Highway
- Railway
- Canal
- Gorta
- River Waterbody
- Estate Boundary
- 5km Buffer From Estate Boundary
- Village Boundary

Data Source :  
 GIDC  
 R&S Division, Ge.C. General  
 Settlement Commissioner  
 and Land Records  
 Government of Gujarat

Jointly Prepared by :  
 GPCB





S U P R E M E C O U R T O F I N D I A  
R E C O R D O F P R O C E E D I N G S

CIVIL APPEAL Diary No. 19271/2020

(Arising out of impugned final judgment and order dated 10-07-2019 in OA No. 1038/2018 and 23-08-2019 in OA No. 1038/2018 and 14-11-2019 in OA No. 1038/2018 passed by the National Green Tribunal)

GUJARAT CHAMBERS OF COMMERCE AND INDUSTRY

Petitioner(s)

VERSUS

CENTRAL POLLUTION CONTROL BOARD &amp; ANR.

Respondent(s)

(FOR ADMISSION and I.R. and IA No.90231/2020-CONDONATION OF DELAY IN FILING and IA No.90230/2020-EXEMPTION FROM FILING C/C OF THE IMPUGNED JUDGMENT and IA No.90228/2020-EX-PARTE STAY and IA No.90233/2020-INTERVENTION/IMPLEADMENT and IA No.90225/2020-PERMISSION TO FILE APPEAL)

Date : 22-09-2020 This matter was called on for hearing today.

CORAM : HON'BLE MR. JUSTICE ROHINTON FALI NARIMAN  
HON'BLE MR. JUSTICE NAVIN SINHA  
HON'BLE MS. JUSTICE INDIRA BANERJEEFor Petitioner(s) Mr. Dhruv Mehta, Sr. Adv.,  
Mr. Mahesh Agarwal, Adv.  
Mr. M. S. Ananth, Adv.  
Mr. Mitul Shelat, Adv.  
Mr. Saurabh Kulkarni, Adv.  
Mr. Anirudh Bhatia, Adv.  
Mr. E. C. Agrawala, AOR

For Respondent(s)

UPON hearing the counsel the Court made the following  
O R D E R

Permission to file appeal granted.

Application for impleadment stands allowed.

Delay condoned.

Issue notice.

In the meantime, there shall be a stay of the operation of the impugned orders dated 10.07.2019, 23.08.2019 and 14.11.2019 passed by the National Green Tribunal, Principal Bench, New Delhi.

Tag the matter along with Civil Appeal Nos. 2218-2219/2020.

(NIDHI AHUJA)  
AR-cum-PS(NISHA TRIPATHI)  
BRANCH OFFICER

# **FORM-I**

## **TERMS OF REFERENCE**

**For  
Environmental Clearance of**

**Proposed Project of 2.0 MTPA Grinding Unit with bulk & bag packing plant**

**AT**

**Hazira Industrial Zone, Survey No. 125/1, 125/2,126/1+2+3; Shivrampur Village,  
Taluka-Choryasi, District- Surat 394510, Gujarat**

**APPLICANT**

### **Sanghi Industries Limited**

10<sup>th</sup> Floor, Kataria Arcade, Off SG Highway,  
PO –Makarba, Ahmedabad, PIN Code: 370 511  
Tele: 079-26838000 FAX: 079-26838111

E-mail: [info@sanghiment.com](mailto:info@sanghiment.com), [gjbhatt@sanghiment.com](mailto:gjbhatt@sanghiment.com)

**December 2018**

## FORM 1

(I) BASIC INFORMATION																
1.	Name of the Project : Environmental Clearance for Proposed project of 2.0 MTPA Standalone Grinding Unit with bulk & bag packing plant by Sanghi Industries Ltd.															
2.	S. No. in the Schedule : Schedule 3(b)Category "B"															
3.	Proposed capacity / area /length /tonnage to be handled/ command area /lease area/number of wells to be drilled : Proposed capacity: 2.0 Million TPA Standalone Grinding Unit with bulk and bag packing plant Total plot area: 12.0 acre or 48562.0 m <sup>2</sup> .															
4.	New / Expansion/Modernization : New Project															
5.	Existing Capacity / Area etc. : Not applicable															
6.	Category of Project i.e. 'A' or 'B' : Category of project "B"															
7.	Dose it attract the general condition? If yes, please specify. : No.															
8.	Dose it attract the specific condition? If yes, please specify. : No.															
9.	Name &Location : <b>Sanghi Industries Limited (SIL)</b>															
	Plot /Survey /khasra No. : Survey No. 125/1, 125/2,126/1+2+3															
	<table border="1"> <thead> <tr> <th>Points</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>21° 9'0.08"N</td> <td>72°39'0.68"E</td> </tr> <tr> <td>B</td> <td>21° 8'57.60"N</td> <td>72°39'12.32"E</td> </tr> <tr> <td>C</td> <td>21° 8'55.54"N</td> <td>72°39'11.61"E</td> </tr> <tr> <td>D</td> <td>21° 8'57.07"N</td> <td>72°39'0.75"E</td> </tr> </tbody> </table>	Points	Latitude	Longitude	A	21° 9'0.08"N	72°39'0.68"E	B	21° 8'57.60"N	72°39'12.32"E	C	21° 8'55.54"N	72°39'11.61"E	D	21° 8'57.07"N	72°39'0.75"E
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C	21° 8'55.54"N	72°39'11.61"E														
D	21° 8'57.07"N	72°39'0.75"E														
	Village : Shivrampur Village															
	Taluka : Choryasi															
	District : Surat, 394510															
	State : Gujarat															
10.	Nearest railway station/airport along with distance in kms. : Nearest Railway Station : Surat (~20.0 km in NE) Nearest Airport: Surat (10.1 km in SE)															
11.	Nearest Town, City, District Headquarters along with distance in kms. : Nearest town: Surat (~16 km in ESE) Nearest District Head quarter: Surat (15.9 km)															
12.	Village Panchayats, Zilla Parishad, Municipal corporation, Local body (complete postal addresses with telephone nos. to be given) : Village Shivrampur, Hazira Industrial Zone, Surat.															
13.	Name of the applicant : <b>Sanghi Industries Limited</b>															
14.	Registered Address : M/s. Sanghi Industries Limited P.O. Sanghinagar, Hayatnagar Mandal, R.R.District, Telengana-501511.															
15.	Address for correspondence : Sanghi Industries Limited															
	Name : Mr. Gaurang Bhatt															

	Designation (Owner/Partner / CEO)	:	Sr. Vice President
	Address	:	Sanghi Industries Limited 10 <sup>th</sup> Floor, Kataria Arcade, Off SG Highway, PO: Makarba, Ahmedabad-380051
	Pin Code	:	380051
	E-mail	:	gjbhatt@sanghiment.com, info@sanghiment.com
	Telephone No.	:	079-26838000
	Fax No.	:	079-26838111
16.	Details of Alternative Sites examined , if any Location of these sits should be shown on a toposheet	:	Yes. Toposheet attached.
17.	Interlined Projects.	:	-No-
18.	Whether separate application of interlined project has been submitted	:	Not applicable.
19.	If yes, data of submission	:	Not applicable.
20.	If no. reason	:	Not applicable.
21.	Whether the proposal involves approval/ clearance under: (a) The Forest (Conservation) Act , 1980 (b) The Wildlife (protection) Act, 1972 (c) The C.R.Z. Notification 1991	:	-No-
22.	Whether there is any Government Order/Policy relevant/relating to the site?	:	-No-
23.	Forest land involved (hectares)	:	-No--
24.	Whether there is any litigation pending against the project and / or land in which the project is propose to be set up (a) Name of the court (b) Case No. (c) Orders / directions of the court, if any and its relevance with the proposed project.	:	No litigation pending against the project.

**(II) ACTIVITY**

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S. No.	Information/Checklist confirmation	Yes / No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	Proposed project will be established on the land of 12.0 acre (48562.0 m <sup>2</sup> ) already in possession of SIL acquired for the purpose. The proposed land is in Hazira Industrial Zone. The proposed land was agricultural land will be converted for Industrial purpose.
1.2	Clearance of existing land, vegetation and buildings?	No	Not applicable.
1.3	Creation of new land uses?	No	Hazira Industrial Zone as per Urban Development and Urban Housing Department Notification dated 13 <sup>th</sup> August 2013,
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	There will be no physical impacts on the locality due to the soil testing or other pre-construction investigations.
1.5	Construction works?	Yes	Anticipated Environmental Impacts on physical environment: <ul style="list-style-type: none"> <li>• Increase in fugitive emissions during construction phase and operation phase;</li> <li>• Increase in traffic levels (construction &amp; post construction phase);</li> <li>• Drainage;</li> <li>• Landscape &amp; Visual considerations.</li> </ul> The impact on physical environment will be temporary in terms of fugitive emissions. Best construction practices will be adhered to minimize the impacts.
1.6	Demolition works?	No	There will be no demolition, underground, reclamation or dredging work.
1.7	Temporary sites used for construction works or housing of construction workers?	No	Temporary store-rooms and site office will be built during construction phase, which will be removed later. The impact due to the same will be confined to the construction phase

			only and thus can be categorized as temporary. Provisions of temporary housing facility for construction workers have been provided. Adequate infrastructural facilities such as sanitation (including separate toilet (mobile) for male and female workers), drinking water, cooking fuel, cookers etc will be provided to construction labours
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	No	The project will involve earthwork which will be reused for filling. The top soil will be stored at earmarked places and will be subjected to temporary stabilization (mulching), while the other excessive soil will be used in the form of earthen berms near the project boundary, which will also help to curtail the noise levels. The same will be later taken by the contractors.
1.9	Underground works including mining or tunneling?	No	Not Applicable
1.10	Reclamation works?	No	Not Applicable
1.11	Dredging?	No	Not Applicable
1.12	Offshore structures?	No	Not Applicable
1.13	Production and manufacturing processes?	Yes	Standalone grinding unit (2.0 Million TPA) with bulk and bag packing plant.
1.14	Facilities for storage of goods or materials?	Yes	The raw materials, finished goods will be stored in separate closed storage area.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	No process effluents and solid wastes will be generated during cement manufacturing process. The process / cooling water will be recycled. The sewage water will be treated in STP & will be used in greenbelt development Ash generated in HAG will be 100% recycled in PPC grade cement process Used oil & waste oil generating due to maintenance will be used in Kiln Firing (Main plant) – Sanghipuram, Kutch for burning purpose.
1.16	Facilities for long term housing of	No	There is no need to provide long term housing

	operational workers?		facility for operational workers. Workers are available in local/nearby area.
1.17	New road, rail or sea traffic during construction or operation?	No	No new road, rail or sea traffic during construction or operation
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	Not applicable
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	Not applicable
1.20	New or diverted transmission lines or pipelines?	No	Not applicable
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	Not applicable
1.22	Stream crossings?	No	Not applicable
1.23	Abstraction or transfers of water from ground or surface waters?	No	Water requirement will be 200 KLD which will be met through local body / GIDC / bore well and applicable permissions will be obtained prior to implementation.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	No effect and changes of drainage pattern of water body due to project activity.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	We will hire personnel from local / nearby area only and the construction material will be obtained preferably from local traders and will be transported via roads. The sources of raw materials and machinery for operation will vary based on market driven forces, which will be transported via roads.
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not applicable
1.28	Influx of people to an area in either temporarily or permanently?	No	Not applicable.
1.29	Introduction of alien species?	No	Not applicable
1.30	Loss of native species or genetic diversity?	No	Not applicable.

1.31	Any other actions?	No	Not applicable
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**2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):**

S.No.	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	No	No
2.2	Water (expected source & competing users) unit: KL/D	Yes	Water requirement will be 200 KLD which will be met through local body / GIDC / bore well and applicable permissions will be obtained prior to implementation.
2.3	Minerals (MT)	Yes	Gypsum will be obtained from local market and stored in yard of capacity 6000 MT capacity for adding @ 5% in Cement. Gypsum shall be transported in trucks.
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	Source : from local traders
2.5	Forests and timber (source – MT)	No	Not Applicable
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	<b>Power:</b> Considering power demand of 13.5 MW. SIL plans to with draw power from DGVCL. A 11 KV / 66 KV HT voltage underground cable will be laid from nearest sub station. A transformer of 20 MVA 11 KV /66/6.6 KV will be installed in grinding Unit. <b>Fuel:</b> 0.06 Million Ton per Annum Lignite/Coal/Petcoke will be used in HAG to produce hot gas for material drying purpose.
2.7	Any other natural resources (use appropriate standard units)	No	Nil

**3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.**

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment	Yes	No hazardous waste will be generated during cement manufacturing process. Ash generated from HAG will be 100%

	(flora, fauna, and water supplies)		recycled in PPC grade cement. Used oil & waste oil generating due to maintenance will be used in Kiln Firing (Main plant) – Sanghipuram, Kutch for burning purpose.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	No such impact has been anticipated.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	The Company's Corporate Social Responsibility initiatives will have positive impact on socio-economic fabric of the region. <ul style="list-style-type: none"> <li>➤ Direct &amp; indirect employment opportunities</li> <li>➤ Education facilities will be improved</li> <li>➤ Communication &amp; transport facilities will be improved</li> <li>➤ Community health care programs provide better health and medical facilities</li> </ul>
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	None
3.5	Any other causes	No	Not applicable.

#### 4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No.	Information/Checklist confirmation	Yes / No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	Not applicable.
4.2	Municipal waste (domestic and or commercial wastes)	Yes	Municipal solid waste generated from plant will be segregated and disposed as per the Municipal Solid Waste Management, Handling Rules, 2000.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	Used Oil, discarded containers will be generated from proposed project which will be used in Kiln Firing (Main plant) – Sanghipuram, Kutch for burning purpose.
4.4	Other industrial process wastes	No	No any
4.5	Surplus product	No	--
4.6	Sewage sludge or other sludge from effluent treatment	Yes	Domestic waste water will be treated in STP and used for greenbelt. No process effluents will be generated.

4.7	Construction or demolition wastes	No	Construction debris will be used within the premises for labeling.
4.8	Redundant machinery or equipment	No	There will be no redundant machinery or equipment.
4.9	Contaminated soils or other materials	No	There will be no contamination of soil or any other material.
4.10	Agricultural wastes	No	No Agriculture waste will be generated.
4.11	Other solid wastes	No	No other solid waste will be generated.

#### 5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S. No.	Information/Checklist confirmation	Yes / No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	The identified sources of dust are unloading area of clinker, gypsum, fly ash and fly ash storage silo, clinker grinding mill, cements silos and packing machines. PM <sub>10</sub> and PM <sub>2.5</sub> is considered as major air pollutants from this source. The emission from these sources, other than cement mill, would be fugitive in nature and the proposed Bag Filters would be adequate to control emission.
5.2	Emissions from production processes	Yes	SPM and others will be collected in bag filter.
5.3	Emissions from materials handling including storage or transport	Yes	The identified sources of dust are unloading area of clinker, gypsum, fly ash and fly ash storage silo, cements silos and packing machines. The emission from these sources would be fugitive in nature and the proposed Bag Filters would be adequate to control emission.
5.4	Emissions from construction activities including plant and equipment	Yes	Fugitive emission will be generated during construction activity only for short period. Utmost care will be taken during construction activity and water sprinklers will be utilized whenever necessary.
5.5	Dust or odors from handling of materials including construction materials, sewage and waste	No	No such impact has been anticipated.

5.6	Emissions from incineration of waste	No	No incinerator will be used.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Not applicable
5.8	Emissions from any other sources	No	No any.

**6. Generation of Noise and Vibration, and Emissions of Light and Heat:**

S. No.	Information/Checklist confirmation	Yes / No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Noise will generate from operation of equipments. Noise level is being / will be kept below the prescribed limit by CPCB. Proper noise abatement measures are being / will be taken and persons working just close to machines and machine operator are being / will be provided with personal protective equipment viz. Ear plugs/Ear defenders etc. for further protection.
6.2	From industrial or similar processes	Yes	The noise level will not exceed than 75 dBA.
6.3	From construction or demolition	Yes	Noise will be generated during construction activity and vehicular movement. Proper mitigation measure will be adopted to check the noise pollution during construction work.
6.4	From blasting or piling	No	No blasting is involved as this is project of cement grinding unit.
6.5	From construction or operational traffic	Yes	Noise will be generated only for short period in construction period and due to vehicular movement. PUC certified vehicle will be used for loading the raw material and product during operation phase.
6.6	From lighting or cooling systems	No	Not applicable
6.7	From any other sources	No	Nil

**7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:**

S. No.	Information/Checklist confirmation	Yes / No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	Used Oil, discarded containers will be generated from proposed project which will be used in Kiln Firing (Main plant) – Sanghipuram, Kutch for burning purpose. All Hazardous Waste will be treated as per The Hazardous Wastes (Management, Handling & Trans-boundary Movement) Rules, 2016
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	<ul style="list-style-type: none"> <li>• Domestic effluent will be passed through septic tank/soak pit system.</li> <li>• No industrial effluent will be generated.</li> </ul>
7.3	By deposition of pollutants emitted to air into the land or into water	Yes	The air emissions have been controlled by providing adequate pollution control equipments. The stacks height has been provided to a level for maximum dispersion of the pollutants in the environment. However, periodic monitoring is being / will be done to assure the level of emission within the prescribed limit.
7.4	From any other sources	No	Nil
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	There will be no long term build-up of pollutants in the environment, however periodic monitoring will be done for the air, water and soil in the plant premises and surroundings, so that timely mitigation measures can be undertaken.

**8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment**

S.No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	Used Oil, discarded containers will be generated from proposed project which will be used in Kiln Firing (Main plant) – Sanghipuram, Kutch for burning purpose.
8.2	From any other causes	No	Nil
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No	Nil

**9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality**

S. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting, cities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> <li>• Supporting infrastructure (roads, power supply, waste or wastewater treatment, etc.)</li> <li>• Housing development</li> <li>• Extractive industries</li> <li>• Supply industries</li> <li>• Other</li> </ul>	No	There have well supporting infrastructure like highways, power supply & underground effluent drainage line etc. Hence there will be no need of extra development. Local people will be employed and no housing is required.
9.2	Lead to after-use of the site, which could have an impact on the environment	No	Not applicable
9.3	Set a precedent for later developments	No	Not applicable
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects.	No	Plant structure will be designed to withstand the severity of earthquake / cyclone etc.

## (III) ENVIRONMENTAL SENSITIVITY

S. No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	None	No any
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	None	Arabian Sea @ 3.62 in West direction Tapi River @ 0.89 in East direction
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	None	No
4	Inland, coastal, marine or underground waters	Coastal area of Arabian Sea	Arabian Sea @ 3.92 in West direction
5	State, National boundaries	None	--
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	NH-6 SH-168	0.9 km, East direction 8.5 km, NE direction
7	Defense installations	None	--
8	Densely populated or built-up area	Shivrampur village	Approx. 1.5 km, SW direction
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Hospitals, Schools, Places of Worship, Community facilities	<ul style="list-style-type: none"> <li>• Essar International School – Hazira, – 2.16 km, SE direction</li> <li>• Mora ITI - Hazira – 3.76 km, , NNe direction</li> <li>• Reliance. – Hospital Hazira– 2.03 km, NNE direction</li> <li>• Care Nursing Hom –Nand Niketan Township , Hazira 2.73 km, , SSW direction</li> <li>• State Bank of India, Hazira Branch– 2.33 km, SSE direction</li> </ul>
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	Surface water resources Tapi river, Arabian Sea	<ul style="list-style-type: none"> <li>• River Tapi– Approx. 0.89 km, East direction.</li> <li>• Arabian Sea: Approx. 3.92 km, West direction.</li> </ul>

11	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	None	-
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	None	--

**(IV) PROPOSED TERMS OF REFERENCE FOR EIA STUDIES**

As the proposed project will be established considering all the aspects of Environment Protections and there is no major impact on environment due to proposed project with proper EMP However, as per the requirements the Draft TOR for proposed EIA study is given below:

S.No.	Parameters	Justification
	<b>Standard ToR</b>	
1.	Executive Summary	
2.	Introduction	<ul style="list-style-type: none"> <li>• Details of the EIA Consultant including NABET accreditation.</li> <li>• Information about the project proponent.</li> <li>• Importance and benefits of the project.</li> </ul>
3.	Project Description	<ul style="list-style-type: none"> <li>• Cost of project and time of completion.</li> <li>• Products with capacities for the proposed project.</li> <li>• List of raw materials required and their source along with mode of transportation.</li> <li>• Other materials required with quantities and storage capacities.</li> <li>• Details of Emission, effluents, hazardous waste generation and their management.</li> <li>• Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).</li> <li>• Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.</li> <li>• Hazard identification and details of proposed safety systems.</li> </ul>
4.	Site Details	<ul style="list-style-type: none"> <li>• Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.</li> <li>• A topo sheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)</li> <li>• Details w.r.t. option analysis for selection of site</li> <li>• Co-ordinates (lat-long) of all four corners of the site.</li> <li>• Google Map-Earth downloaded of the project site.</li> <li>• Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.</li> <li>• Photographs of the proposed plant site.</li> <li>• Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc. shall be included. (not required for industrial area)</li> <li>• A list of major industries with name and type within study area</li> </ul>

		<p>(10km radius) shall be incorporated. Land use details of the study area</p> <ul style="list-style-type: none"> <li>• Geological features and Geo-hydrological status of the study area shall be included.</li> <li>• Details of Drainage of the project upto 5km radius of study area.</li> <li>• Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)</li> <li>• Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.</li> <li>• R&amp;R details in respect of land in line with state Government policy (Not applicable).</li> </ul>
5.	Forest and wildlife related issues (if applicable):	<ul style="list-style-type: none"> <li>• Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (Not applicable).</li> <li>• Land Use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).</li> <li>• Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.</li> <li>• The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly</li> <li>• Authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.</li> <li>• Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.</li> <li>• Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.</li> </ul>
6.	Environmental Status	<ul style="list-style-type: none"> <li>• Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.</li> <li>• AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO<sub>2</sub>, NO<sub>x</sub>, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.</li> <li>• Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be</li> </ul>

		<p>provided as an annexure to the EIA Report.</p> <ul style="list-style-type: none"> <li>• Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&amp;CC guidelines.</li> <li>• Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&amp;CC, if yes give details.</li> <li>• Ground water monitoring at minimum at 8 locations shall be included.</li> <li>• Noise levels monitoring at 8 locations within the study area.</li> <li>• Soil Characteristic as per CPCB guidelines.</li> <li>• Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.</li> <li>• Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.</li> <li>• Socio-economic status of the study area.</li> </ul>
7.	Impact and Environment Management Plan	<ul style="list-style-type: none"> <li>• Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.</li> <li>• Water Quality modelling - in case of discharge in water body.</li> <li>• Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum- rail transport shall be examined.</li> <li>• A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.</li> <li>• Details of stack emission and action plan for control of emissions to meet standards.</li> <li>• Measures for fugitive emission control.</li> <li>• Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding</li> </ul>

		<p>utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.</p> <ul style="list-style-type: none"> <li>• Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.</li> <li>• Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.</li> <li>• Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.</li> <li>• Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.</li> <li>• Action plan for post-project environmental monitoring shall be submitted.</li> <li>• Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.</li> </ul>
8.	Occupational health	<ul style="list-style-type: none"> <li>• Plan and fund allocation to ensure the occupational health &amp; safety of all contract and casual workers.</li> <li>• Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far &amp; Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.</li> </ul>
9.	Corporate Environment Policy	<ul style="list-style-type: none"> <li>• Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.</li> <li>• Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.</li> <li>• What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.</li> <li>• Does the company have system of reporting of non-</li> </ul>

		compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.
10.	Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.	
11.	Enterprise Social Commitment (ESC)	Adequate funds shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
12.	Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.	

**(V) Undertaking**

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

**Date: 21/12/2018**

**Place: Ahmedabad, Gujarat**

**Signature of  
applicant:**

**Name:**

**Mr Gaurang Bhatt**

**Designation :**

**Sr. Vice President**

**Address:**

**Sanghi Industries Ltd. (SIL)**

Sanghi Industries Limited

10<sup>th</sup> Floor, Kataria Arcade, Off SG Highway,

PO: Makarba, Ahmedabad-380051

S. M. SAIYAD, IFS  
MEMBER SECRETARY  
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT  
AUTHORITY  
GUJARAT

Government of Gujarat

By R P A D

No. SEIAA/GUJ/TOR/3(b)/223/2019

Date: 29 JAN 2019

Sub: Terms Of Reference to M/s. Sanghi Industries Limited for setting up of Standalone Grinding Unit (2.0 Million TPA) with bulk & bag packing plant at Survey No. 125/1, 125/2, 126/1+2+3; Village - Shivrampur, Tal.: Choryasi, Dist.: Surat. Time Limit

Ref: Your Proposal No: SIA/GJ/IND2/30448/2018.

Dear Sir,

This has reference to your online application dated 22/12/2018 along with Form-I submitted to SEIAA. The project activity is covered in 3(b) and is of 'B' Category.

The SEAC, Gujarat vide their letter dated 16/01/2019 had recommended to the SEIAA, Gujarat, to grant the Terms Of Reference for the above-mentioned project based on its meeting held on 04/01/2019.

The proposal was considered by SEIAA, Gujarat in its meeting held on 16/01/2019 at Gandhinagar. After careful consideration, the SEIAA hereby accords Terms Of Reference to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006. The copy of Terms Of Reference is attached herewith.

With regards,  
Yours sincerely,

  
(S. M. SAIYAD)  
Member Secretary

Encl: As Above

Issued to:  
M/s. Sanghi Industries Limited  
10<sup>th</sup> Floor, Kataria Arcade,  
Off S G Highway, PO. Makarba,  
Ahmedabad.



**Terms of Reference [ToR] to M/s: Sanghi Industries Limited for setting up Standalone Grinding Unit (2.0 Million TPA) with bulk & bag packing plant at Survey No. 125/1, 125/2, 126/1+2+3; Village – Shivrampur, Tal.: Choryasi, Dist.: Surat.**

Category of the unit: 3(b)

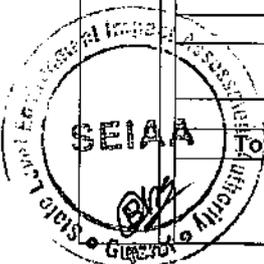
Project status: New

- I. This is in reference to proposal no. SIA/GJ/IND/30448/2018 dated 22/12/2018 regarding grant of Terms of Reference [ToR] for preparation of EIA/EMP report.
- II. Project proponent (PP) has submitted Form-1, PFR and relevant details/information.
- III. This is Standalone Grinding Unit (2.0 Million TPA) with bulk & bag packing plant as tabulated below:

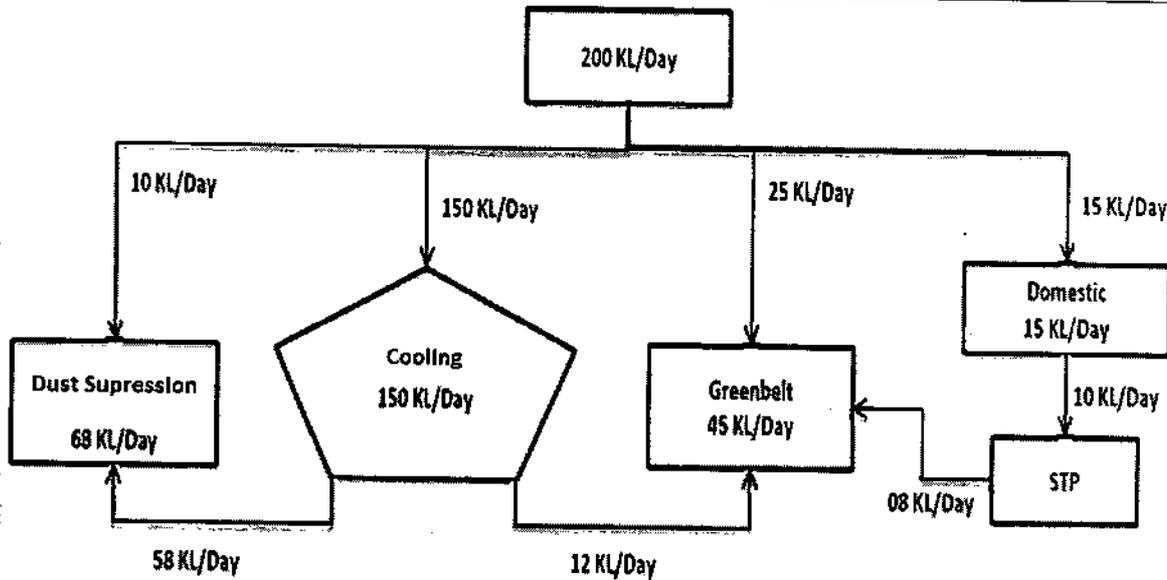
S. No.	Name of the Products	CAS no. /CI no.	Quantity MT/Month	End-use of product
1	Cement (PPC, OPC, PSC)	65997-15-1.	1,67,000	For infrastructural growth

- IV. The project falls under Category B of project activity 3(b) as per the schedule of EIA Notification 2006.
- V. PP was called for presentation in the SEAC meeting dated 04/01/2019.
- VI. The project proponent along with their expert /consultant ECO CHEM SALES & SERVICES, Surat attended the meeting and made presentation before the committee
- VII. Salient features of the project are as under:

S. no.	Particulars	Details																																	
A	Total cost of Proposed Project (Rs. in Crores):	Rs. 282.28 Crores																																	
B	Total Plot area ( sq. meter)	4.856 Ha. (48,563 m <sup>2</sup> )																																	
	Green belt area ( sq. meter)	1.6 Ha.																																	
C	Employment generation	Construction phase: 500 Nos. Operation Phase: 280 Nos.																																	
D	Water																																		
i	Source of Water Supply (GIDC Bore well, Surface water, Tanker supply etc...)	Local Body/ Bore well/GIDC Local Source / Bore well/GIDC/Tanker Supply																																	
	Status of permission from the concern authority.	-																																	
ii	Water consumption (KLD)																																		
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iv	Treatment facility within premises with capacity (In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..) <b>No ETP will be required</b>
v	Mode of Disposal & Final meeting point Domestic: Treated STP water will be reused for greenbelt Industrial: No effluent will be generated
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE etc. , Name of CF Not applicable Membership of Common facility (CF) (For waste water treatment) Not applicable
vii	<b>Simplified water balance diagram with reuse / recycle of waste water</b>

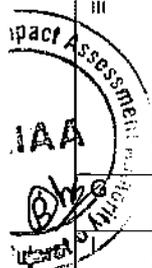


viii	Reuse/Recycle details (KLD)	
Total reuse 78 KLD		
Source of waste water for reuse with quantity in KLD	Application area with quantity in KLD	Remarks regarding feasibility to reuse i.e. w/w characteristics (COD, BOD, TDS etc.)
Cooling tower blow down water	70.0	-
Domestic water after treatment	8.0	-

**E Air**

i	Flue gas emission details No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.														
	<table border="1"> <thead> <tr> <th>Sr. no.</th> <th>Source of emission With Capacity</th> <th>Stack Height (meter)</th> <th>Type of Fuel</th> <th>Quantity of Fuel MT/Day</th> <th>Type of emissions i.e. Air Pollutants</th> <th>Air Pollution Control Measures (APCM)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Cement Mill (9,00,000 m<sup>3</sup>/hr) (In-built Hot Air Generator – HAG system)</td> <td>55</td> <td>Coal/ Lignite/ Pet coke</td> <td>181.81</td> <td>SPM, SO<sub>2</sub>, NO<sub>x</sub></td> <td>1 Nos. Bag House and 7 Nos. of de-dusting bag filter</td> </tr> </tbody> </table>	Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)	1	Cement Mill (9,00,000 m <sup>3</sup> /hr) (In-built Hot Air Generator – HAG system)	55	Coal/ Lignite/ Pet coke	181.81	SPM, SO <sub>2</sub> , NO <sub>x</sub>	1 Nos. Bag House and 7 Nos. of de-dusting bag filter
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ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.) <b>Not Applicable as this is cement grinding unit</b>														
iii	Fugitive emission details with its mitigation measures. As below:														
	<p><b>Source:</b></p> <ul style="list-style-type: none"> <li>PM10 and PM2.5 is considered as major air pollutants from this source. No process gas emission will be generated.</li> <li>The unloading area of clinker, gypsum, fly ash and fly ash storage silo, clinker grinding mill, cements silos and packing machines are the main areas where dust is likely to be generated.</li> </ul> <p><b>Mitigation:</b></p> <ul style="list-style-type: none"> <li>Vehicles with valid PUC will be used for the transportation of materials and equipment.</li> </ul>														

	<ul style="list-style-type: none"> <li>The emission from these sources would be fugitive in nature and bag filters are proposed as APCM to control fugitive emission.</li> <li>Concrete road has been/shall be developed.</li> <li>Regular water sprinkling is being/ will be done to avoid dust generation from transportation.</li> <li>Closed conveyer belt for limestone (from captive mine to plant) is being used to control the dust emission.</li> <li>Transportation vehicles will be covered with tarpaulin sheet while transporting materials.</li> <li>Proper loading/unloading procedures will be carried out.</li> <li>Carry out regular sweeping of roads to minimize emissions.</li> <li>Provided paved roads and concrete flooring at Cement mills, packing plant and coal yard area.</li> </ul>													
F	<b>Hazardous wastes</b> (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.													
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Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)	Management of HW									
1.	Used Oil*	From machinery and other equipment	1/5.1	60	Secondary lubrication / send to Own Clinker plant under AFR.									
ii	Membership details of TSD, CHWIF etc. (For HW management)	100% recycle in process												
iii	Details of Non-Hazardous waste & its disposal (MSW and others)	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Waste</th> <th>Qty in TPA</th> <th>End use / Disposal</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Dust collected from APCM</td> <td>450</td> <td>Totally recycled in process.</td> </tr> <tr> <td>2.</td> <td>Ash generated from HAG</td> <td>18000</td> <td>100 % recycled in the plant in PPC</td> </tr> </tbody> </table>	S.No.	Waste	Qty in TPA	End use / Disposal	1.	Dust collected from APCM	450	Totally recycled in process.	2.	Ash generated from HAG	18000	100 % recycled in the plant in PPC
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1.	Dust collected from APCM	450	Totally recycled in process.											
2.	Ash generated from HAG	18000	100 % recycled in the plant in PPC											
	Solvent management, VOC emissions etc.	Not applicable												
	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>												
ii	VOC emission sources and its mitigation measures	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>												



- VIII. During the meeting dated 04/01/2019, technical presentation made by project proponent.
- IX. This proposal is for new standalone cement grinding unit with bulk and bag packing unit.
- X. Nearest residential area of village Shivrampur is in SW direction at a distance @ 1.5 Km from project site.
- XI. Total water consumption will be 278 KLD. Total wastewater generation will be 70 KLD. Total industrial effluent will be completely reused back in process. Coal/lignite/pet coke will be used as fuel for proposed project. Bag house and dedusting bag filter as APCM will be provided. Hazardous waste management will be as per the HW Rules. The proposal is new for clinker grinding for production of 2 MMTPA. It is noted that bag house for clinker grinding unit and adequate pollution control measures are proposed by the unit. All transportation from point of landing of clinker and other bulk raw materials will be done through covered vehicles and will be stored in Silos.
- XII. Committee asked PP to explore to use ETP waste of chemical industries having gypsum as alternative raw materials. A detail of measures to curb fugitive emission due to storage of coal was discussed at length.
- XIII. **Terms of reference (ToR) are prescribed as below for the EIA study to be done covering 10 Km radial distance from the project boundary.**
- Alternative site analysis and justification for selection of the present site based on the pros & cons of various alternatives with technical reasons including the likely impacts of the air pollution (both flue gas emission and fugitive emissions) vis-à-vis wind direction, noise impacts due to the proposed activities, etc. for the proposed project.
  - Project site specific details and site suitability with respect to siting criteria / guidelines. The site specific details should include distance of the project site from the nearest (1) Village (2) Water Body: River / Creek / Nallah / Reservoir / Pond / Canal (3) National Highway (4) State Highway (5) Railway line (6) Heritage site (7) National Park / Wild Life Sanctuary / Biosphere Reserve / Conservation Reserve (8) Reserve Forest / Protected Forest (9) Any other eco-sensitive areas like wetland, mangroves, coral reefs, migratory route of wild animals, turtle nesting ground etc.
  - Land possession documents and NA order.
  - Need for the proposed project along with justification for selecting the proposed product and unit size.

5. PP shall furnish status of all the applicable Rules, Acts, Regulation, Clearances in a tabular form.
6. Land requirement for the project including its break up for various purposes, its availability and optimization.
7. Layout plan clearly demarcating various units (plants / utilities), green belt and open path around the periphery / plants for easy movement of emergency vehicles.
8. Demarcation of proposed facilities for expansion in lay out of the existing premises.
9. Details of exact production capacity per month in terms of each kind of cement i.e. Ordinary Portland Cement [OPC] / Pozzolona Portland Cement [PPC] etc.
10. Detailed manufacturing operations along with mass balance, process flow diagram describing each unit, its processes / operations etc.
11. Strategy for the implementation of the Cleaner Production activities along with a write up on possibility of using high calorific hazardous wastes in kiln and commitment regarding use of hazardous waste in the process.
12. Explore possibilities of reuse / recycle and other cleaner production options for reduction of wastes & emissions along with commitment of the management on futuristic development / implementation for the same.
13. Water requirement, its source and permission obtained from the concerned authority for supply of requisite quantity of water to the project. In case of ground water abstraction, status of permission from the CGWA along with study report on geo-hydrology of the area and impacts of ground water abstraction.
14. Explore the possibilities of getting surface water supply instead of depending on the ground water source for the proposed project.
15. Detailed report for storm water drainage, management & disposal, measures proposed to avoid contamination of the storm water as well as restricting and isolating the contaminated storm water not allowing it to flow out of the premises.
16. Water balance diagram (including reuse-recycle, if any). Efforts for water conservation.
17. Details on raw materials, source, storage and handling within the premises. Mode of transportation of raw materials and products as well as measures proposed for preventing fugitive emission during transportation.
18. Type, quantity and quality of fuels required. A confirmed fuel linkage / copy of MoU for supply of fuel.
19. List the sources of air pollution including process emissions as well as fugitive emissions along with the mitigation measures. Air pollution control measures (APCM) along with its design details, efficiency, inlet and outlet pollutant concentrations, etc. and stack height. The APCM shall be designed to achieve particulate matter emission below 50 mg/Nm<sup>3</sup> at the stack outlet and it's design should be got approved by the reputed institute.
20. An action plan to control and monitor secondary fugitive emissions from all the sources.
21. Provision of the online monitoring system on stacks for monitoring of pollutants, with an arrangement to reflect monitored data on company's server that can be accessed by the GPCB on real time basis.
22. In case, hazardous waste is proposed to be charged in kilns, details on type of waste, its characteristics and monitoring of emissions of gases, heavy metals, VOCs, dioxins and furans.
23. Details of solid / hazardous wastes generation, its composition, handling, storage, utilization, disposal etc.
24. Details of all possible sources of noise pollution, its magnitude and mitigation measures including engineering and other controls proposed to control it.
25. Details of heat emission sources from the proposed project and proposed mitigation measures.
26. One season site-specific meteorological data including temperature, relative humidity, hourly wind speed and direction and rainfall shall be provided.
27. One season (except monsoon) ambient air quality monitoring at minimum 6 locations within the study area along with dates of monitoring. Parameters to be considered shall be in accordance with the revised national ambient air quality standards notified in November, 2009 and other project specific parameters. The monitoring stations shall take into account the predominant wind direction, population zone and sensitive receptors including reserved forests. There should be at least one monitoring station in the upwind direction and one monitoring station at / near the location where maximum ground level concentration is likely to occur.
28. Prediction of ground level concentration of pollutants by air quality modeling based on site-specific meteorological features. Details of the model used and the input parameters used for modelling shall be provided. The air quality contours shall be plotted on a location map showing location of project site, habitation, sensitive receptors, etc. The wind roses should also be shown on this map.
29. Location of the project site and nearest habitats with distances from the project site to be demarcated on a toposheet (1: 50000 scale).
30. Land use pattern of the study area based on satellite imagery / field investigation including location-specific sensitivities such as national parks / wildlife sanctuary, villages, industries, prime agricultural land etc., for the



study area. If any incompatible landuse attributes fall within the study area, proponent shall describe the sensitivity (distance, area and significance).

31. The baseline data shall also be collected for other components of environment viz. noise, water, land, and biology and socio-economic.
32. Ecological status (terrestrial and aquatic) of the study area such as habitat type and quality, species, diversity, rarity, fragmentation, ecological linkage, age, abundance, etc. In case of scheduled fauna, conservation measures should be proposed.
33. A detailed study to assess the wildlife habitats, their migration route, etc. and measures to mitigate impacts of the proposed activities.
34. While identifying the likely impacts, also include following for analysis of significance and required mitigation measures: (i) Impacts due to transportation of raw materials and end products on road network (ii) Impacts on surface water, soil and groundwater (iii) Impact on drainage of the area and the surroundings (iv) Impacts due to air pollution (v) Major sources of noise and its impacts (vi) Impacts due to fugitive emissions (vii) Impact on health of workers due to proposed project activities.
35. Proposal to construct approach road from the main road to the company premises and to maintain it in good condition for reducing fugitive emission due to transportation of vehicles.
36. Details regarding infrastructure facilities such as sanitation, fuel storage, restroom, etc., to the workers during construction and operation phase.
37. Environmental Monitoring Program for operational phase of project including (i) Monitoring programme for pollution control at source, (ii) Monitoring pollutants at receiving environment for the relevant parameters – air quality, groundwater, surface water, etc. to assess impact during operational phase of the project, (iii) Specific programme for medical surveillance and monitoring of working environment (especially for cement / silica dust) as per Gujarat Factories Rules (iv) Details of in-house monitoring capabilities and details of outsourcing to other agencies if proposed for conducting monitoring.
38. Environmental Management Plan including (i) Measures to mitigate adverse impacts along with item-wise cost of its implementation (capital and recurring costs), (ii) Administrative and technical organizational structure for implementation of mitigation measures and proposed post-project Environmental Monitoring Program, (iii) Allocation of resources and responsibilities for plan implementation.
39. **A tabular chart for the issues raised in public hearing/consultation and commitment of the project proponent to the same. An action plan addressing the issues raised and the necessary allocation of funds for the same.**
40. PP shall ensure participation of people during Public Hearing with equality in gender so as to encourage woman participation in Public hearing & at the same time their issues shall also be given weightage.
41. Action plan for the greenbelt development in accordance to CPCB published guidelines. The details should include types & number of species, width of plantations, area under green belt development [with map], planning schedule, budgetary outlay, etc.
42. Risk assessment including prediction of the worst-case scenario and maximum credible accident scenario along with risk contours plotted on the plant layout clearly showing the activities that would be affected in case of an accident taking place.
43. Details on the proposed safeguard measures, fire control plan, and on-site and off-site emergency management plans.
44. Proposal for CSR activities most useful in the area along with time bound action plan and cost.
45. Compliance of MoEFCC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEFCC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
46. Explore the use of renewable energy to the maximum extent possible. Details of provisions to make the project energy-efficient through energy efficient devices and adoption of modes of alternative eco-friendly sources of energy like solar water heater, solar lighting etc. Measures proposed for energy conservation.
47. Detailed scheme for surface / roof top rain water harvesting and ground water recharge shall be incorporated. In case of ground water abstraction, annual abstraction quantity should be compensated by equal amount of ground water recharge. The details should include scientific calculations based on rainfall, catchment area, runoff / recharge coefficients, percolation rate, duration of recharge etc. Before recharging the surface run off, pre-



treatment must be done to remove suspended matter / oil & grease. Location of recharge percolation wells should be demarcated on layout plan.

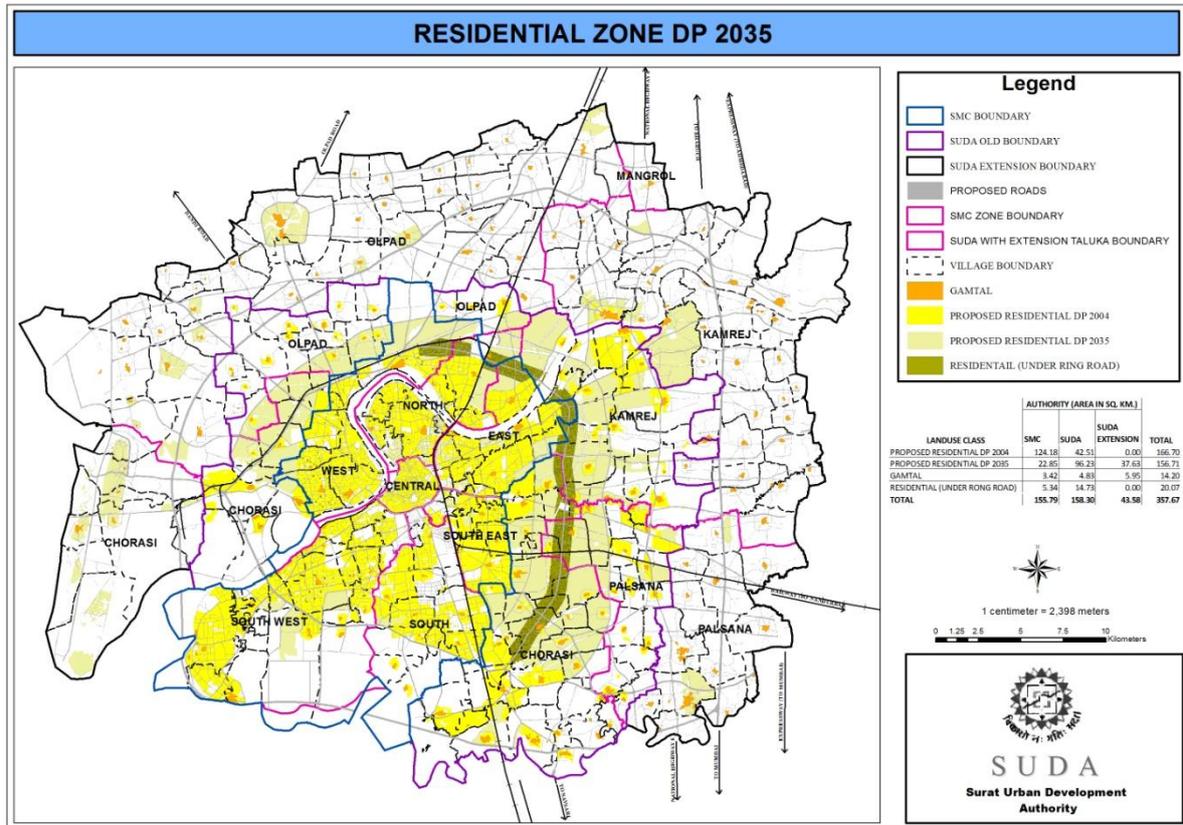
48. Plan for compliance to the CREP guidelines.
  49. (a) Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
  50. (b). Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions ? If so, it may be detailed in the EIA.
  51. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the EC conditions. Details of this system may be given.
  52. Does the company have a system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA Report.
  53. Certificate of accreditation issued by the NABET, QCI to the environmental consultant should be incorporated in the EIA Report.
  54. PP shall explore using gypsum as ARF (Alternative Raw Material/ Fuel) produced by chemical industries from process/ETP.
  55. A tabular chart with index for point-wise compliance of above TORs.
- XIV. The TOR prescribed as above and the model ToRs available in the MoEFCC's sector specific EIA Manual for 'Cement Industry' shall be considered as generic TORs for preparation of the EIA report in addition to all the relevant information as per the generic structure of EIA given in Appendix III in the EIA Notification, 2006. The draft EIA report shall be submitted to the Gujarat Pollution Control Board for conducting the public consultation process as per the provisions of the EIA Notification, 2006. The project proponent shall have to apply for Environmental clearance through online portal <http://environmentclearance.nic.in/> along with final EIA report.

**Validity of ToR:**

- The ToRs prescribed for the project will be valid for a period of three years for submission of EIA & EMP report. ToR will lapse after three years from the date of issue.
- The period of validity could be extended for a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, at least three months before the expiry of valid period together with an updated Form-I, based on proper justification and also recommendation of the SEAC.



Figure 63: Residential Zone Proposals- DP 2035



### 19.11.2 INDUSTRIAL ZONE

Surat is one of the industrial hubs of the nation, attracting large labour forces from across the nation for employment. This is one of the reasons of large share of migrants' population in the city over the decades. Hazira is one of the biggest industrial centres in the country, housing variety of industries in terms of scale and nature. Hazira is now made a part of SUDA jurisdiction after extension of SUDA in December, 2015 under the State Government's resolution. Other than this, there are other pockets of textile, diamond and Zari industries across the city.

The level of industrial growth over last couple of decades has been tremendous. All the areas proposed as industrial zones in DP 2004 have been occupied by different types of industries and moreover, the areas outside SUDA jurisdiction have experienced high level of industrial development due to the unavailability of industrial zones for development within SUDA. The major industrial zones proposed in DP 2004 and later on developed as industrial pockets are Pandesara GIDC, Udhna GIDC and Katargam GIDC. However, Navagam did not develop to its potential even though it is located in proximity of National highway.

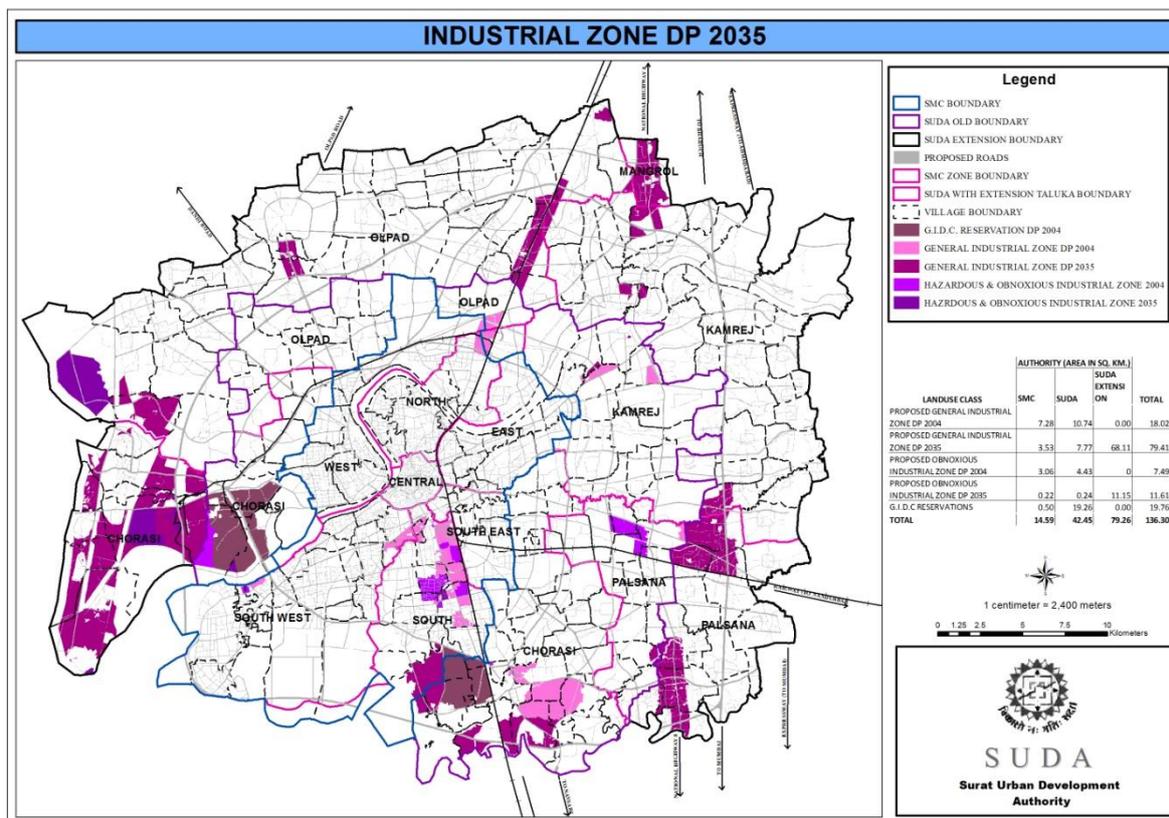
At present, there is hardly any scope of industrial development due to consumption of industrial zone. There are also various polluting industries located within residential zones, negatively affecting the health standards, environment and overall liveability. The existing polluting industries within the residential area proposed to be shifted admeasures about 4.3 sq.km. (1075 acres). For such industries to be shifted outside and to cater the potential of development, 136 sq.km. of area is proposed as industrial zone in the Development Plan- 2035, which includes about 9 sq.km. (2200

acres) of Obnoxious and Hazardous Industrial Zone in the newly added Pinjarat village. The location is on the north of existing Hazira area, under huge Government vacant land with access to water bodies. The site is in vicinity of 120 Regional Ring Road, 90 m ORR and the Utility Corridor. Only 22 acres of the land is under the private ownership while rest is the Government land. Kadodara, Palsana, Sachin and Tena growth nodes are proposed for the industrial zone considering the existing land use and the access to the existing National Highway and proposed Ring Roads. The Industrial Zone and Obnoxious and Hazardous Industrial Zone existing in DP 2004 have been continued including the Hazira Industrial Zone as per the erstwhile Hazira Area Development Authority's development plan. Industrial Corridor along broad gauge railway line near Gothan- Kosad has been proposed.

Since the acquisition proceedings by OGNC, KRIBHCO and GSPCL is over in the Kavas- Bhatpore area, the portion which was not acquired has been proposed as Obnoxious and Hazardous Industrial Zone.

Total area proposed under Industrial zone (including DP 2004 proposal) is 136 sq.km., which is 17.32% of the total urbanised area proposed in DP 2035.

Figure 64: Industrial Zone Proposals- DP 2035



### 19.11.3 SURAT INDUSTRIAL GROWTH REGION (SIGR) ZONE

Hazira is one of the key industrial areas in the state of Gujarat and is now included in the development area under the jurisdiction of SUDA. There are critical infrastructure facilities of Reliance, ESSAR, Shell, L&T. Adani, KRIBHCO, etc. Hazira port has been developed on BOOT basis and is operational since 2012. As per GMB estimate, the Hazira Port is going to handle about 84 million

population of SUDA area for the target year of 2035 has been projected to be 110 lakhs. It means additional 60 lakhs people shall be living in SUDA area. Projects like, Expressway from Ahmadabad to Mumbai, DFC, High Speed Train, Bullet Train, Metro, DREAM City project, setting up of premier institutions / Universities, etc. is going to influence the Surat in a big way during the plan period of 2015-2035.

Moreover, the highly developed industrial pocket of Hazira Notified Area is also included in the new SUDA limits for which the Development Plan has now to be prepared. Hazira is one of the major ports of India. Development of Hazira having concentration of various large scale industries, has lot of implications on the planning proposals of the SUDA area. The existing industrial portfolio of Hazira includes industrial activities such as petrochemicals, fertilizers, heavy engineering, steel, energy and port related activities. More than 20 large and medium companies are located in Hazira, including KRIBHCO, ONGC, IOC, IPCL, BPCL, CAIRN ENERGY, NTPC, SHELL, GPCL, RELIANCE INDUSTRIES, L & T, ADANI Infrastructure, ESSAR, etc. Large industrial units are functioning in the Hazira area for which necessary infrastructure and planning inputs are required along with the comprehensive disaster management plan. Large scale movement of hazardous goods is also taking place to and fro from Hazira to different states through newly extended SUDA area. Moreover, Kathor development area, Sachin (Census Town), Kansad, Kadodara, Olpad, Sayan (Census Town), Amboli (Census Town), Kamrej, etc. are acting as magnet for the economic activities.

The need has arisen for reserving the land in the DP of SUDA for the various public purposes mentioned under section 12(2) of the Act for catering to the additional population and to satisfy the planning requirement.

SVNIT, being the technical institute of repute in Surat, SUDA took the expertise of SVNIT in analyzing the public purposes plots proposed in the Development Plan of 2004 and suggesting public purpose plots location to be reserved in this Development Plan - 2035 looking to the population growth rate and development happened and going to happen within the target year of 2035 in terms of its use, spatial extent and its location. Unique culture of the urban area as well as regional developments and national development policies were kept in mind for proposals.

SVNIT submitted the report in April 2016 and accordingly, the public purpose land are reserved in the SMC, Old SUDA and New SUDA area as per the provisions of section 12(2) of the Act, for various public purposes for acquiring agencies like SMC, SUDA, GHB, Custom department, R&B, GSRTC, Airport Authority, P & T, etc.

Under the provisions of the Act, the reserved land has to be acquired by consent, agreement or under the provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.

The Public Purpose zone proposed in DP 2004 has been continued in DP 2035.

Historical monuments, Government Buildings, etc. have been included in the Public Purpose zone.

About 36.54 sq.km. of the urbanized land has been proposed under reservation in the DP 2035. The list of reservation proposed in DP 2035 is given in ~~Annexure-7 of this report.~~(removed)

## Project Application Form

Date: 07/09/2019 02:39:15 PM

Project Id: 10001128386

### Applicant Details

Applicant First Name:	SANGHI INDUSTRIES LIMITED A COMPANY THROUGH ITS SENIOR VICE PRESIDENT	Applicant Middle Name:	-
Applicant Last Name:	SHRI GAURANGBHAI JAYANTIBHAI B	Applicant Designation:	OWNER
Applicant Phone Number:	-	Applicant Fax No:	-
Applicant Mobile Number:	9979866079	Applicant Email ID:	jignasujain123@gmail.com
Applicant Address Line 1:	10nt floor,Katariya Arcade,makarba,ahmedabad.	Applicant Address Line 2:	-
Applicant Country:	INDIA	Applicant City:	-
Applicant State / UT:	Gujarat	Applicant District:	Ahmedabad
Applicant Taluka:	Ahmedabad City	Applicant Village:	Makarba
Applicant PIN Code:	380051		

### Company Details

Name of Enterprise:	SANGHI INDUSTRIES LIMITED A COMPANY THROUGH ITS SENIOR VICE PRESIDENT SHRI GAURANGBHAI JAYANTIBHAI B	Registered Company Address Line 1:	10nt floor,Katariya Arcade,makarba,ahmedabad.
Registered Company Address Line 2:	-	Registered Company Country:	INDIA
Registered Company City:	-	Registered Company State / UT:	Gujarat
Registered Company District:	Ahmedabad	Registered Company Taluka:	Ahmedabad City
Registered Company Village:	Makarba	Registered Company PIN Code:	380051
Date of Incorporation:	2019-09-07 00:00:00.0	Organization Type:	Proprietorship
Type:	-	In case of partnership firm, whether the deed of partnership is registered?	No
Registration No :	-	Registration No. in case of Co-operative Society:	-
No. given by the register of Companies in case of private/public limited companies:	-	Company PAN Number:	ADWPJ4520F
Website:	-	Is your project situated in:	Urban Local body

### Project Details

Name of Project:	PROPOSED INDUSTRIAL LAYOUT	Whether proposed work is for:	New
------------------	----------------------------	-------------------------------	-----

Project Address Line 1:	BLOCK-125/P1,125/P2,126/1+2+3,MOJE-SHIVRAMPUR,TALUKA-CHORYASI,DIS-SURAT	Project Address Line 2:	-
Project Country:	INDIA	Project City:	
Project State / UT:	Gujarat	Project District:	Surat
Project Taluka:	Choryasi	Project Village:	Surval
Project PIN Code:	394510	Survey Number:	BLOCK-125/P1,125/P2,126/1+2+3
Plot / Sub Plot / Shed No.:	-	Ward No/Nearest Landmark:	-
Type of Industry:	Manufacturing	NIC Code:	410 - Construction of buildings
Does your industry unit fall under the category of white industries exempted from obtaining Consent to Establish under GPCB ?	Yes	GPCB District Name:	-
GPCB SIDC Name:	-	GPCB Taluka Name:	-
GPCB Village Name:	-	Project Phone Number:	-
Project Fax No:	-	Project Mobile Number:	9979866079
Project Email ID:	jignasujain123@gmail.com	Relevant Urban Local Body:	Surat Urban Development Authority
Expected Date of Commencement:	2019-12-10 00:00:00.0	GPCB Code:	-

### Investment Details

Investment in Land (INR):	5000000	Investment in Plant and Machinery(P & M) (INR):	1000000
Investment in equipment:	1000000	UAN/EMN/SSMEM Number:	ADWPJ4520F
Type of Unit:	Micro		

### Correspondence Address

First Name:	-	Middle Name:	-
Last Name:	-	Phone Number:	-
Fax:	-	Mobile Number:	9979866079
Email ID:	jignasujain123@gmail.com	Address Line 1:	BLOCK-125/P1,125/P2,126/1+2+3,MOJE-SHIVRAMPUR,TALUKA-CHORYASI,DIS-SURAT,
Address Line 2:	-	Country Name:	INDIA
City Name:		State Name:	Gujarat
District Name:	Surat	Taluka Name:	Choryasi
PIN Code:	394510		

### Other Details

Power Required (KVA):	Yes	Do you need electrical plan approval?:	No
Type of power connection required:	New LT Connection	Power Category:	DGVCL

Do you require a water connection?	Yes	water connection category:	Water Application (GWSSB/GWIL/SSNL/ Water Resource Department)
Will your enterprise have steam boilers?	No	Do you intend / employ 10 or more contract labourers?	Yes as a Contractor
Will you be felling trees on your premises?	Yes	Do you need Building Plan Approval?	Yes, from ULB

## ANNEXURE 7

## TRAFFIC STUDY REPORT

For

## CEMENT GRINDING UNIT

of

M/s Sanghi Industries Limited (SIL)

Survey No. 125/1, 125/2, 126/1+2+3, Shivrampur Village,  
Tal. Choryasi, Dist.- Surat, Gujarat, India

*Prepared By*

Surat Branch: Akshar Park, Near Dhara Complex,  
Surat-395007 (Gujarat) INDIA

Reg. Address: 176-B, 4/2, Paschim Vihar Colony, Mohan Road,  
Lucknow-227107 (UP) INDIA

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&amp;

**NABET Accredited Consultant**  
**M/s GRC INDIA (P) LTD.**

Service Report No. AKONE/2020/SER-072

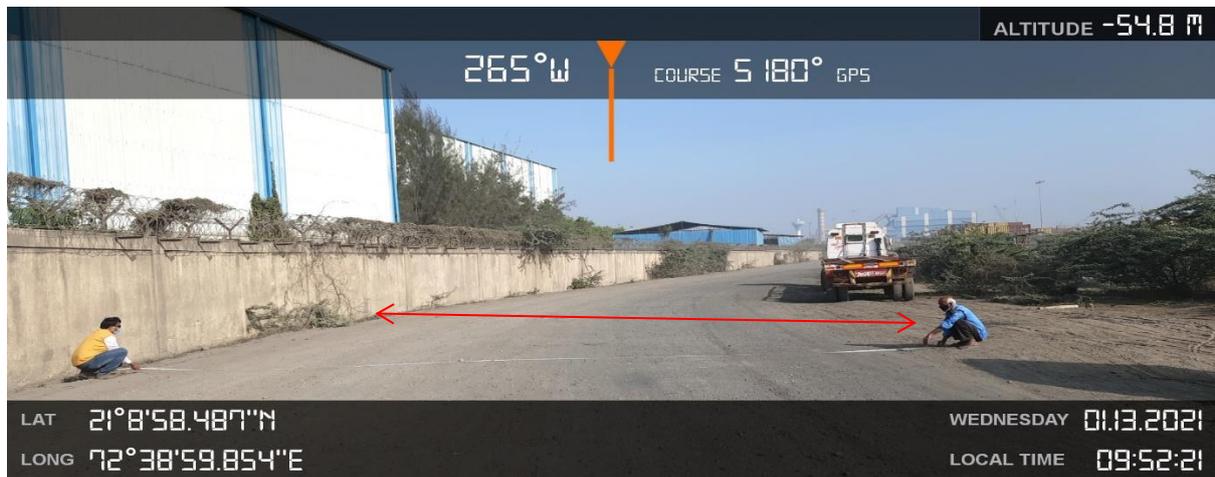


Figure 8. Width Measurement at Approach Road nar Proposed Unit



Figure 9. Photographs of Approach Road and its Measurement

## 2.2 CARRYING CAPACITY OF APPROACH ROAD

The width measurement of Approach /Panchayat road has been done manually at 11 points. The total length of approach /panchayat road is 1.62 km from NH-6 (earlier NH-53) to proposed cement grinding unit. The measurement points has been depicted in figure and table below-

Table 6: Width of Approach Road /Panchayat Road

S.No.	Point	Lattitude	Longitude	Width (m)	Width (ft)
1	A	21° 8'59.62"N	72°38'59.80"E	12	38
2	B	21° 8'57.11"N	72°39'0.28"E	12.2	40
3	C	21° 8'56.35"N	72°39'0.54"E	21.45	70.39
4	D	21° 8'51.66"N	72°38'59.47"E	20.05	65.77
5	E	21° 8'47.21"N	72°38'58.41"E	15	49.26
6	F	21° 8'46.73"N	72°38'59.06"E	15.57	51
7	G	21° 8'46.65"N	72°38'56.89"E	9.20	30
8	H	21° 8'47.84"N	72°39'10.75"E	15	49.30
9	I	21° 8'48.59"N	72°39'19.18"E	16	53
10	J	21° 8'52.40"N	72°39'36.18"E	17.38	57
11	K	21° 8'51.47"N	72°39'38.53"E	34.5	113

The carrying capacity of Panchayat road as per width of the road is 1250 PCU. However, as per IRC, 1990; the carrying capacity of Panchayat road notified by Collector of District & having 2-Lane (Two way) for roads with free frontage access, parked vehicle & heavy crossed traffic is 900 PCU. There is a possibility of additional PCU on this road. The panchayat road is pucca road (metalled road) and as per SUDA vide letter no.252927 dtd 08/01/2021, the proposed site falls under industrial zone with 22 m wide road for indutrail traffic.



Figure 10. Measurement of Panchayat Road (1.62 km)

**SANGHI CEMENT SITE LOCATED IN MIDST OF L&T COMPLEX LESS THAN 1 KM OF PERIPEHRY FROM ALL UNITS**



Towards Surat City, NH-48 & SH-168



L&T (WEST)

L&T Heavy Engineering

L&T (EAST)

PRIVATE LAND

L&T MHPS Boiler

L&T (WEST)

Sanghi site

RIVER TAPI

Panchayat Road

PRAWN FARMS, CREEK & FOREST LAND-0.5.Km

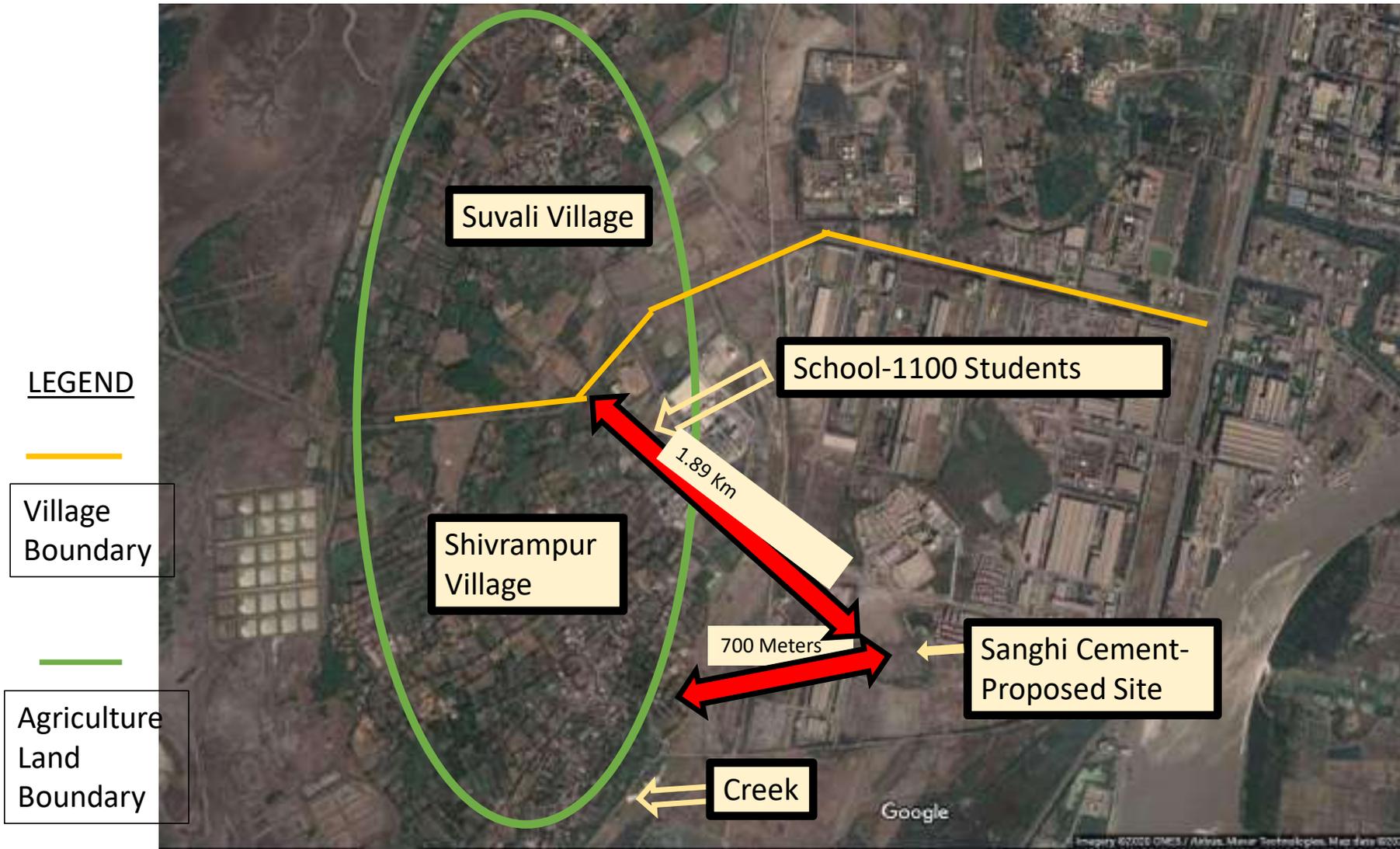
Towards Adani Port

**LEGEND**

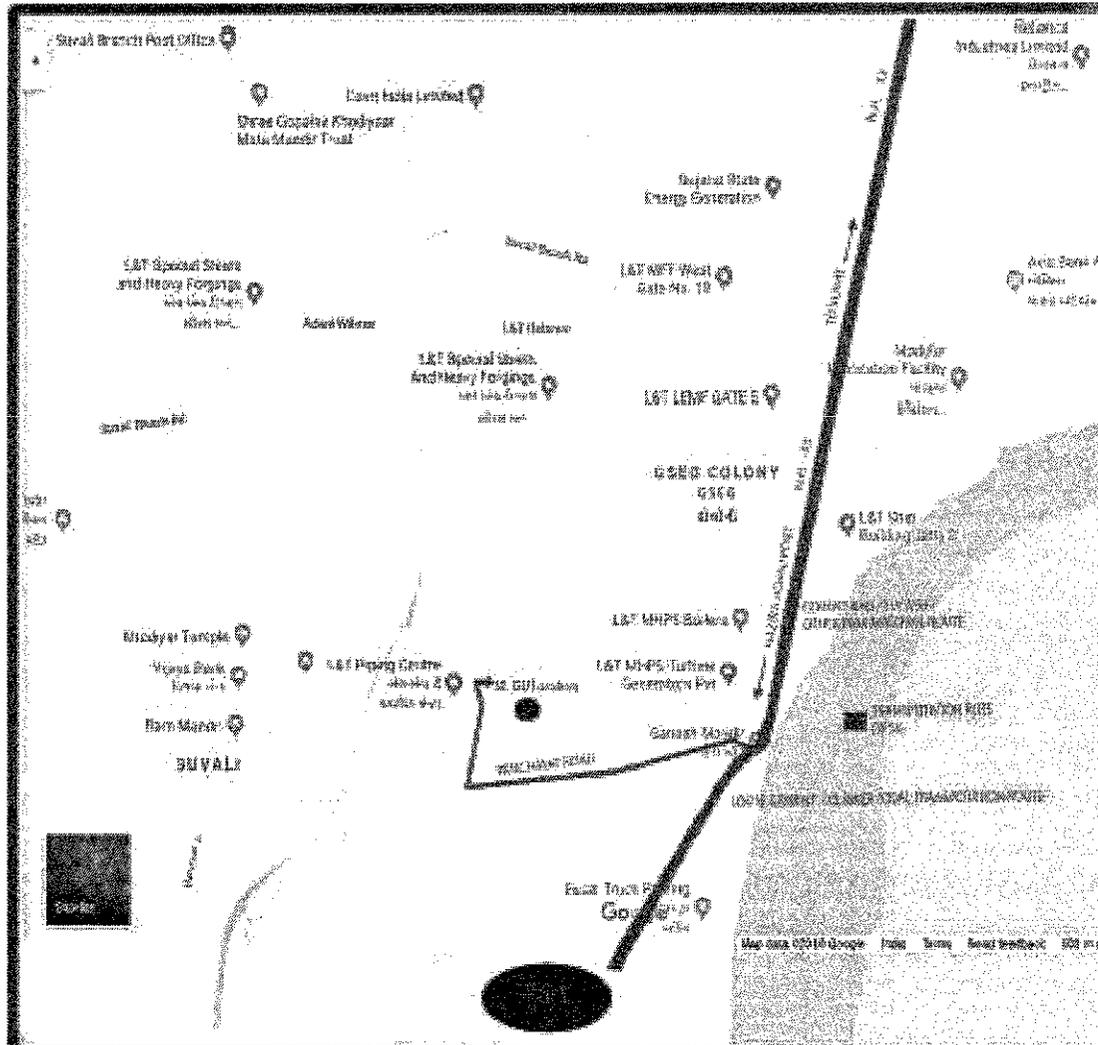


L&T Boundary

MAP SUBMITTED BY SUVALI -SHOWING DISTANCE BETWEEN SUVALI AND SIL PLANT- PAGE 346 OF COMMITTEE REPORT



### 3. Submit raw material and product transportation route, its impact on surrounding area and mitigation measures. Compliance



- ❑ Total 12,304 TPD raw-material & finished goods will be transported.
- ❑ **62% of the total in and out material will be handled on the road between Port to SIL Location.**
- ❑ 363 No. of vehicle (Truck/Day) required for transportation of materials.
- ❑ Out of total 363 No. of vehicle,
  - ❑ 223 No. of vehicle (Truck / Day) will move on the road between Port to SIL Plant (Opposite site of L&T Hazir).
  - ❑ Only 140 No. of vehicle (Truck / Day) will move on the road between SIL Plant to NH towards Surat.



Slide - 30



Figure 11. Tri-Point at L&T Piping Centre near proposed Site

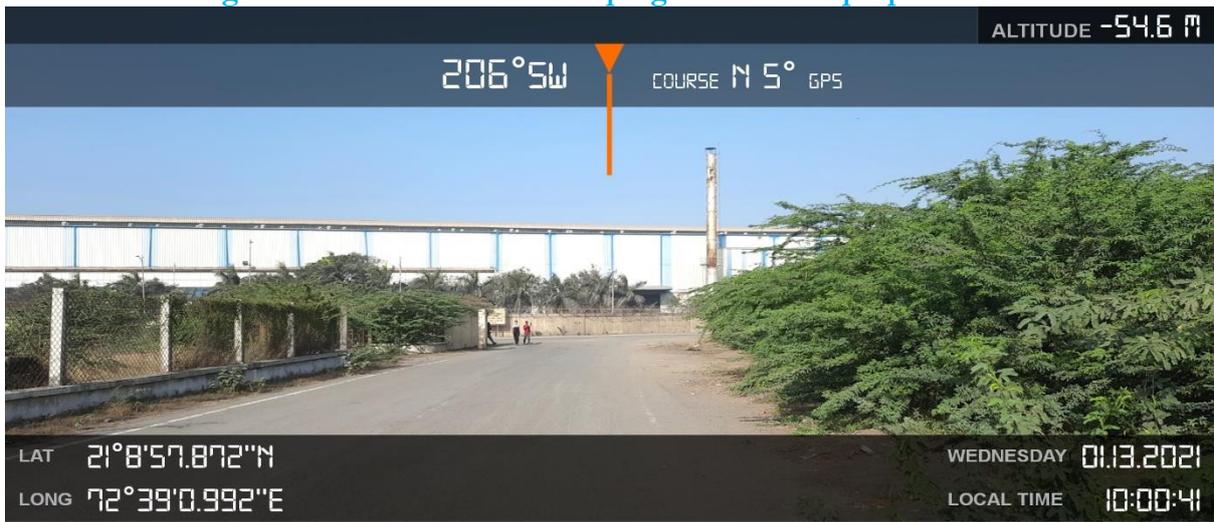


Figure 12. Road around the Proposed Site



Figure 13. Approach Road Near L&T Piping centre

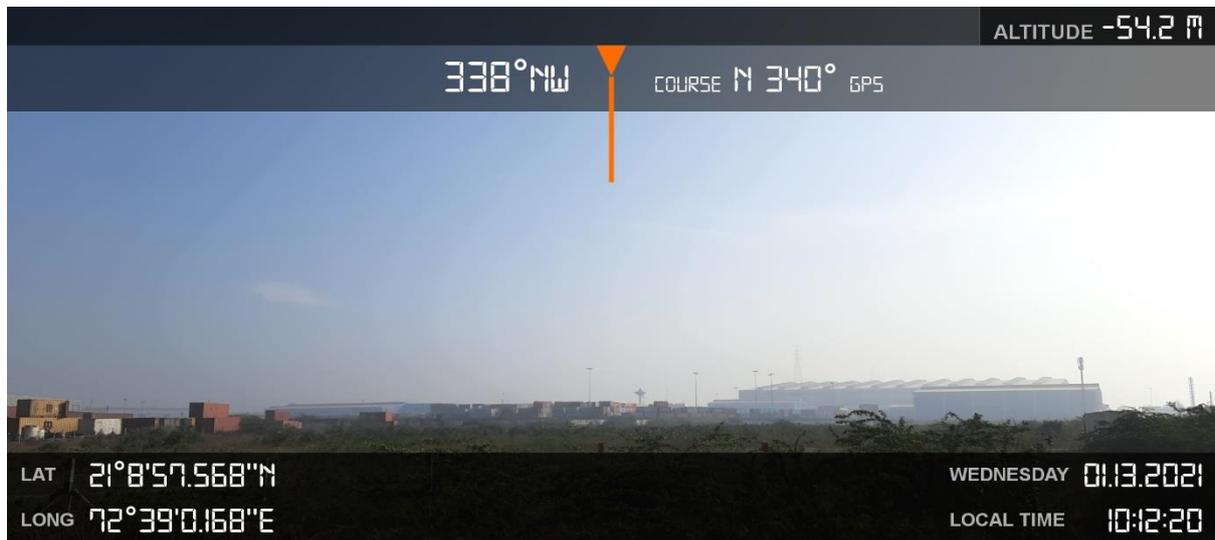


Figure 14. View of Proposed Site and nearby Industries



Figure 15. Tri-Point on Approach Road towards linking to NH-6 (Old NH-53)



Figure 16. Current Scenario of Approach Road linking to NH-6 (Old NH-53)– will be utilized for Material Transportation

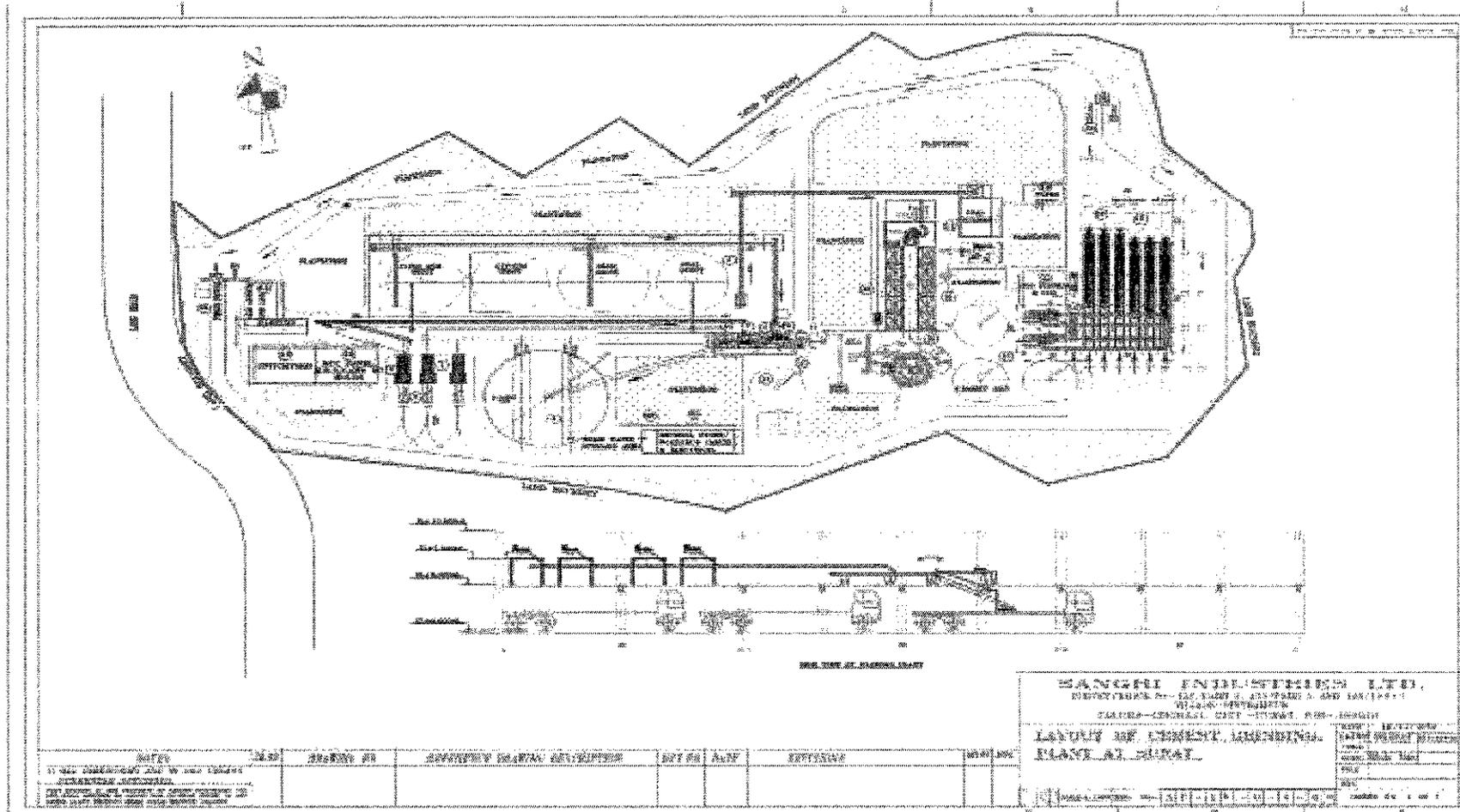


Figure 17. Current Scenario of Panchayat Road Linking to Suvali Village





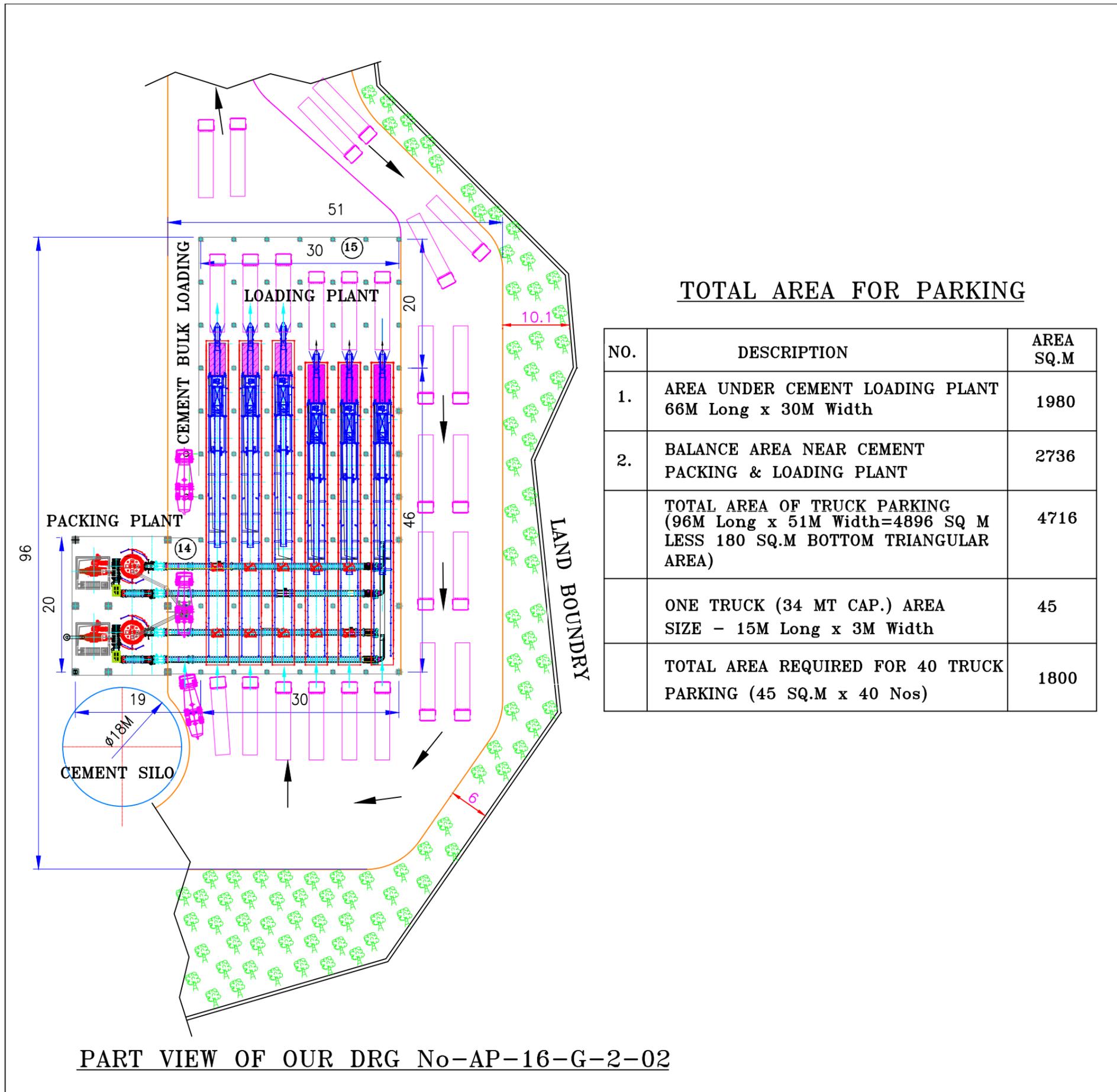
## Parking Arrangement within Plant Premises :



Looking to the in & out flow materials from the plant, SIL has made provision for parking of 40 trucks within the plant boundary below and near the Packing Plant.



Slide - 37



## Traffic Impact and Mitigation Measures

The material and finished product quantity along with number of trucks required as below -

S.No.	Raw Material & Product	Quantity Million TPA	Quantity TPA	Quantity TPD	Source	Mode of Transport	No. of Vehicles (Truck/day)
1.	Clinker	2.0	20,00,000	6061	Captive	Sea	184
2.	Additives like Gypsum, Fly Ash, Slag				Purchase	Road	
3.	Fuel	0.06	60,000	182	Purchase	Road	
4.	Cement	2.0	20,00,000	6061	Captive	Road/Sea	179
<b>Total No. of Trucks Required</b>							<b>363</b>

The clinker/material will come from sea route and from the seaport it will be transported using truck of 34-ton capacity with 4 axles. As per S.O. 3447(E) dtd 16<sup>th</sup> July 2018 of MoEF&CC ([https://morth.nic.in/sites/default/files/Advisory\\_regarding\\_revision\\_of\\_safe\\_axle\\_1.pdf](https://morth.nic.in/sites/default/files/Advisory_regarding_revision_of_safe_axle_1.pdf)) for Maximum safe Axle weight of Truck/trailers, weight carrying upto 36 tons, safe axles in rigid truck required is 4.

The equivalent PCU factor of truck or bus (fast moving) is 2.2 PCU in 5% composition of vehicle type in traffic stream and 3.7 PCU in 10% composition of vehicle type in traffic stream as per IRC guideline 106-1990 (<https://thelibraryofcivilengineer.files.wordpress.com/2015/09/irc-106-1990-guidelines-for-capacity-of-urban-roads-in-plain-areas.pdf>).

We have taken average of two values (2.95 say 3) as the traffic composition of approach road is between 6% to 7%. Hence the Total PCU will be 363 x 3 = 1089 per day or 45 PCU per day. In worst case scenario, we have taken traffic of 48 PCU per hr to be added on existing roads. Considering the same value, we have prepared the Traffic Impact assessment (TIA) report additionally for approach road (Panchayat Road) for the assessing the traffic scenario and impact with proper mitigation measures.

### Modified Traffic Scenario in case of 48 PCU and LOS

S.No	Road	Increased PCUs	Modified V	C	Modified V/C Ratio	Modified V/C Ratio
1.	<b>National Highway 6</b>	48*60%= 29	1421+29 = 1450	3000	0.48	C
2.	<b>State Highway 168</b>	48*40%= 19	743+19= 762	1250	0.61	D
3a.	<b>Approach Road/ Panchayat Road*</b>	48	190+48= 238	1250	0.19	A
3b.				900		0.26

However, as per new recommendations of IRC (<https://thelibraryofcivilengineer.files.wordpress.com/2015/09/irc-sp-41.pdf>), the equivalent PCU factor for 4-6 Axle Truck/Trailer (fast moving) vehicle is 4.5. The modified equivalent PCU for proposed project will be as follows:

No. of trucks required per day = 363

Equivalent PCU factor for 4-6 Axle = 4.5

PCU per day for 363 Trucks =  $363 \times 4.5 = 1633.5$  per day or 68.06 say 68 PCU per hr. The modified traffic scenario considering 68 PCU per hr presented in table below:

### Modified Traffic Scenario in case of 68 PUC and LOS

S.No	Road	Increased PCUs	Modified V	C	Modified V/C Ratio	Modified V/C Ratio
1.	<b>National Highway 6</b>	$68 \times 60\% = 41$	$1421 + 41 = 1462$	3000	0.48	C
2.	<b>State Highway 168</b>	$68 \times 40\% = 27$	$743 + 27 = 770$	1250	0.62	D
3a.	<b>Approach Road/ Panchayat Road*</b>	68	$190 + 68 = 258$	1250	0.21	B
3b.				900		

For considering modified PCU factory of 4.5, the LOS value of Approach road / Panchayat Road (Sr. No. 3.a) will change from A to B i.e. Excellent to Very Good.

In this scenario, as mitigation measure the impact can be further reduced by reutilizing the trucks of clinker for cement disptach to the sea route. As per the present market condition, about 118 trips can be reutilized (same truck will be used for clinker in up and cement in down) which will negate approx. 20 PCU per hr (actual 22). Thus only  $68 - 20 = 48$  PCU per hr will be the net impact as per the previous scenario of traffic.

#### Mitigation Measures of Dust Pollution:

- More than 33% green belt in three tiers as per MoEF requirement will be developed by planting local species with consultation of Forest department with some fruit bearing and medicinal trees, along periphery within the premises to prevent the impact of vehicular emission in the nearby areas.
- Raw material /finished product will be transported in covered trucks/trippers.
- Fly ash will be transported in bouser.
- Paved roads and concrete flooring will be provided in activity area.
- Speed of vehicle will be limited to 10 kmph.
- Sweeping machine will be provided for road and floor cleaning as abundant precaution.
- Water sprinkling will be done in non-process area.
- Valid PUC trucks will be deployed for transportation.

- To avoid accidents, the speed of vehicles will be minimum in nearby areas.
- Speed breakers are recommended near the proposed project on both way (up & down).

### **Mitigation Measures of Noise Pollution**

- Periodic vehicle inspection
- The trucks will shortly go into regular revenue service, to uncover and correct any operating or maintenance problems which might arise from the techniques applied.
- Regular vehicle overhauling and maintenance
- Training to drivers for awareness about consequences of noise pollution.
- Contra-noise - installing speakers in engine compartment to cancel out engine noise or electronic mufflers for exhaust noise.
- Open-graded asphalt pavement material for tire noise reduction
- Speed limit reduction in certain neighbourhoods
- Banning truck operation at certain urban streets.
- Enforcing sufficient right-of-way distances.
- Establishing 3 tier greenbelt within premises and avenue plantation along the approach road to reduce noise levels at receptor locations.
- Changes in vertical or horizontal alignment, so that the transportation facility avoids noise sensitive areas.

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## Gujarat Pollution Control Board

Regional Office,  
Belgium Square, Silver Plaza Complex, Opp. Linear Bus Stand,  
Ring Road, Surat -395 003  
Website: [www.gpcb.gov.in](http://www.gpcb.gov.in)

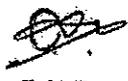


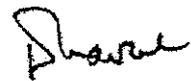
A statement showing participants present during the public hearing is enclosed as Annexure A.

A statement highlighting issues raised by the participants and responded to by the representative of the applicant during the public hearing in English and Gujarati Languages are enclosed as Annexure B and B1 respectively.

Copies of responses received in writing from other persons having plausible stake and written representation received before and during Public Hearing in environmental aspects are enclosed herewith collectively as Annexure C-1 and C-14, the replies by applicant to the same are enclosed herewith collectively as Annexure D-1 and D-14.

Place: Project Site,  
M/s. Sanghi Industries Ltd.,  
Survey No. 125/1, 125/2,  
126/1+2+3, Vill:  
Shivrampur, Ta: Choryasi,  
Dist: Surat, (Gujarat)

  
P.U. Dave  
Regional Officer,  
GPCB, Surat  
as Representative of  
the Member Secretary,  
GPCB

  
Dr. Dhaval Patel (IAS)  
Collector and  
District Magistrate,  
Surat

Date: 22/03/2019

- Encl: 1 Annexure A, B, B1, C-1 to C-14 and D-1 to D-14 as above.  
2 Video DVD of public hearing

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REGIONAL OFFICE, SURAT  
**GUJARAT POLLUTION CONTROL BOARD**

338, Belgium Square, Opp. Linear Bus Stand, Ring Road, SURAT-395003



ANNEXURE - A

A statement showing participants present during the public hearing

As per the Ministry of Environment and Forests, Government of India, New Delhi, vide its notification no. S.O.1533 (E) dated 14/09/2006 and its subsequent amendment S.O.3067 (E) dated 1<sup>st</sup> December 2009, Public Hearing has been fixed for the following project covered under CATEGORY "B" of M/s Sanghi Industries Limited for proposed establishment of Standalone Grinding Unit (2.0 Million TPA) with bulk & bag packing plant.

The statement showing Participants present during public Hearing held on 22.03.2019 at 11:00 a.m. at project site of M/s. Sanghi Industries Limited, Survey No: 125/1, 125/2, 126/21+2+3, Village: Shivrampur, Tal: Choryasi (Gujarat), is as under:

ભારત સરકારના વન અને પર્યાવરણ મંત્રાલય, નવી દિલ્હીના જાહેરનામા ક્રમાંક :એસ.ઓ. ૧૫૩૩(ઇ) તા. ૧૪-૦૯-૨૦૦૬ અને તેના પછીના સુધારા ક્રમાંક એસ.ઓ. ૩૦૬૭ (ઇ) તા. ૦૧-૧૨-૨૦૦૯ અનુસંધાને મેસર્સ સાંધી ઇન્ડસ્ટ્રીઝ લીમીટેડ, સર્વે નં. ૧૨૫/૧, ૧૨૫/૨, ૧૨૬/૧+૨+૩, ગામ: શિવરામપુર, તા. ચોર્યાસી, જિલ્લો. સુરત દ્વારા સ્ટેન્ડલોન ગ્રાઇન્ડીંગ યુનિટ (૨.૦ મિલિયન ટી.પી.એ) સાથે બલ્ક અને બેગ પેકીંગ પ્લાન્ટના સ્થાપન માટેની અને જે કેટેગરી "બી" માં આવરી લેવાયેલ છે તેના અનુસંધાનમાં સુરત જિલ્લા માટે લોક સુનાવણી રાખવામાં આવેલ છે.

તા. ૨૨/૦૩/૨૦૧૯ ના રોજ સવારે ૧૧:૦૦ કલાકે, પ્રોજેક્ટ સાઇટ પર, મેસર્સ સાંધી ઇન્ડસ્ટ્રીઝ લીમીટેડ, સર્વે નં. ૧૨૫/૧, ૧૨૫/૨, ૧૨૬/૧+૨+૩, ગામ: શિવરામપુર, તા. ચોર્યાસી, જિલ્લો. સુરત (ગુજરાત) ખાતે યોજાયેલ લોક સુનાવણી ધરમ્યાન હાજર રહેલા લોકોની યાદી નીચે મુજબ છે.

Sr.No. ક્રમાંક	Name and Designation નામ અને હોદ્દો	Organization/Village સંસ્થા/ગામ	Signature સહી
1.	P.B. Chaudhary	LIT	
2.	Dr. Jayant Patel	LIT	
3.	Aruni Jethi	LIT	
4.	DIPAK CHAUDHARY	LIT	

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REGIONAL OFFICE, SURAT  
**GUJARAT POLLUTION CONTROL BOARD**  
 338, Belgium Square, Opp. Linear Bus Stand, Ring Road, SURAT-395003



Sr.No. શ્રીલ	Name and Designation નામ અને ડીઝી	Organization/Village સંસ્થા/ગામ	Signature સહી
5.	Raj. Naik manager. Adurim	LBT	
6.	Hiren Shah Asst. Manager	LBT	
7.	Jayesh Rajvar	Secretary HAIA	
8.	Pranvata Sheth	Senior Civilian	
9.	Amardeep Desai	RIC	
10.	S.S. Dubey	Surat	
11.	Brijesh Bhai	Surat	
12.	Guddu Jadar	Bala Ji	
13.	Raj Kumar	Baba Ji	

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14	ગામ અલ વડે	સુરત	
15	Visham K. Lumbhani	SURAT	
16	Manthun Patel	SURAT	
17	Mogal Patel	સુરત	
18	Yogesh Patel	SURAT	
19	Vinod Vansur	SURAT	
20	Chetan Mistri	SURAT	
21	Manoj Vaghurshi	SURAT	
22	Durshan Jari	CBT SURAT	

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23	SAMARJEET SINGH) Safety officer	Mora	
24	Patel Surendra N. Businessman	Surendra Adigan	
25	Patel Harsan J. Businessman	Surat-Pal	
26	Patel Kishan R. Businessman	Surat - Adigan	Patel K.R.
27	Mamish Khandya	Surat	
28	Ranga Patani	Surat	
29	Sarant Gupta	Surat	
30	Pornal Patel	Surat	
31	Shubhendraji Mampda	Kotamb Sai's Water & Gas management	

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32	Nisarnjan T. Patel	KVSNS. Haveli	
33	Shri Kandas C. Chatur	"	
34	Manoj G. Patel	KVSNS - Haveli (MGO)	 9825966971
35	Darout Bhai Patel	દાવુતભાઈ	
36	Ginshikhai D. Ahir	Suvadi	
37	Bankim D. Patel	Rajgera	
38	Mehul J. Patel	L & T	
39	Chayali. A. Patil	Jungar	
40	Kati H. Inpara	Jungar Green quarter	

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41	Hemanshi Patel	Junagum	
42	Ashish Pandey	Sai infotech	
43	Tejas K. Prajapati	Sai Infotech	
44	Vasant F. mudi	DIC Surat Sanghi kade Junagum	
45	M. V. Muchhad	DIC Surat -11-	
46	Mandaj. I. Desai	SURAT.	
47	Sumit Desai	JUNAGRAM TCM	
48	Mehul Desai	SURAT. AHPPL	
49	Pratik Bhandla	SURAT AHPPL	

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50	સુપરિન્ટેન્ડિંગ ઇન્જિનિયર વિદે.	સુરત	[Signature]
51	ચેમિકલ મેનજર વડે	સુરત	[Signature]
52	ઇન્જિનિયર મેનજર વડે	(સુરત) ૨	[Signature]
53	પરી રિસર્ચ ઓફિસર	સુરત	પરી રિ. ઓફિસર
54	પી.એ. સી. ઓફિસર	સુરત	[Signature]
55	ઇન્જિનિયર ઓફિસર	સુરત	[Signature]
56	ઇન્જિનિયર ઓફિસર	સુરત	[Signature]
57	ઇન્જિનિયર ઓફિસર	સુરત	[Signature]
58	ઇન્જિનિયર ઓફિસર	સુરત	[Signature]

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59	ગુજરાત પોલ્યુશન કંટ્રોલ બોર્ડ	ગુજરાત	B. S. Shah
60	સુભાષી વા. ૪૨૬	૦૨૦૧૦	જુલુ ૧૧.૫.૨૧૦૫
61	સુભાષી સુભાષી વા	૦૨૦૧૦	<del>જુલુ</del> સુભાષી મુરુ ૦૨૦૧૦
62	સુભાષી સુભાષી વા	૦૨૦૧૦	સુભાષી મુરુ ૦૨૦૧૦
63	સુભાષી સુભાષી વા	૦૨૦૧૦	સુભાષી મુરુ ૦૨૦૧૦
64	સુભાષી સુભાષી વા	૦૨૦૧૦	સુભાષી મુરુ ૦૨૦૧૦
65	સુભાષી સુભાષી વા	૦૨૦૧૦	સુભાષી મુરુ ૦૨૦૧૦
66	સુભાષી સુભાષી વા	૦૨૦૧૦	સુભાષી મુરુ ૦૨૦૧૦
67	સુભાષી સુભાષી વા	૦૨૦૧૦	સુભાષી મુરુ ૦૨૦૧૦

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REGIONAL OFFICE, SURAT  
GUJARAT POLLUTION CONTROL BOARD



338, Belgium Square, Opp. Linear Bus Stand, Ring Road, SURAT-395003

Sr.No. ક્રમ નં	Name and Designation નામ અને સ્થાન	Organization/Village સંસ્થા/ગામ	Signature સહી
68	R. N. Z. S. M. R. V. S. H.	વિરગામ	H. P. O. T.
69	Santosh C. Valvi	Mohca	S. Valvi
70	Dipak D. Patel	Damley	D. Patel
71	Chandrabhan D. Patel	ડામલે	C. Patel
72	Jayesh Patel	Surat	Jay.
73	2221 2222 2224	2151737	2221 2224
74	Ankit Patel	Damka	A. Patel
75	Alesh Patel	Damka	A. Patel
76	Bijesh Patel	Vansva	B. Patel

(31)

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**GUJARAT POLLUTION CONTROL BOARD**  
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Sr.No. ક્રમિક	Name and Designation નામ અને હોદ્દો	Organization/Village સંસ્થા/ગામ	Signature સહી
77	ASHOK	Junagadh	ASHOK
78	Ashok Patel	Junagadh	[Signature]
79	Suresh . S. Patel	Danvan	[Signature]
80	Haresh . M. Patel (Patel)	Junagadh	H.M. Patel
81	Dhruv . S. Patel	Junagadh	[Signature]
82	Ashish . H. Patel	Junagadh	[Signature]
83	AKSHAY D. PATEL	JUNAGADH	A.D.P.
84	Deep M. Patel	Junagadh	[Signature]
85	AJAY . N. Patel	JUNAGADH	A. N. Patel

(32)

REGIONAL OFFICE, SURAT  
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Sr.No. ક્રમ	Name and Designation નામ અને ડીઝી	Organization/Village સંસ્થા/ગામ	Signature સહી
86	Kopil P. Patel	JUNUGUM	K. P. Patel
87	Nitesh B. Patel	DAMKA	N. B. Patel
88	Kuldev H. Patel	MORA	<u>Kuldev</u>
89	સુરજીવન વાઘેલા	મોરબી	A. S. V.
90	Dalsukh Khari	JUNASAM	<u>Dalsukh</u>
91	Prakash D. Patel	Bhettai	<u>P. D. Patel</u>
92	M. S. H. Shrivastava	allad Surat	<u>M. S. H. Shrivastava</u>
93	અમરજીવન જ. વાઘેલા	ગામી	<u>Amrjivan</u>
94	શુભાંશુ વા. વાઘેલા	ગામી	<u>Shubanshu</u>

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Sr.No. ક્રમિક	Name and Designation નામ અને ડીઝી	Organization/Village સંસ્થા/ગ્રામ	Signature સહી
95	Hirap Patel	Junagan	
96	Shri. C. Patel	Dam Ka	
97	Chiray Patel	Vansva	
98	Diyesh Patel	Vansva	
99	Prina. B. Patel	Junagan	
100	Kamlesh bhai.	Dam Ka.	
101	DIRESH .A .PATEL	Junagan	D.A.PATEL
102	Mansi S. Patel	Junagan	M.S. Patel
103	Manesh. A. Patel	Junagan	M.G. PATEL

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REGIONAL OFFICE, SURAT  
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Sr.No. ક્રમિક	Name and Designation નામ અને ડોલર	Organization/Village સંસ્થા/ગામ	Signature સહી
104	અમીતક વાપાઈ	હાજીરા	અમીતક
105	વિમલ. D. પટેલ	બાલોઈ	
106	સાનેશ. H. પટેલ	"	S.H. Patel
107	Dharmesh m. Patel	"	
108	Nilesh. B. Patel	જુઓગરા	NB Patel
109	Patel chetala K	Hazira	Patel
110	Poonow. J. Patel	Hazira	
111	mahesh. R. Patel	Bhatlai	
112	Himmat. N. Patel	Bhat lai	

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REGIONAL OFFICE, SURAT  
**GUJARAT POLLUTION CONTROL BOARD**  
 338, Belgium Square, Opp. Linear Bus Stand, Ring Road, SURAT-395003



Sr.No. ક્રમિક	Name and Designation નામ અને હોદ્દો	Organization/Village સંસ્થા/ગામ	Signature સહી
113	Aminath. @ Patel	EMAGI	
114	Ajog Ru Sar	ICHADPUKE	
115	SANJEEV KUMAR	HAZIRA	
116	PRAMOD S. PATEL.	JUNAYAM SHIVRAM PUR	
117	Hinal Patel	Shivrompon	



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**ANNEXURE – B (English)****A statement showing issues raised by the participants and responses by the representative of the applicant during the public hearing**

As per the provisions of Notification No. S.O. 1533(E) dated 14/09/2006 and its subsequent amendment S.O. 3067(E) dated 01/12/2009, Ministry of Environment, Forest & Climate Change, Government of India, New Delhi, public hearing is conducted for **M/s. Sanghi Industries Ltd.**, for Setting up Standalone Grinding Unit (2.0 Million TPA) with Bulk & Bag Packing Plant, at Survey No. 125/1, 125/2, 126/1+2+3, Vill: Shivrampur, Ta: Choryasi, Dist: Surat (Gujarat). The Public Hearing held on 22-03-2019 at 11:00 hrs. at Project Site, Survey No. 125/1, 125/2, 126/1+2+3, Vill: Shivrampur, Ta: Choryasi, Dist: Surat (Gujarat). This project is covered under Schedule-3(b), Category "B" of above referred Notifications. Public Hearing is conducted under the chairmanship of **Shri Dhaval Patel (IAS)**, Collector & District Magistrate, Surat.

**Shri P.U.Dave**, Regional officer, Gujarat Pollution Control Board, Surat, representative of Member Secretary GPCB; welcomed all the participants who remained present in the Public Hearing. He outlined the various provisions of the Notification and briefed about the procedural details for conducting this Public Hearing, including actions taken by GPCB for wide publicity of this Public Hearing and the advertisement published earlier in the local daily newspaper. He announced that as per the provision of Notification, only affected persons will be allowed to make their representation in the Public Hearing while others having plausible stake may submit their representation in writing which would be included in proceedings. He also made it clear to the gathering that the Committee is responsible only for preparation of proceedings of the meeting covering all the concerns raised during the Public Hearing.

He then opened the forum for public hearing with due permission of Chairman of Public Hearing and invited the Project Proponent to make the presentation of their project in local language.

Then representative of **M/s. Sanghi Industries Ltd.**, gave brief introduction of the company and their technical representative welcomed all and gave introduction of the project and presented the technical information in local language regarding the project, company introduction, impact on environment due to proposed project, environmental management system, mitigation measures & socio economic responsibilities.

After the presentation made by project proponent, Regional Officer, GPCB with due permission of Chairman of Public Hearing opened the forum for representations/suggestion/objections/questions from the locally affected people.

The statement showing issues/suggestions/objections/opinion raised by participants during the Public hearing and responded to by representative of the project proponent during the public hearing is as under.

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Sr. No.	Name and Address	Point Represented and/or written submission	Replies by Concerned Project Proponent
1.	Shri Bhagubhai Manibhai Patel, Sarpanch, Vill : Shivrampura, Ta : Choryasi, Dist. : Surat	<ul style="list-style-type: none"> <li>• He represented by stating that the project is going to be established in between L&amp;T compound in private land. Which method will be adopted for Storage of raw material like coal, gypsum, clinker so that surrounding people and the employees of the company will not get affected by the dust?</li> <li>• How coal will be stored? As closed material handling system is proper because there is a possibility of fire.</li> <li>• Dust emission from stack or silo will be 5% to 10% up to how many kilometer will it effect?</li> <li>• What actions will be taken for dust emission from packing plant?</li> <li>• What actions will be taken for deposition of dust in cement plant, on the road and surrounding area?</li> </ul>	<ul style="list-style-type: none"> <li>• Raw material of the proposed project will be stored in closed yard and will be sent to the mill through closed belt conveyor. Hence, whole material handling system will be closed so there will be no issue of dusting.</li> <li>• Sprinkler System and Firefighting System will be installed in coal yard.</li> <li>• Air Pollution Control Equipment will be installed to control dust emission and it will be limited to company premises. Moreover, greenbelt will be developed so that no dust will be spread outside the premises.</li> <li>• Packing Plant of the proposed project will be totally automatic. Bag Filter will be installed for Material Handling System of packing plant as mentioned in the table which will cover transfer point. Dusting will be</li> </ul>

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		<ul style="list-style-type: none"> <li>• There is grinding furnace in the plant which will generate noise. How will it affect health of the surrounding people and employees of the plant?</li> <li>• How many percentage of local people will be employed in the proposed project? Give in writing. Give priority to such local people who are technician, welder, fitter, operator or for any other employment.</li> <li>• This company will bring its raw material from Adani Port. At present 700-800 trailers are running on 20-30 feet road. There is only one approach road for</li> </ul>	<p>terminated due to installation of bag filter.</p> <ul style="list-style-type: none"> <li>• Cement grinding process is being carried with two technologies. One of the technology is Ball Mill technology in which grinding media remains in the mill which generates much noise. Cement grinding mill of the proposed project is based on Vertical Roller Technology in which no grinding media is used. Table centrally rotates and grinding is carried out with three rollers' press. Due to this new technology level of noise pollution will be negligible.</li> <li>• Your suggestion is welcomed. Our approach will be of giving priority to locals for employment and priority will be given to skilled and semi-skilled workers as per their qualification. Utmost preference will be given to locals for employment.</li> <li>• Our requirement is of 2 Million Ton per annum and it will be transported once in a month. So it will not create any effect. Though we will follow speed limit,</li> </ul>
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		<p>L&amp;T company which is not having a traffic circle. So there is possibility of accident. Road should be extended and circle should be made from Hajira Highway to L&amp;T Company. 2 million ton material will be brought to this plant and roads are not sufficient for the same. What action company will initiate?</p> <ul style="list-style-type: none"> <li>• If any employee is recruited from outside in future security and safety aspects shall be taken by the company also shall take care that no antisocial activity being carried out.</li> <li>• Development of greenbelt is shown only within company premises and pollution spreads outside the campus as well. What action company will initiate for conservation of environment surrounding villages?</li> <li>• NavChetan Sports Academy has been approved by the Government of Gujarat in Shivrampur and hostel facility has to be augmented in the said</li> </ul>	<p>road site and traffic rules.</p> <ul style="list-style-type: none"> <li>• We will carry out plantation in our internal premises and budget is also allocated for avenue plantation in CER for the same. We will clean our internal roads with the help of sweeper machine.</li> <li>• It will be worked out in coordination and discussion with villagers.</li> </ul>
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		Academy. How much fund will be allocated in CSR for the same?	
2	Shri Pravinbhai Patel, Member Taluka Panchayat, Village : Bhatlai, Dist. : Surat	<ul style="list-style-type: none"> <li>• He represented by stating that he has been president of Hajira Kantha Vistar Samiti for the last 15 years and has welcomed many industries in Hajira and have experienced many positive and negative incidences.</li> <li>• There is a cement project beside Reliance Company. They stated that their conveyor belt will be close system. But it is not shown whether the same is open or close in the proposed project?</li> <li>• Company reported that they will plant 4000-5000 trees. But they have not planted even 10 to 50 trees till date. It is company's responsibility to take care of humans as well.</li> <li>• We should be compensated because we sacrifice, we suffer pollution, we suffer accident. We are benefited from Reliance Company. We welcomed their CPP plant. There is</li> </ul>	<ul style="list-style-type: none"> <li>• We welcome your suggestion of greenbelt development. It is responsibility of all of us conserving environment along with industrial development. We are new to this area and we are committed to develop the greenbelt with your suggestions.</li> </ul>

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		<p>not pollution from the CPP Plant.</p> <ul style="list-style-type: none"><li>• Cement factory have recruited 85 persons from outside and not even our 4 persons recruited. So we request the company to adhere to their commitment. Country will progress due to the industries but basic needs of the people should be satisfied.</li><li>• We welcome that company will use recycled water. So no water will be discharged outside the premises. As per your statement Rs.482 Lakh per year will be spent in CER activities. Will it be utilized or not is a Question.</li><li>• I request Hon'ble Collector that plantation should be carried out in barrier land around Notified Area. Because it is necessary to reduce the pollution.</li><li>• We asked tree guards from office of Notified Area for planting trees in the villages. But they insisted to contact SUDA as it does not falls under</li></ul>	
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		<p>their scope. It is the responsibility of Notified Area Committee.</p> <ul style="list-style-type: none"> <li>• NTPC have grown trees in 10 acre of land.</li> <li>• Very good rain falls in Navsari area. which is at the distance of 40 Kms. and rainfall in Hajira is much lesser. What is the reason for the same? Company should do something.</li> </ul>	
3	<p>Shri Dharmendra Bhikhubhai Patel Sarpanch, Vill: Hazira, District: Surat</p>	<ul style="list-style-type: none"> <li>• He represented that we welcome this plant and we have also welcomed many large companies. But as time passes, all the companies do not adhere to their commitments.</li> <li>• Company should take care of local issues such as water, pollution, education and employment.</li> </ul>	<ul style="list-style-type: none"> <li>• People of nearby villages of the vicinity of the company will be preferred for employment according to their qualification and skill.</li> </ul>
4	<p>Shri Dhansukhbhai Kantibhai Patel Village: Kawas, Ta: Choryasi, District: Surat</p>	<ul style="list-style-type: none"> <li>• He introduced him and represented that company is established after the public hearing and then it has to be inspected by GPCB. There are 10 to 12 large companies in the Hazira area. The equipment which are installed by the company, the report for the same should be sent to the</li> </ul>	<ul style="list-style-type: none"> <li>• We will cooperate fully according to planning of our Budget for medical facilities.</li> </ul>

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		<p>village panchayat. So that people know that in which quality of air and land they are living.</p> <ul style="list-style-type: none"> <li>• I like the hospitality of this company and it is sad that there are large companies in our area have millions of turn over's. And the Government of Gujarat gets income from the ESIC of Hazira Industries, but even there is no small hospital in our area. Due to which 10 to 12 people die every year and there is no facility of 108 in our area. So we request that 108 ambulances should be placed by the Sanghi Charitable Trust so that people get immediate treatment.</li> <li>• Dhulia to Hajira Highway has been fixed as but the road from ONGC cross Road to Kawas is more important which has not been built yet. It has been stopped by petition and stay so I request you to take necessary steps for the same.</li> </ul>	
5	Shri Chhotubhai Ramubhai Patel, Sarpanch Bhatlai, President Hazira Katha Vistar, Vill.: Bhatlai,	<ul style="list-style-type: none"> <li>• He represented that, rules of pollution are not followed properly, which should be taken care off. Regarding employment, give us in writing. In</li> </ul>	<ul style="list-style-type: none"> <li>• Regional Officer replied that, I assure you that if I will get the complaint regarding the non-compliance of the rules for prevention of pollution I</li> </ul>

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	Ta.: Choryasi, Dist.: Surat	Hazira, Shivrampura water problem is very high. It is our demand to provide water facility through canal to Junagam, Rajgiri and Suvali by the company or any other.	<p>will take immediate action against the responsible company as per the provisions of the environmental laws.</p> <ul style="list-style-type: none"> <li>Company's representative replied that, air pollution control equipment is to be installed for the operation phase will control the pollution and monitoring report will be forwarded to the competent authority. Planning has been made for control of pollution in the project, its regular monitoring will be carried out and report will be submitted to the authority.</li> </ul>
6	Kum. Avani Joshi Environmental Engineer, Representative of L&T Company, Dist.: Surat	<ul style="list-style-type: none"> <li>She represented that, beside this company near the gate no. 20, under the project of Government of India there is armor system project, in which A.S.C. K-9 Vajra, self propelled gun manufacturing is in process and the same will be in process for further more years. What will be company's provision being a grinding unit other than EMS system, if the issue regarding the quality of the above mentioned project arise due to the dust particle spreading out of company or due to air pollution.</li> <li>It is mentioned that transportation of the fly ash and slug will be carried out by road. So from which thermal power plant will</li> </ul>	<ul style="list-style-type: none"> <li>Regarding the issue, as mentioned in E.M.P. prevention and dust pollution control steps which is required to be taken will be taken. Continuous monitoring will be carried out to prevent the pollutants to spread beyond company's boundary.</li> <li>Fly ash will be taken from nearby company's captive power plant and Ukai thermal power plant. Slag will be sourced from</li> </ul>

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		<p>you bring the same.</p> <ul style="list-style-type: none"> <li>As a fuel pet-coke, coal and lignite is mentioned, so out of that which fuel will be used more?</li> </ul>	<p>nearby steel company.</p> <ul style="list-style-type: none"> <li>We will use mix fuel in which there will be 10% pet-coke, 40% lignite and remaining will be imported coal.</li> </ul>
7	<p>Shri Dipak kumar Dhansukhbhai Patel, Vill.: Damka, Ta.: Choryasi, Dist.: Surat</p>	<ul style="list-style-type: none"> <li>He represented that, as per the law of Gujarat government there is a rule to provided 80% employment to local people. In that 80% whole Gujarat is considered. Out of those 80% some percentage should be reserved by the company for the employment for the people of 10 k.m. radius.</li> </ul>	<ul style="list-style-type: none"> <li>We will give priority to the local people in employment in the company as per rules and regulations.</li> </ul>
8	<p>Shri Kalpesh Bhagubhai Patel, Vill.: Junagam, Ta.: Choryasi, Dist.: Surat</p>	<ul style="list-style-type: none"> <li>He represented that, we are welcoming the plant to be established here by the Sanghi Industries. But there is problem of employment over here since many times. So, I hope that employment to the local people will be given. Priority to the local people will be given for transportation and contract works.</li> <li>It is small plant and around 150 to 200 workers will be employed in it. We hope that, no obstacle will arise to the people residing nearby, there will be conservation of the environment and local people get the employment.</li> </ul>	<ul style="list-style-type: none"> <li>Company's representative replied that, your suggestion is welcome and priority will be given to the local in employment.</li> </ul>
9	<p>Shri Dhansukh B. Patel, Dy. Sarpanch, Vill.: Rajgari,</p>	<ul style="list-style-type: none"> <li>He represented that, company gives priority to the village in which it</li> </ul>	<ul style="list-style-type: none"> <li>All the villages are covered under the CER activity of the company.</li> </ul>

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	Ta.: Choryasi, Dist.: Surat	establish. There are 11 villages within the radius of 10 km from the company, it is our request to cover all those villages under the CSR activity and give priority to them.	
10	Shri M.H.Sheikh Ta.: Olpad, Dist.: Surat	<ul style="list-style-type: none"> <li>• He suggested that, CZMP are prepared for coastal belt. In Surat city there are 3% of trees of Gujarat state. Which is very low and the same condition is in SUDA too. Waste land in the Shivrampur should be allotted to any organization or Panchayat by the collector for development as a forest or 10 to 15 hector land in any village shall be selected and allotted legally for toddy plantation, as toddy trees are lost these days and today forest can be developed.</li> </ul>	
11	Shri Ramesh J. Patel, Hazira Katha Vistar Mahamantri, VIII.: Shivrampur, Ta.: Choryasi, Dist.: Surat	<ul style="list-style-type: none"> <li>• He represented that, this is cement factory and our residence is near to this plant. Proper steps to be taken to prevent the situation of this area to turn in future alike situation in Hazira due to establishment of plant over there. There should be solution of the pollution in the area. Junagam, Shivrampur, Suvali and Rajgari village didn't get canal water. Farming or animal husbandry which are main occupation over here can be carried out in this village only if the water is available in lake of</li> </ul>	<ul style="list-style-type: none"> <li>• Regional Officer informed to give representation for pollution and said that definite action will be taken. This is not proper forum for representation regarding SUDA but it will covered in the proceedings.</li> <li>• Company's representative replied that, high efficiency APCM will be installed and will be operated with regular maintenance. Even then whatever new technology will be available, company will upgrade and care will be taken to prevent</li> </ul>

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		village. These occupations are on the village of permanent close down. Animal fodders are not available here. Employment is not provided to local. Application to declare our village as Gametal is pending since many year which is not taken into consideration. So, it should be taken into consideration and our village to be declared as Gametal and inhabitant.	pollution.
12	Shri Pravinbhai Patel, Member of Taluka Panchayat, Vill.: Bhatlai, Dist.: Surat	<ul style="list-style-type: none"> <li>• He represented that, there are many industries in this area but if ESIC facility will be provided it will be better. ESIC have authorized some hospital accordingly hospital near to this area should also be authorized so that people can get immediate medical treatment.</li> </ul>	<ul style="list-style-type: none"> <li>• Regional Officer informed that, this is not proper forum for your representation but it will be covered in this proceedings.</li> </ul>
13	Shri Kalpeshbhai Bhaghubhai Patel, Vill.: Junagam, Ta.: Choryasi, Dist.: Surat	<ul style="list-style-type: none"> <li>• He represented that, ESIC file is pending since 11 year. We have demanded for allot the same in Suvali village. It is our request to construct fire safety station and big hospital.</li> </ul>	
14	Shri Deven Patel, Farmer of Shivrampur, Suvali and Bhatlai, Dist.: Surat	<ul style="list-style-type: none"> <li>• He represented that, we are welcoming Sanghi cement in this area. Employment opportunity will arise due to there will be Financial social development of surrounding villages.</li> </ul>	

Shri P.U.Dave, Regional Officer, GPCB, Surat informed to the people present and announced to ask the questions, if any for further information or give the suggestions regarding this project. As no

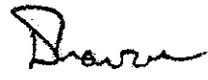
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further representation arose, he informed that, before the Public Hearing, the Board has received total Thirteen (13) written representations from (1) Shri Kalpesh B. Patel, Choryasi Taluka Congress Samiti, President, (2) Shri Hansmukh Vora, Amroli, Surat, (3) Shri Jasmatbhai Vidiya, Credai Surat, Chairman, Surat (4) Shri Hareshbhai Jivrambhai Patel, Shivrapur, (5) Shri Dilipbhai Manibhai Patel, Shivrapur, (6) Shri Prahladbhai Manibhai Patel, Shivrapur, (7) Shri Devenbhai Mafatlal Patel, Shivrapur, (8) Shri Harshadbhai Chhotubhai Patel, Kawas Group Gram Panchayat, Kawas, (9) Shri Bhagubhai Patel, Sarpanch, Shivrapur (Junagam) Gram Panchayat, (10) Smt. Reenaben Dhansukhbhai Patel, Sarpanch, Gram Panchayat Rajgari, Ta. Choryasi, (11) Shri Tulsibhai N. Patel, Gram Panchayat Damaka, (12) Shri Chhotubhai R. Patel, President, Hazira Kantha Vistar Vikash Sahakari Mandli Ltd. Kawas, Ta. Choryasi, and (13) Shri Dharmesh Mistry, Bharuch, which are covered in proceeding and during Public Hearing One (01) written representations from Shri Bhagubhai Patel, Sarpanch, Shivrapur (Junagam) Gram Panchayat, is received. Which are being enclosed as Annexure C-1 to Annexure C-14. The written replies given by the project proponent are enclosed as Annexure D1 to Annexure D14 in the proceedings.

Shri P.U.Dave, Regional Officer, GPCB, Surat with the due permission of the Chairman concluded with vote of thanks.

Place: Project Site,  
M/s. Sanghi Industries Ltd.  
Survey No. 125/1, 125/2,  
126/1+2+3,  
Vill: Shivrapur,  
Ta: Choryasi,  
Dist: Surat, (Gujarat)

  
P.U.Dave  
Regional Officer,  
GPCB, Surat  
as Representative of the  
Member Secretary, GPCB

  
Dr. Dhaval Patel (IAS)  
Collector and  
District Magistrate,  
Surat

Date: 22/03/2019

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**(Gujarati to English Translation C-4)**

Date : 15.03.2019

From :  
Shri Hareesh Jivrambhai Patel  
Village :Shivrampur

To,  
The Regional Officer  
Gujarat Pollution Control Board  
338, Belgium Square,  
Opp. Linear Bus Stand,  
Ring Road, Surat

Sub : Regarding public hearing of 2 million ton capacity standalone grinding unit of  
M/s:Sanghi Industries Ltd.

Respected Sir,

This is to inform you that we have been informed through daily newspaper 'Gujarat Mitra' dated 16.02.2019 about public hearing of upcoming project of grinding unit of Sanghi Industries Ltd. in Shivrampur.

Unit is situated at Moje :Shivrampur in Hazira Industrial Area and the area falls under 'Industrial area' in new development plan by SUDA. Many large and small industrial units are in operation around the upcoming project area through which villagers have got employment.

Villagers will get new opportunity of employment due to upcoming project of Sanghi Industries Limited.

Sanghi Industries will provide local employment and we welcome the upcoming project with the hope of social welfare work by the company.

Yours Faithfully,

Hareesh Jivrambhai Patel

(76)

(Gujarati to English Translation C-5)

Date : 13.03.2019

From :  
Shri Deelipbhai Manibhai Patel  
Village :Shivrampur

To,  
The Regional Officer  
Gujarat Pollution Control Board  
338, Belgium Square,  
Opp. Linear Bus Stand,  
Ring Road, Surat

Sub : Regarding public hearing of upcoming project of M/s Sanghi Industries Ltd.

Respected Sir,

This is to inform you that I own land in Shivrampur where the upcoming project of Sanghi Industries is going to be established which will increase opportunities of local employment and we welcome the upcoming project with the hope of contribution of the company in social welfare work. We wish continuous progress of the company.

Yours Faithfully,

Deelipbhai Manibhai Patel

  
TC

ANNEXURE - A - 11

o/c



LARSEN &amp; TOUBRO LIMITED

Larsen & Toubro Limited  
 Hazira - Central Services  
 Hazira Manufacturing Complex  
 Post: Dhatha, Surat 394 519  
 Gujarat, INDIA  
 Tel: +91 261 280 5000  
 Fax: +91 261 280 5050  
 www.Larsentoubro.com

To,  
 State Level Environment Impact Assessment Authority (SEIAA)  
 Gujarat Pollution Control Board,  
 Parvavaran Bhavan, Opp. Bij Nigam,  
 CHH Road, Sector 10A,  
 Gandhinagar - 382010

05/04/2019

Kind Attention: Public Hearing Cell

Reference: Letter Submitted to Regional Office, GPCB, Surat dated 04/04/2019 (Enclosed)

Sub: - Concerns for the proposed project of 2.0 Million TPA standalone Grinding unit with bulk &amp; bag packing Plant by M/s. Sanghi Industries Limited (SIL)

Dear Sir,

With reference to the subject matter, M/s. Larsen & Toubro Limited remained present in scheduled Public Hearing dated 22/03/2019 for proposed SIL project of 2.0 Million TPA standalone Grinding unit with bulk & bag packing Plant at Hazira Industrial Zone, Survey No. 125/1, 125/2, 125/1+2+3, Village - Shivrampur, Tal. Choryasi, Dist. - Surat.

In addition to points raised by us during the Public Hearing and Minutes of Meeting (MOM) published by GPCB, please find detailed explanation of our concerns as follows:

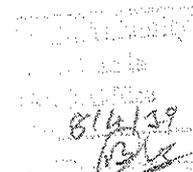
Proposed project of Sanghi Industries Limited will result in to substantial increase in Pollution i.e., Air (Dust), Noise and Water, and that will impact our critical business operations.

1. L & T is in business of manufacturing Ultra Critical equipment i.e., Super Critical Turbine Generators, Nuclear equipment and K9 Vajra self-propelled Howitzer guns at Hazira Manufacturing Complex. Above mentioned production facilities are within 1 Km radius of the Proposed Project of Sanghi Industries Limited. Cement & Coal dust will adversely impact the quality & on field performance of such Critical products of National Security/Safety Importance, which could impact to our Business, as well as Nation and Community at Large.
2. Transportation, Loading, Storage, Transfer Operation & Unloading of Coal, Fly Ash, Clinker & Slag will lead to substantial increase in Process/ Non-Process related Fugitive Emission. This may lead to irreversible damage to us including surrounding Environment.
3. Increased PM<sub>2.5</sub> & PM<sub>10</sub> exposure may lead to serious health hazards specifically Respiratory & lung diseases (Cancer) to People operating in close vicinity.

Considering the above-mentioned concerns, we request your good office to have a fresh look about Proposed Project and take appropriate actions looking at above impacts.

Warm Regards,  
 For, LARSEN & TOUBRO LIMITED

*(Atia M. Desai)*  
 Authorized Signatory



Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001, INDIA  
 CIN: L99999MH1946PLC004768

O/C



Larsen & Toubro Limited  
 Hazira Central Services  
 Hazira Manufacturing Complex  
 Pesti Bhatra, Surat 394 510  
 Gujarat, INDIA  
 Tel.: +91 261 280 5000  
 Fax: +91 261 280 5050  
 www.larsentoubro.com

To,  
 State Level Environment Impact Assessment Authority (SEIAA)  
 Gujarat Pollution Control Board,  
 Paryayaran Bhavan, Opp. Bij Nigam,  
 CHH Road, Sector 10A,  
 Gandhinagar - 382010

13/04/2019

Kind Attention: Public Hearing Cell

Reference: Letter Submitted to Regional Office, GPCB, Surat dated 04/04/2019 (Enclosed)

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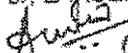
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Warm Regards,  
 For, LARSEN & TOUBRO LIMITED

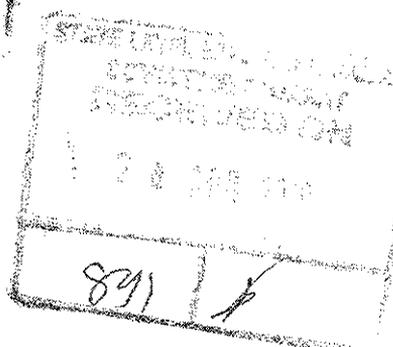
 (Atish M. Desai)  
 Authorized Signatory

Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001 INDIA  
 CN: L9999MH1546PLC004753

## ANNEXURE-A-12



Larsen &amp; Toubro



Larsen & Toubro Limited  
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 Gujarat, INDIA  
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 Fax: +91 261 280 5050  
 www.Larsentoubro.com

No. HZCS/E-30/2019-20/SIL

20/04/2019

To,  
 State Level Environment Impact Assessment Authority (SEIAA)  
 Gujarat Pollution Control Board,  
 Paryavaran Bhavan, Opp. Bij Nigam,  
 CHH Road, Sector 10A,  
 Gandhinagar - 382010

Reference: Meeting dated 18.04.2019 at SEAC, GPCB, Head Office  
 : Letter submitted to SEIAA dated 05/04/2019

Sub: Clarification & Actions required from M/s. Sanghi Industries Limited for their Proposed Project of 2.0 Million TPA standalone Grinding unit with bulk & bag packing Plant at Hazira Industrial Zone, Survey No. 125/1, 125/2, 126/1+2+3; Village – Shivrampur, Tal. Choryasi, Dist.- Surat

Dear Sir,

Larsen & Toubro is USD 18 billion company, a truly Indian Multinational having presence in Construction, Heavy Engineering and Finance & Technology. It is well respected for Ethical Business Practices and Nation First approach.

L & T Hazira Manufacturing Complex comprising of Manufacturing Units that covers Modular Fabrication, Heavy Engineering, Defence, Nuclear Reactors, Shipbuilding and Power Equipment. L & T, Hazira is contributing for government's indigenous defence & nuclear projects and currently executing some of the key defence and nuclear projects which are of utmost National importance.

With reference to the subject matter, we would like to submit our concerns & expected solutions from M/s. SIL.

Sl. No.	Particular	Concerns / Impacts	Expected Solution
1	Air Pollution	1) Air borne particles will disturb our Water quality. L & T is having 06 nos. of open reservoirs of capacity 25000 KL. The same is being used for Drinking Water purpose  Cement dust deposition on Water bodies will degrade the potable water quality.  2) Health Hazard – SPM is known to pose	A) 100% efficiency of Air Pollution Control Mechanism to be ensured  B) Sustain current Air Quality and no further increase in SPM, SO <sub>x</sub> & NO <sub>x</sub>

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 CIN: L99999MH1946PLC004768



Larsen & Toubro Limited

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2	Use of Pet Coke/ Lignite as Fuel	As you have mentioned in Pre-Feasibility Report (PFR) & also confirmed during Public Hearing dated 22.03.2019 that you will be consuming 10% Pet Coke & 40% Lignite as Fuel  Use of low quality grade Lignite & Pet coke will lead to high emission of SOx, NOx & PM	Use of Petcoke/ Lignite not to be pursued
3	Green Belt Damage	Our developed Green belt will be directly exposed to the Cement dust deposition, & other process & non-process related fugitive emission. Besides, green belt development proposed by you will take 5 years to grow, which is very much longer time	100 % Green Belt development to be ensured before commencing any operations
4	Ground Level Concentration of Pollutants	What will be the level of GLC of SPM, Sox & NOx considering the downwind directions?  Moreover, we feel that the proposed project site is within 500 meters of Forest area. (Ref. GPCB Guidelines for Coal Handling Units)	Kindly provide the data on the same to our satisfaction  Kindly confirm the same in writing.
5	Total Nos. of Road Trips (Raw Material + Finished Good) per Day	Capacity of Proposed Project is 2.0 Million TPA, which means approx. 550 nos. of Trucks' movement in a day.  This will create frequent Traffic issues & non-process related fugitive emission.  What is your Traffic Management Plan including Parking facilities?	Kindly confirm the no. of daily (In & Out) trucks' movement along with proposed route and mitigation plan to avoid spillage on roads adjacent to Forest/ L & T  Kindly provide details for Parking space
6	Exact mode & route of Transportation for Raw Materials & Finished Goods.	Proposed project site is in the middle of various L & T Manufacturing Facilities; <ul style="list-style-type: none"> <li>- L &amp; T Piping Centre,</li> <li>- L &amp; T MHPS Turbine Generators Pvt. Ltd.</li> <li>- L &amp; T MHPS Boilers Pvt. Ltd.</li> <li>- L &amp; T Defence,</li> <li>- L &amp; T Special Steels &amp; Heavy Forgings,</li> <li>- L &amp; T Heavy Engineering etc.</li> </ul> Truck transportation thru internal roads and	Is it possible to explore alternate location for the proposed project?

Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001, INDIA  
 CIN: L99999MH1946PLC004768



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		trucks loaded with Clinker, Coal, Slag & Fly ash & Cement will create heavy traffic & non-process related fugitive emission.	
7	Responsibility & Liability	If any damage will occur to our Green Belt, Water, Health of Employees, Product Quality & Business due to your operations, who will be responsible for the same?	We would propose SIL to sign guarantee Risk Mitigation Plan and compensation for damages
8	Project Expansion in Future	As Cement Industry falls under 17 Categories of Highly Polluting Industries declared by CPCB, we will be the direct sufferers if at all there is any chance of setting up integrated / full fledge cement plant.	Is it possible to explore alternate location for the proposed project?
9	Location of Proposed Project	Proposed Project site is surrounded by various L & T Manufacturing Units. Hence, we will be having direct impacts due to your Operations.	At the Overall Interest, is it feasible to shift the Project Site to any other location?

We are not against investment or development but project of this kind at this location, which is surrounded by manufacturing facilities of National Importance, creating serious threats to quality of Environment & quality of equipment being manufactured by us.

Looking at the above concerns, we request M/s. SIL to please explore the feasibility to relocate the proposed project to more suitable site. We are willing to have a joint meeting between SEIAA, SIL & L&T.

Warm Regards,  
 For, LARSEN & TOUBRO LIMITED

Authorized Signatory

CC:

1. M/s. Sanghi Industries Limited  
 10<sup>th</sup> Floor, Kataria Arcade, Off SG Highway,  
 PO-Makarba,  
 Ahmedabad - 370511

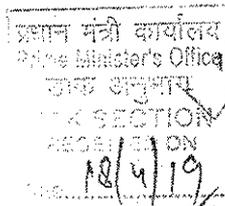
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LARSEN & TOUBRO

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 Tel: +91 261 280 5000  
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 www.Larsentubro.com

CC:



Hon'ble Prime Minister, India  
 Prime Minister Office  
 South Block, Raisina Hill,  
 New Delhi-110011

Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001 INDIA  
 CIN: L99999MH1945PTC004768

- not addressed.
- Hazardous waste matrix is not properly addressed in accordance with the HWM Rules, 2016.
- Details of EMP-CER with break-up is not submitted.
- Project specific safety details are not addressed.
- Chemical reaction and relevant details not covered in EIA report.
- Composition of waste generated from the different sources and its management as per prevailing laws/rules & regulations is not addressed properly.

During SEAC meeting, Committee noted that most of the ToR pertaining to the above mentioned points are not addressed properly in EIA report as well as in presentation. Committee concluded that PP is not well prepared and compliance of TOR is not satisfactory.

**In view of the above, Committee unanimously decided to consider the proposal after submission of the following details:**

1. Redress ToR no. 8, 10, 16,17,19,23,26,27, 28,37, 40,41,44,46,50 and incorporate it in EIA.
2. Compliance of MoEF&CC's OM dated 01/05/2018 regarding "Corporate Environment Responsibility" (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per MoEF&CC's O.M. No. 22-65/2017-IA.III dated 01/05/2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
3. Justification of quantity of ETP sludge against treatment of industrial effluent.
4. Sources of process gas emission, process stack and its APCM.
5. Sound management of bleed liquor (exhausted scrubbing media) as per the HWM Rules, 2016.

5	SIA/GJ/IND2/30448/2018	M/s. Sanghi Industries Limited Survey No. 125/1, 125/2 and 126/1+2+3, Vill.: Shivrampur, Tal.: Choryasi, Dist.: Surat.	Appraisal
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Category of the unit: 3(b)

Project status: New

- Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/30448/2018 dated 12/03/19 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide their letter dated 20/01/2019.
- Project proponent has submitted EIA Report prepared by Eco Chem Sales & Services based on the TOR issued by SEIAA.
- Public Hearing for the project was held on 22/03/2019.
- This is new unit proposes for stand alone cement grinding as tabulated below:

Sr. No.	Name of the Products	Quantity MMT/Annum	End-use of products
1	Cement (OPC / PPC / PSC)	2.0	Customer

- The project falls under Category B of project activity 3(b) as per the schedule of EIA Notification 2006.
- PP was called for presentation in the SEAC meeting dated 16/04/2019.
- Salient Features of the project including Water, Air and Hazardous waste management:

Sr. no.	Particulars	Details	
A	Total cost of Proposed Project (Rs. in Crores):	282.28	
<b>Brief details of EMP</b>			
S. No.	Particulars	Capital Cost (Lakhs)	Recusing Cost (Lakhs/annum)
1.	Air Pollution Control Devices	752.15	85.00
2.	Water Pollution & Reclamation	35.00	5.60
3.	Occupational Health and Safety	49.85	18.30
4.	Environmental Monitoring	54.00	27.81
5.	Green Belt Development	20.00	12.00
<b>Total</b>		<b>911.00</b>	<b>148.71</b>
<b>Brief details of CER</b>			
Approximately Rs. 424.00 Lakhs (~1.5%) is been allocated for following CER activities for next five years.			
S.No.	CER Activities	Cost (Lakhs)	
1.	Drinking water facility in nearby village	75.00	
2.	Up-gradation and hygiene facilities in nearby village	149.00	
3.	Plantation in community areas	55.00	
4.	Training and Awareness Program	75.00	
5.	Education & Farming related activities	70.00	
<b>Total</b>		<b>424.00</b>	
B	Total Plot area ( sq. meter)	48,560 m <sup>2</sup>	
	Green belt area/Tree Plantation area ( sq. meter)	1650 m <sup>2</sup>	
C	Employment generation	780 Nos. (Construction + Operation)	
D	<b>Water</b>		
i	Source of Water Supply(GIDC Bore well, Surface water, Tanker supply etc...)	The water requirement shall be met from irrigation department/Private Tanker.	
	Status of permission from the concern authority.	Application has been made to Irrigation Department which is under process	
ii	<b>Water consumption (KLD)</b>		

S. No.	Particulars	Water Consumption, (KLD)																					
A.	Domestic	15.0																					
B.	Industrial																						
1.	Processing/Cooling	150																					
2.	Dust suppression & Fire Fighting	10 KLD Fresh Water + 58 KLD from Blow down = 68 KLD																					
	<b>Total Industrial</b>	<b>160.0</b>																					
C.	Gardening	25 KLD Fresh water + 20 KLD recycled= Total 45																					
	<b>Total Fresh water Requirement</b>	<b>200.0</b>																					
	<b>Total water Requirement</b>	<b>278.0</b>																					
1) Total water requirement for the project: 278 KLD 2) Quantity to be recycle: 78 KLD 3) Total fresh water requirement: 200 KLD																							
iii	<b>Waste water generation (KLD)</b>																						
	<table border="1"> <thead> <tr> <th>Type / Source</th> <th>Quantity of Waste Water Generated (Kilo Litre per Day)</th> <th>Treatment Capacity (Kilo Litre per Day)</th> <th>Treatment Method</th> <th>Mode of Disposal</th> <th>Quantity of Treated Water Used in Recycling / Reuse (Kilo Litre per Day)</th> <th>Quantity of Discharged Water (Kilo Litre per Day)</th> </tr> </thead> <tbody> <tr> <td>Domestic</td> <td>10.0</td> <td>15</td> <td>STP</td> <td>-</td> <td>8</td> <td>None</td> </tr> <tr> <td>Industrial</td> <td>70.0</td> <td>150</td> <td>Cooling Tower</td> <td>-</td> <td>70</td> <td>None</td> </tr> </tbody> </table>	Type / Source	Quantity of Waste Water Generated (Kilo Litre per Day)	Treatment Capacity (Kilo Litre per Day)	Treatment Method	Mode of Disposal	Quantity of Treated Water Used in Recycling / Reuse (Kilo Litre per Day)	Quantity of Discharged Water (Kilo Litre per Day)	Domestic	10.0	15	STP	-	8	None	Industrial	70.0	150	Cooling Tower	-	70	None	
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iv	<b>Treatment facility within premises with capacity [For existing and Proposed]</b> [In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..] STP – 15 KLD																						
v	<b>Mode of Disposal &amp; Final meeting point</b> Domestic: Recycle through STP and use for green belt Industrial: Recycle through close circuit Cooling Tower																						
vi	<b>In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.</b> Name of Common facility Not Applicable Membership of Common facility (CF) Not Applicable																						
vii	<b>Reuse/Recycle details (KLD)</b> 78 KL																						
E	<b>Air</b>																						
i	<b>Flue gas emission details</b> No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc. <b>Proposed</b>																						
	<table border="1"> <thead> <tr> <th>S.No.</th> <th>Location</th> <th>Types of Emission</th> <th>Qty. Nos.</th> <th>Air Pollution Control Measures (APCM)</th> <th>Stack Details</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	S.No.	Location	Types of Emission	Qty. Nos.	Air Pollution Control Measures (APCM)	Stack Details																
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497<sup>th</sup> meeting of SEAC - Gujarat dated 16.04.2019

	1	Cement Mill (VRM)	PM SO <sub>x</sub> NO <sub>x</sub>	01	Bag House Capacity - 11,00,000 m <sup>3</sup> /hr	Height – 55 m Dia – 3.2 m APC: Bag filters Air emission: PM 30 mg/Nm <sup>3</sup> SO <sub>x</sub> 100 ppm NO <sub>x</sub> 100 ppm											
ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.) Proposed																
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1	Not Applicable																
iii	Fugitive emission details with its mitigation measures.																
	Fugitive emission during raw material handling and feeding process and vehicle movements. Mitigation measures – High efficiency pulse air jet type bag filters will be considered to arrest the air borne dust at all the locations where transfer of material are takes place; The automatic bagging machine with bag filters will be installed for packing plant; Unloading of coal trucks will be carried out with proper care avoiding dropping of the materials from height. Sprinklers will be installed in Raw Material / Fuel storage/ Loading / unloading areas. The sprinkling of water will be done along the internal roads in the plant in order to control the dust arising due to the movement of vehicular traffic; Proper maintenance of vehicles shall be carried out; All the workers inside the plant will be provided with disposable dust masks; Thick greenbelt will be developed around the plant to arrest the fugitive emissions; and Periodic air quality monitoring shall be carried out as per CPCB / SPCB norms etc.																
F	Hazardous waste (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. Proposed																
i	Solid/ Hazardous waste will be collected, stored, transported and disposed as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016. Dust collected from air pollution control equipment will be 100% recycled in system. Generated used oil from plant machinery will be utilized as alternative fuel to burn in existing cement plant at Sanghipuram.																
ii	Membership details of TSDF, CHWIF etc.				Not Applicable												
iii	Details of Non-Hazardous waste & its disposal (MSW and others)				-												
G	Solvent management, VOC emissions etc. Not Applicable																
i	Types of solvents, Details of Solvent recovery, % recovery. reuse of recovered Solvents • Not Applicable																
ii	VOC emission sources and its mitigation measures • Not Applicable																
• During the meeting dated 18/04/2019, technical presentation made by the Project proponent.																	

- During the meeting, the project was appraised based on the information furnished in the EIA Report, various issues raised during the public hearing and details presented during the meeting.
- The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect for the study area of 10 km radial distance from project site for the period 01/10/2018 to 31/12/2018. Ambient Air Quality monitoring was carried out for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC at Nine locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST 3.
- The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- Committee noted that this proposal is for new project of 2.0 MMTPA Standalone Cement Grinding at Survey No. 125/1, 125/2 and 126/1+2+3, Village: Shivrampur, Taluka: Choryasi, District: Surat .
- Cooling bleed off will be utilized for dust suppression within premises. There will no process effluent generation. Sewage will be treated in STP and treated sewage will be utilize on land for gardening/plantation within premises.
- PP has proposed to use Lignite or Coal or Petcoke 12 TPH as fuel in HAG. Committee noted that use of Petcoke in HAG is not allowed in Gujarat as per approved fuel notification. PP has not proposed APCM for SO<sub>x</sub> control incase of use of lignite. Committee found that details of stacks attached to APCS are not addressed. While deliberation on fuel, PP informed that they will not use lignite & Petcoke as a fuel.
- This office has received representation from M/s. L&T Limited, Hazira against this project regarding anticipated air pollution due to proposed Cement grinding unit through email dated 12.04.2019. M/s. L&T Ltd. represented that they are manufacturing super critical turbine generator, nuclear equipments, war weapons (gun, tanks etc.) and fugitive dust emission of proposed project will adversely affect quality and performance of the product which being used in national security. The same issue was also raised by M/s. L&T Limited during public hearing on dated 22/03/2019. The copy of representation of M/s. L&T Limited, Hazira was given to PP for compliance of the issues raised by them.
- PP has addressed hazardous waste management.

497<sup>th</sup> meeting of SEAC-Gujarat dated 16.04.2019

- Committee deliberated CER, EMP and baseline data. PP has not furnished status of all the applicable Rules, Acts, Regulation, Clearances in a tabular form as per given ToR no. 5.

After deliberation, SEAC unanimously decided to consider the proposal after submission of the following details:

1. Readdress ToR no. 5, 40
2. Point wise action plan regarding representation of L&T Ltd. Hazira.
3. Submit raw material & product transportation route, its impact on surrounding area and mitigation measures.
4. Undertaking regarding no use of Lignite & Petcoke as fuel.
5. Sound APCM to control fugitive dust emission during raw material transportation, storage, handling, loading, unloading, transfer; fuel grinding etc.
6. Details of vents/stacks with specific source & Air Pollution Control System.
7. Compliance of Coal & Ash handling guidelines & its commitment.

6	SIA/GJ/IND2/31394/2018	M/s. Gujarat Dyestuff Industries Plot No. Z/25,26,27,28, Dahej SEZ, Vill.: Dahej, Tal. : Vagra, Dist.: Bharuch	EC Amendment
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Category of the unit: 5(f)

Project status: EC Amendment

- This unit has been granted EC vide letter no. SEIAA/GUJ/EC/5(f)/43/2018 dated January 31, 2018.
- Now this unit has applied for EC amendment vide proposal no. SIA/GJ/IND2/31394/2018 dated 28.03.2019.
- During the meeting dated 16/04/2019, technical presentation made by the Project Proponent (PP).
- Unit has applied for EC amendment to total water consumption from 34.5 KLD to 166 KLD. The additional water consumption will be utilized in cooling purpose only.
- Industrial effluent will be treated in ETP and reused in cooling make up. Complete ZLD will be maintained.
- PP explained that the acetic anhydride plant requires huge amount of cooling and the conventional cooling system is through cooling water (upto 40 degree) followed by chill water (upto 10 degree) and finally through brine (upto -10 degree). When the EC application was done they had envisage that the chill water and brine requirement would be met through using VAM (Vapour absorption Machine) waste heat from gas based power plant (Proposed) and flue gas from furnace. Based on above the water consumption in the cooling tower which was envisaged in the plant was 28.5 KLPD. Thereafter, when the detailed engineering was conducted after the approval of the EC it was

497<sup>th</sup> meeting of SEAC-Gujarat, Dated 16.04.2019

**Minutes of the 514<sup>th</sup> meeting of the State Level Expert Appraisal Committee held on 12/06/2019 at Committee Room, Gujarat Pollution Control Board, Sector 10-A, Gandhinagar.**

The 514<sup>th</sup> meeting of the State Level Expert Appraisal Committee (SEAC) was held on 12<sup>th</sup> June 2019 at Committee Room, Gujarat Pollution Control Board, Sector 10-A, Gandhinagar. Following members attended the meeting:

1. Dr. Dinesh Misra, Chairman, SEAC
2. Shri S. C. Srivastav, Vice Chairman, SEAC
3. Shri V. N. Patel, Member, SEAC
4. Shri R. J. Shah, Member, SEAC
5. Shri Natrajan Pratap, Member, SEAC

The agenda of TOR/Scoping cases, Appraisal and reconsideration was taken up. The applicants made presentations on the activities to be carried out along with other details furnished in the Form-1, PFR, EIA-EMP reports and other reports.

6.	SIA/GJ/IND2/22012/2018	M/s. Bakul Pharma Pvt. Ltd. Plot No. 6202 GIDC Ankleshwar, Ta- Ankleshwar, Dist - Bharuch	Appraisal
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**Category of the unit : 5(f)**

**Project status:** Expansion

- PP has submitted online application vide no. SIA/GJ/IND2/22012/2018 for obtaining Environmental Clearance.
- The SEAC had recommended TOR to SEIAA and SEIAA issued TOR to PP vide their letter dated 29/09/2018.
- Project proponent has submitted EIA Report prepared by M/s: Envisafe Environmental Consultants based on the TOR issued by SEIAA
- This is an existing unit engaged in Synthetic organic chemicals and now proposes for expansion as tabulated below:

**Existing Products : Pharmaceutical Bulk drugs and intermediates**

**Proposed Expansion Products : Pharmaceutical Bulk drugs and intermediates**

Sr. No.	Name of Products & Intermediates	CAS No.	Capacity (TPM)	
			Intermediate	Finished Products
➤ GROUP A				
A1	Pentoxiphylline &/OR	64935-6	--	10.00

compliance of it.

- PP was called for Presentation based on the reply dated 10/06/2019.
- During the meeting dated 12/06/2019, PP along with its expert consultant explained in details regarding query reply. Committee asked for MPDSA dirty products proposed production showing nil but total production showing 12 MT/Month which is higher than existing production, PP has not satisfactorily addressed about it. Also committee insisted for copy of closure order and revocation order recent status instead of reply of PP regarding closure order. Committee asked for treatment clarification as BOD, COD and TDS value drastically reduction even though conventional primary treatment and also simple evaporator proposed for , PP has not satisfactorily addressed about it. PP shown also discharge of effluent in CETP, Chhatral, Committee asked for membership of it, PP has not produced it during meeting.
- **After deliberation, committee asked PP to come prepared with all the details pertaining to project and defer the proposal in one of the upcoming SEAC meeting with submission of following details**
  1. Compliance of GPCB circular dated 03/11/2018 for specific products and adequate proposal for treatment and disposal of effluent along with adequate onsite ETP proposal with segregation of effluent and membership of common ZLD system .
  2. Submission of legal action like SCN/Notice/closure order issued by the Board in last three years and compliance of it. (Tabular Format)
  3. Revised form-1 with respect to revised product profile considering compliance of GPCB circular dated 03/11/2018 regarding specific products.

15.	SIA/GJ/IND2/30448/2018	<b>M/s. Sanghi Industries Limited</b> Survey No. 125/1, 125/2 and 126/1+2+3, Vill.: Shivrampur, Tal.: Choryasi, Dist.: Surat.	Appraisal- Reconsideration
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Category of the unit: **3(b)**

Project status: **New**

- Project proponent (PP) submitted online application vide no. SIA/GJ/IND2/30448/2018 dated 03/04/2019 for obtaining Environmental Clearance.
- SEIAA issued TOR to PP vide their letter dated 29/01/2019.
- Project proponent has submitted EIA Report prepared by Eco Chem Sales & Services based on the TOR issued by SEIAA.
- Public Hearing was conducted by Gujarat Pollution Control Board on 22/03/2019 at project site of M/s. Sanghi Industries Limited Survey No. 125/1, 125/2 and 126/1+2+3, Vill.: Shivrampur, Tal.: Choryasi, Dist.: Surat.
- This is new unit proposes for standalone cement grinding as tabulated below:

Sr. No.	Name of the Products	Quantity MMT/Annum	End-use of products
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1	Cement (OPC / PPC / PSC)	2.0	Customer
<ul style="list-style-type: none"> <li>The project falls under Category B of project activity 3(b) as per the schedule of EIA Notification 2006.</li> <li>PP was called for presentation in the SEAC meeting dated 16/04/2019.</li> <li>Salient Features of the project including Water, Air and Hazardous waste management:</li> </ul>			
<b>Sr. no.</b>	<b>Particulars</b>	<b>Details</b>	
<b>A</b>	<b>Total cost of Proposed Project (Rs. in Crores):</b>	282.28	
<b>Brief details of EMP</b>			
<b>S. No.</b>	<b>Particulars</b>	<b>Capital Cost (Lakhs)</b>	<b>Recusing Cost (Lakhs/annum)</b>
1.	Air Pollution Control Devices	752.15	85.00
2.	Water Pollution & Reclamation	35.00	5.60
3.	Occupational Health and Safety	49.85	18.30
4.	Environmental Monitoring	54.00	27.81
5.	Green Belt Development	20.00	12.00
<b>Total</b>		<b>911.00</b>	<b>148.71</b>
<b>Brief details of CER</b>			
Approximately Rs. 424.00 Lakhs (~1.5%) is been allocated for following CER activities for next five years.			
<b>S.No.</b>	<b>CER Activities</b>	<b>Cost (Lakhs)</b>	
1.	Drinking water facility in nearby village	75.00	
2.	Up-gradation and hygiene facilities in nearby village	149.00	
3.	Plantation in community areas	55.00	
4.	Training and Awareness Program	75.00	
5.	Education & Farming related activities	70.00	
<b>Total</b>		<b>424.00</b>	
<b>B</b>	<b>Total Plot area ( sq. meter)</b>	48,560 m <sup>2</sup>	
	<b>Green belt area, /Tree Plantation area ( sq. meter)</b>	1650 m <sup>2</sup>	
<b>C</b>	<b>Employment generation</b>	780 Nos. (Construction + Operation)	
<b>D</b>	<b>Water</b>		
i	Source of Water Supply(GIDC Bore well, Surface water, Tanker supply etc...)	The water requirement shall be met from irrigation department/Private Tanker.	
	Status of permission from the concern authority.	Application has been made to Irrigation Department which is under process.	
ii	<b>Water consumption (KLD)</b>		

S. No.	Particulars		Water Consumption, (KLD)				
A.	Domestic		15.0				
B.	Industrial						
1.	Processing/Cooling		150				
2.	Dust suppression & Fire Fighting		10 KLD Fresh Water + 58 KLD from Blow down = 68 KLD				
<b>Total Industrial</b>			<b>160.0</b>				
C.	Gardening		25 KLD Fresh water + 20 KLD recycled= Total 45				
<b>Total Fresh water Requirement</b>			<b>200.0</b>				
<b>Total water Requirement</b>			<b>278.0</b>				
1) Total water requirement for the project: 278 KLD 2) Quantity to be recycle: 78 KLD 3) Total fresh water requirement: 200 KLD							
<b>Waste water generation (KLD)</b>							
iii							
	Type / Source	Quantity of Waste Water Generated (Kilo Litre per Day)	Treatment Capacity (Kilo Litre per Day)	Treatment Method	Mode of Disposal	Quantity of Treated Water Used in Recycling / Reuse (Kilo Litre per Day)	Quantity of Discharged Water (Kilo Litre per Day)
	Domestic	10.0	15	STP	-	8	None
	Industrial	70.0	150	Cooling Tower	-	70	None
iv	Treatment facility within premises with capacity [For existing and Proposed]						
	(In-house ETP (Primary, Secondary, Tertiary), MEE, Stripper, Spray Dryer, STP etc..)						
	STP – 15 KLD						
v	Mode of Disposal & Final meeting point						
	Domestic:	Recycle through STP and use for green belt					
	Industrial:	Recycle through close circuit Cooling Tower					
vi	In case of Common facility (CF) like CETP, Common Spray dryer, Common MEE, CHWIF etc.						
	Name of Common facility						
	Not Applicable						
	Membership of Common facility (CF)						
	Not Applicable						
vii	Reuse/Recycle details (KLD)						
	78 KL						
<b>E</b>	<b>Air</b>						
i	Flue gas emission details						
	No. of Boilers/TFH/Furnaces/DG sets etc. with capacities viz. TPH, Kcal/hr, MT/hr, KVA etc.						
	<b>Proposed</b>						
	Sr. no.	Source of emission	Stack Height (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air	Air Pollution Control

		With Capacity				Pollutants	Measures (APCM)
	1	Cement Mill (VRM)	40	Imported Coal	182	PM SOx Nox	Bag House
ii	Process gas i.e. Type of pollutant gases (SO <sub>2</sub> , HCl, NH <sub>3</sub> , Cl <sub>2</sub> , NO <sub>x</sub> etc.) <b>Proposed</b>						
	<b>Sr. no.</b>	<b>Source of emission</b>	<b>Type of emission</b>	<b>Stack/Vent Height (meter)</b>	<b>Air Pollution Control Measures (APCM)</b>		
	1	Clinker unloading Station	Fugitive	Vent Fan	De-dusting Bag Filter		
	2	Additive Unloading Station	Fugitive	Vent Fan	De-dusting Bag Filter		
	3	Clinker Silo Top	Fugitive	Vent Fan	De-dusting Bag Filter		
	4	Cement Silo Top	Fugitive	Vent Fan	De-dusting Bag Filter		
	5	Cement Extraction	Fugitive	Vent Fan	De-dusting Bag Filter		
	6	Packing Plant	Fugitive	Vent Fan	De-dusting Bag Filter		
	7	Bulk Cement Loading	Fugitive	Vent Fan	De-dusting Bag Filter		
	8	Fly Ash Silo Top	Fugitive	Vent Fan	De-dusting Bag Filter		
	9	HAG Feed Hopper	Fugitive	Vent Fan	De-dusting Bag Filter		
iii	Fugitive emission details with its mitigation measures.						
	Fugitive emission during raw material handling and feeding process and vehicle movements. <b>Mitigation Measures</b> <i>From Production Area:-</i> <ul style="list-style-type: none"> <li>The primary emissions during clinker grinding &amp; packing plant will be controlled by installing bag filters.</li> <li>Raw material handling area and material transfer points will be equipped with dust extraction system which consists of bag filter units complete with ducts and extraction fans.</li> <li>Height of the stack will be as per statutory requirement.</li> <li>Automatic bagging machine with bag filters will be installed for packing plant.</li> <li>Fully enclosed unloading station.</li> <li>Closed belt conveyor will be provided for all raw material handling.</li> <li>Dust Extraction (suction apparatus) system with dust collector will be provided.</li> <li>An automated closed loop silo extraction system with closed belt conveyor will be provided for clinker loading and transportation from silo to mill.</li> <li>Thick Green Belt will be developed in and around the plant.</li> </ul> <i>Material Handling Area:</i> <ul style="list-style-type: none"> <li>All transfer points will be fully enclosed and spillages removed periodically.</li> <li>Bag filters will be installed at all transfer points.</li> <li>Water will be sprayed on the stockpiles so as to retain some moisture in the top layer.</li> </ul> <i>Storage Area:</i> <ul style="list-style-type: none"> <li>Covered Yard for Raw material storage will be provided.</li> </ul>						

	<ul style="list-style-type: none"> <li>• Single entry point with flexible curtain will be provided.</li> <li>• Fly ash will be transported through closed automated system.</li> <li>• Silo vent will be equipped with bag filter to vent out the air borne fines.</li> <li>• Bag filters will be operated and maintained properly and cleaning of bags done on regular basis.</li> <li>• Dust suppression system will be provided at stock piles.</li> <li>• Concrete Silo will be provided for Clinker and Fly Ash Storage.</li> </ul> <p><b>On Road</b></p> <ul style="list-style-type: none"> <li>• All internal roads used for transport of vehicles will be paved and maintained properly and repaired immediately when required.</li> <li>• For prevention of road dust emission, speed will be restricted to 10 km/hr for heavy vehicles within the project premises.</li> <li>• All preventive measures i.e. covering of trucks, paving and maintenance of internal roads will be adopted.</li> <li>• Regular vacuum sweeping and water spraying will be done on the internal roads.</li> <li>• Proper maintenance of vehicles will be carried out.</li> </ul>												
<b>F</b>	<b>Hazardous waste</b> (as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016. <b>Proposed</b>												
i	Solid/ Hazardous waste will be collected, stored, transported and disposed as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016. Dust collected from air pollution control equipment will be 100% recycled in system. Generated used oil from plant machinery will be utilized as alternative fuel to burn in existing cement plant at Sanghipuram.												
	<table border="1"> <thead> <tr> <th>S.N.</th> <th>Type of Waste</th> <th>Source</th> <th>Category as per Haz. Waste Rules, 2016</th> <th>Quantity, MT/ Annum</th> <th>Management of HW</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Used Oil</td> <td>Utilities &amp; Operation</td> <td>5.1</td> <td>60 MT/Annum</td> <td>Collection, Storage, Transportation and Disposed off in own cement plant at Sanghipuram</td> </tr> </tbody> </table>	S.N.	Type of Waste	Source	Category as per Haz. Waste Rules, 2016	Quantity, MT/ Annum	Management of HW	1	Used Oil	Utilities & Operation	5.1	60 MT/Annum	Collection, Storage, Transportation and Disposed off in own cement plant at Sanghipuram
S.N.	Type of Waste	Source	Category as per Haz. Waste Rules, 2016	Quantity, MT/ Annum	Management of HW								
1	Used Oil	Utilities & Operation	5.1	60 MT/Annum	Collection, Storage, Transportation and Disposed off in own cement plant at Sanghipuram								
ii	Membership details of TSDF, CHWIF etc.	Not Applicable											
iii	Details of Non-Hazardous waste & its disposal (MSW and others)	-											
<b>G</b>	<b>Solvent management, VOC emissions etc.</b> Not Applicable												
i	Types of solvents, Details of Solvent recovery, % recovery, reuse of recovered Solvents												
	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>												
ii	VOC emission sources and its mitigation measures												
	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>												
	<ul style="list-style-type: none"> <li>• During the meeting dated 16/04/2019, technical presentation made by the Project proponent.</li> <li>• During the meeting, the project was appraised based on the information furnished in the EIA Report, various issues raised during the public hearing and details presented during the meeting.</li> <li>• The baseline environmental quality has been assessed for various components of the environment viz. air, noise, water, biological and socioeconomic aspect for the study area of 10 km radial distance from project site for the period 01/10/2018 to 31/12/2018. Ambient Air Quality monitoring was carried out for</li> </ul>												

PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC at eight locations, including the project site. Values conform to the prescribed standards for Ambient Air Quality. The incremental Ground Level Concentration (GLC) has been computed using ISCST 3.

- The resultant concentrations are within the NAAQS. The modeling study proved that the air emissions from the proposed plant would not affect the ambient air quality of the region in any significant manner. The ambient air quality around the proposed project site will remain within the National Ambient Air Quality Standards (NAAQS).
- Risk assessment including prediction of the worst-case scenario and maximum credible accident scenarios has been carried out. The detail proposed safeguard measures including On-Site / Off-Site Emergency Plan has been covered in the RA report.
- Committee noted that this proposal is for new project of 2.0 MMTPA Standalone Cement Grinding at Survey No. 125/1, 125/2 and 126/1+2+3, Village: Shivrampur, Taluka: Choryasi, District: Surat .
- Cooling bleed off will be utilized for dust suppression within premises. There will no process effluent generation. Sewage will be treated in STP and treated sewage will be utilized on land for gardening/plantation within premises.
- PP has proposed to use Lignite or Coal or Petcoke 12 TPH as fuel in HAG. Committee noted that use of Petcoke in HAG is not allowed in Gujarat as per approved fuel notification. PP has not proposed APCM for SO<sub>x</sub> control incase of use of lignite. Committee found that details of stacks attached to APCS are not addressed. While deliberation on fuel, PP informed that they will not use lignite & Petcoke as a fuel.
- This office has received representation from M/s. L&T Limited, Hazira against this project regarding anticipated air pollution due to proposed Cement grinding unit through email dated 12.04.2019. M/s. L&T Ltd. represented that they are manufacturing super critical turbine generator, nuclear equipments, war weapons (gun, tanks etc.) and fugitive dust emission of proposed project will adversely affect quality and performance of the product which being used in national security. The same issue was also raised by M/s. L&T Limited during public hearing on dated 22/03/2019. The copy of representation of M/s. L&T Limited, Hazira was given to PP for compliance of the issues raised by them.
- PP has addressed hazardous waste management.
- Committee deliberated CER, EMP and baseline data. PP has not furnished status of all the applicable Rules, Acts, Regulation, Clearances in a tabular form as per given ToR no. 5.
- After deliberation, SEAC unanimously decided to consider the proposal after submission of the following details:
  1. Readdress ToR no. 5, 40.
  2. Point wise action plan regarding representation of L&T Ltd. Hazira.
  3. Submit raw material & product transportation route, its impact on surrounding area and mitigation measures.
  4. Undertaking regarding no use of Lignite & Petcoke as fuel.

5. Sound APCM to control fugitive dust emission during raw material transportation, storage, handling, loading, unloading, transfer; fuel grinding etc.
  6. Details of vents/stacks with specific source & Air Pollution Control System.
  7. Compliance of Coal & Ash handling guidelines & its commitment.
- PP has submitted detailed reply on 23/05/2019 submitting the additional details sought with point-wise reply with respect to the representation of L&T Ltd., Hazira dated 05/04/2019 and 22/04/2019.
  - PP was called for Presentation based on the reply on 12/06/2019.
  - During the meeting, the project was appraised based on details furnished on 23/05/2019 by the project proponent against the additional details sought.
  - PP along with its expert consultant made technical presentation and explained in detail all the points which were raised on 16/04/2019.
  - Committee noted that PP has readdressed ToR no-5 and 40 with details regarding applicable rules/Acts/Regulation to unit in tabular form and compliance of issues of woman and more participation of woman in public hearing.
  - 
  - Committee asked regarding action plan on representation of L & T Ltd, Hazira made vide letter dated 05/04/2019 & 22/04/2019 and reviewed all the points raised by L&T in their representations, PP informed that points raised by L & T Ltd, Hazira are already addressed in the EIA Report. PP also agreed regarding green belt development in periphery of the unit and closed transportation system for loading/unloading and bulk cement in closed cement tanker.
  - Committee asked for fugitive emission from proposed project may affect production activity of Defence Unit of M/s L & T Ltd, Hazira and serious health hazards to people operating in closed vicinity, PP informed that Defence Unit of M/s L & T Ltd is approximately one kilometre aerial distance from proposed project in cross-wind direction and least chances for dusting spread over to M/s L & T Ltd. Moreover company adopted latest technology of covered and closed system in loading/unloading and transportation of raw material and finished products. Also PP informed that 33% green belt developed in and around periphery of proposed project. PP agreed with committee suggestions regarding adequate height boundary wall for control of dusting spread in nearby area and installation of advance sprinkling system for raw material like fly ash, gypsum and coal handling system.
  - 
  - PP submitted detailed reply with clarification regarding L&T representation dated 05/04/2019 & 22/04/2019 and said that there is no chances for dusting with implementation of EMP and no adverse impact on potable water due to cement dusting from proposed project. CAAQMS will be installed in proposed project and its report will be submitted to GPCB regularly.
  - PP submitted undertaking regarding not to use lignite and Petcoke as fuel.
  - PP agreed with complying coal and fly ash guidelines of GPCB for proposed project. PP submitted

assurance that there will not be any degradation of environment which adversely affects the green belt, Water, Health of employees, production quality and business of L & T and other neighbouring units.

- PP submitted adequate proposal for raw material and product transportation route and impact of traffic movement on surrounding area and mitigation measures/EMP for proposed project like Dust extraction system with capacity of 11000 m<sup>3</sup>/Hr and fully enclosed system for unloading station.
- PP addressed and clarified details of sound APCM to control fugitive dust emission during raw-material transportation, storage, handling, loading, unloading, transfer, fuel grinding etc. along with details of vents / stacks with specific source and air pollution control system.
- Committee found that PP has addressed all the points raised in the ADS on 16/04/2019 satisfactorily and also assured to take all necessary mitigation measures to control air pollution at source.
- **After detailed discussion, SEAC unanimously decided to recommend the project to SEIAA Gujarat for grant of Environmental Clearance.**

16.	SIA/GJ/IND2/30845/2013	M/s. Tatva Chintan Pharma Chem Pvt. Ltd Plot No. Z/103/F/1, SEZ Dahej, Part-II, Ta: Vagra, Dist. Bharuch	EC Amendment- Refer back case
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**Category of the unit:5(f)**

**Status of the project: New**

**M/s: Tatva Chintan Pharma Chem Pvt. Ltd**, applied for amendment in Environmental clearance and the SEAC recommended the project for grant of environmental clearance vide this office letter no. EIA-10-2018/IND2/1177 dated 01/04/2019 for amendment in EC for change mode of disposal of effluent from multi effect evaporator to single stage evaporator as mentioned therein:

The case was referred back by the SEIAA, Gujarat vide SEIAA minutes of 209<sup>th</sup> meeting dated 02/04/2019 with the following point:

1. To verify the details of characteristic of effluent and its treatability study.

Project proponent submitted reply vide their letter dated 20/04/2019 showing Characteristic of effluent for the above mentioned points.

PP has submitted as under:

1. PP has submitted characteristic of untreated effluent, primary treated effluent, after solvent stripper and after single stage evaporator characteristic. PP also mentioned about details of primary treatment of and evaporator with solvent stripper for effluent.

The case was reconsidered in the SEAC meeting dated 12/06/2019.

During the SEAC meeting dated 12/06/2019, the said reply was considered by the Committee. Committee asked clarification regarding drastic reduction in TDS, COD and BOD value in solvent stripper and single stage evaporator. Also committee asked about drastic reduction in Ammonical Nitrogen in solvent stripper,

PP has informed that single stage stage evaporator and solvent stripper operate at low temp. And high vacuum pressure at 50-52° C and 750 mm Hg. Committee insisted for adequate technical details of single stage evaporator and solvent stripper operate at 50-52° C and 750 mm Hg with mentioning about authenticated proof regarding drastic reduction of TDS, COD and BOD value in solvent stripper and single stage evaporator.

- **After deliberation, SEAC unanimously decided to consider the proposal after satisfactory submission of the following details.**

1. To verify the details of characteristic of effluent and its treatability study along with authenticated proof regarding drastic reduction of TDS, COD and BOD value in solvent stripper and single stage evaporator and justification regarding single stage evaporator is feasible instead of MEE.

***Meeting ended with thanks to the Chairs.***

**Minutes approved by:**

1.	Dr. Dinesh Misra, Chairman, SEAC	
2.	Shri S. C. Srivastav, Vice Chairman, SEAC	
3.	Shri V. N. Patel, Member, SEAC	
4.	Shri. R. J. Shah, Member, SEAC	
5.	Shri Natrajan Pratap, Member, SEAC	

Sanghi Industries Limited

Grinding Unit - Surat

Survey No. : 125/1, 125/2, 126/1+2+3

Opp. L&T Piping Center, Gate No. 9,

Hazira, Surat - 394510, Gujarat.



May 23, 2019

To,

The State Level Expert Appraisal Committee (SEAC)  
Gujarat Pollution Control Board,  
Gujarat Pollution Control Board,  
4<sup>th</sup> Floor, Sector - 10 A,  
Gandhinagar - 382010.

**Sub: Submission of Additional Information sought by the committee during the appraisal of EC on 16<sup>th</sup> April 2019 for our proposed project of 2 Million TPA Standalone Grinding Unit with Bulk & Bag Packing Plant at Hazira Industrial Zone, Survey No. 125 / 1, 125 / 2, 126 / 1+2+3; Village: Shivrampur, Tal. Choryasi, District - Surat**

**Ref: (1) Proposal No. SIA/GJ/IND2/30448/2018  
(2) 497<sup>th</sup> meeting of SEAC - Gujarat dated 16.04.2019**

Dear Sir,

**Sanghi Industries Limited** is the Cement Manufacturing Company having total captive infrastructure of Power, Port located at Sanghipuram, Kutch with State-of-art technology from FL Smidth, USA operating at 4 MTPA Capacity with an investment of Rs.3000 crores. The company has also set up two Cement Terminals (1) Navlakhi - Gujarat State (2) Dharangdhar - Maharashtra State wherein through coastal route, company brings loose cement at the cement terminal and caters the local market. The company has also established Ready Mix Concrete Plant (RMC) at Ahmedabad as well as Rajkot in Gujarat State. The turnover of the company in the year 2018-19 is Rs.1088 crores.

The Company produces superior quality cement of OPC, PPC and PSC having marketing presence in the State of Gujarat, Rajasthan, Maharashtra, Madhya Pradesh, Cochin.

The company is presently expanding cement capacity from 4 MTPA to 8.6 MTPA with an investment of Rs.1500 crores, which is under advance stage of implementation and expected to commission by March 2020. Thus, total investment would be Rs.5000 crores having 8.6 MTPA capacity at single location.

As per the Company Policy, we believe in State-of-Art Technology to be adopted for the projects to be executed and also has a focus on sustainable development with vigilant eye on ensuring zero pollution with thrust on green environment. Due to our continuous efforts for energy efficiency, sustainable development, Best Industry Practices, company has earned many awards and

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recolonization from National and International reputed institution and even from Government.

The company has always given thrust on sustainable development and has taken various actions for the same. The major actions are:-

- Promotion of alternative fuel and raw materials & waste management
- Reduction of CO2 emission: - Received 38434 energy saving certificate under PAT Cycle - 1.
- Water Management:- Rainwater harvesting in Mines Pit, which helps to meet our demand of water as well as local villagers and also maintains the groundwater table in surrounding area.
- Gujarat Mineral Research and Development Society, an Agency of Government of Gujarat under the aegis of Commissioner of Geology and Mines, Gandhinagar, Gujarat has published a book titled "Working with Elements" and in the said book the water conservation methods and the free distribution of water by the company in the local villages has been highlighted.
- Promoting Bio-diversity:- The first major step was constructing 3 check dams towards the transformation of this barren landscape to impound the rain water harvesting.
- Landmark contribution as 1<sup>st</sup> in Indian Cement sector
  - ✓ Utilization of pond Ash in raw mix
  - ✓ Co processing of Coal Tar - waste from ceramic Industries

The company also taken noteworthy actions in the environment aspects for which following awards has been received by the company:-

1. For Eco-friendly Industrial Development; the company has been awarded Green Rating Project Awards - 3 LEAVES by **Sunita Narain** of Center for Science and Environment, New Delhi.
2. In recognition for outstanding achievement in Environment Management, company received the prestigious "Greentech Environment Excellence Gold Award" in Cement Sector three times i.e. In the year 2008, 2013 & 2014.
3. In recognition of outstanding achievement in Environment Management, company received "Greentech Platinum Award-2018" in Cement sector.

4. For Excellence in Waste Management Initiatives, we have received Kutch Business Excellence Award - 2013 from Federation of Kutch Industries Association.
5. For the last few consecutive years, company has been awarded First Prize for its captive mines and operations mines for Mines Environment and Mineral Conservation under the aegis of Indian Bureau of Mines, IBM, GOI for;
  - Afforestation/Plantation
  - Systematic & Scientific Development
  - Air Pollution Control Measures
  - Water Pollution Control Measures
  - Noise vibration control & Aesthetic Beauty
  - Overall Performance
  - Community Development
  - Mineral Conservation

The company due to its marketing strategies, product quality acceptance etc., has won following awards from various reputed organizations:-

1. India's Most Trusted (Cement Manufacturing) Company Award (2017) International Brand Consulting Corporation, USA.
2. India's Top Challengers 2016-17 Trophy (2016-2017) Construction World Magazine & Media.
3. Most preferred brand by real estate sector (Nov. 2017) Real Estate & Infrastructure Round Table & Awards
4. Gujarat Brand Leadership Award - 2018 (Corporate CSR) by ABP News.
5. Cashless Township (2017) Recognized by Hon'ble Prime Minister Shri Narendra Modiji.
6. Two Star Export House (Certificate of Registration) from the office of the Joint Director General of Foreign Trade, Government of India.
7. Emerging Brand of the Year Award - 2018 Cement & Concrete By Realty Plus.
8. Social Media Campaign of the Year - 2019 by Realty Plus.

For manufacturing of Cement & Clinker company has received International Accreditation:-

- ISO 9001:2015 (Quality Management System Standard)
- ISO 14001:2015 (Environmental Management System Standard)
- OHSAS 1800:2007 (Occupational Hazard and Safety)
- SA 8000:2015 (Social Accountability)
- ISO/ IEC 17025:2005 (NABL accreditation for Chemical and Mechanical Testing)

Sanghi Industries Limited had been described by CRISIL, a global leading Rating Agency, in its report of November 2009, as the "Most efficient in Operating Cost Parameters" in the mid segment of cement industry and second most efficient in the industry as a whole.

It is submitted that we are well reputed and well established Cement Manufacturing Company in the Cement Sector. |

With reference to the captioned subject, our EC proposal was discussed in the 497<sup>th</sup> meeting of SEAC. After detailed deliberation, the Committee sought additional details. We are submitting the point-wise reply as under:-

Sr. No.	Details sought by the Committee	Our reply
1.	Readdress ToR No. 5, 40	Attached as <b>Annexure - 1</b>
2.	Point wise action plan regarding representation of L&T Ltd., Hazira	Attached as <b>Annexure - 2</b>
3.	Submit raw material and product transportation route, its impact on surrounding area and mitigation measures	Attached as <b>Annexure - 3</b>
4.	Undertaking regarding no use of Lignite & Petcoke as fuel	Attached as <b>Annexure - 4</b>
5.	Sound APCM to control fugitive dust emission during raw material transportation, storage, handling, loading, unloading, transfer, fuel grinding etc.	Attached as <b>Annexure - 5</b>
6.	Details of vent / stacks with specific source & Air Pollution Control System	Attached as <b>Annexure - 6</b>
7.	Compliance of Coal & Ash handling guidelines and its commitment	Attached as <b>Annexure - 7</b>

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In view of the above, we sincerely urge Hon'ble Committee to take pragmatic view in the overall interest for development of the area.

Thanking you,

Yours faithfully,  
for **Sanghi Industries Limited**

**Authorized Signatory**

Encl: As above

## Annexure - 1

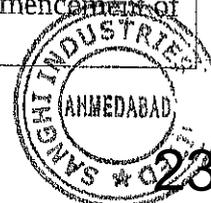
Point No. 1 :- Readdress ToR No. 5 & 40

TOR No. 5:

PP shall furnish status of all the applicable Rules, Acts, Regulation, Clearance in the Tabular Form:

Compliance:

Sr. No.	Applicable Rules, Acts, Regulation, Clearances	Status
1.	The Environment (Protection) Act, 1986 and Rules, 1986 as amended to date	Shall be complied as per conditions of Environment Clearance / CTE / CTO
	Environment Clearance under EIA Notification 2006	Application for EC made on 21.12.2018, which is under process.
	Consent to Establish as per Air and Water Act	Applied and payment towards processing fee of Rs. 300,000/- has been deposited on 30.01.2019.
	Consent to Operate as per Air and Water Act	Will apply at the time of commencement of production.
	E-waste (management and Handling) Rules, 2011 as amended to date	CTE/CTO shall be obtained and condition therein will be complied.
	Hazardous and Other Wastes (Management and Trans-boundary Movement) Amendment Rules 2016.	
	The Air (Prevention and Control of Pollution) Act, 1981 and Rules 1982, as mentioned to date.	
	The Noise Pollution (Regulation and Control) Rules, 2000 as amended to date	
	The Water (Prevention and Control of Pollution) Act, 1974 and Rules, 1975 as mentioned to date	
2.	Factory Act 1948 and amendment thereafter	Will be complied during the stage of erection and commission.
3.	Factory Licence	Will apply at the time of commencement of production.



4.	Workman Compensation Act, 1923 as amended thereafter	Will be complied during the stage of erection and commission.
5.	Contract Labour Regulation and Abolition Act, 1970 as amended thereafter	Will be complied during the stage of erection and commission.
6.	The Bureau of Indian Standards Act, 1986	Will apply at the time of commencement of production.
7.	The Motor Vehicle Act, 1988 and The Central Motor Vehicle Rules, 1989	Will be complied during the stage of erection and commission.
8.	Indian Electricity Act, 2003	We will obtain power from DGVCL and will be applied at the time of erection and commissioning.
9.	Water Permission	Application submitted to Irrigation department on 23.01.2019 and our application is under active consideration as per their letter dated 03.04.2019.  Additionally MoU has been signed with Tankers Suppliers to Supply water
10.	Standards of Weights & Measurement Act 1976 and Rules made thereunder	Will apply at the time of commencement of production.

**TOR No. 40:**

PP shall ensure participation of people during Public Hearing with equality in gender so as to encourage woman participation in Public hearing & at the same time their issues shall also be given weightage.

**Compliance:**

The public hearing was conducted on dated: 22/03/2019 at the Project Location Site as per the Environment Notification 2006 and as per the directions received and in consultation the GPCB Officials.

Accordingly, we have met the Sarpanch of all villages located within 10 kms of Project Site and apprised them about our proposed project and circulated them the Executive Summary in Gujarati Language. We have requested them to ensure more participation of local people including women participation in Public Hearing. Total 118 Nos. of peoples had participated in Public Hearing on 23.03.2019 who have signed. Moreover there are many other people who have also participated in the meeting. Total women participation was approximately 13 Nos.



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**Annexure - 2**

May 23, 2019

To,  
The State Level Environment Impact Assessment Authority (SEIAA)  
Gujarat Pollution Control Board  
Paryavaran Bhavan, Opp. Bij Nigam  
CHH Road, Sector 10 A  
Gandhinagar - 382010

**Sub: Clarifications and Actions required by Larsen & Toubro Limited from Sanghi Industries Limited for proposed project of 2 Million TPA Standalone Grinding Unit with Bulk & Bag Packing Plant at Hazira Industrial Zone, Survey No. 125/1, 125/2, 126/1+2+3; Village: Shivrampur, Tal. Choryasi, District - Surat**

Ref: (1) L&T Letter dated 05.04.2019 submitted to SEIAA  
(2) L&T Letter No. HZCS/E-30/2019-20/SIL dated 22.04.2019 submitted to SEIAA

Dear Sir,

With reference to the subject matter, this is to inform your good-self that the representatives of the L&T remained present during the Public Hearing held on 22.03.2019 and L&T representative also has accepted that the APCM has been well planned by the project proponent. Further certain clarification were sought from the project proponent which were clarified to the satisfaction of L&T representative, which is also recorded in the PH proceedings. However, we are submitting here under the point-wise reply of the concerns raised by L&T in their letters under Reference (1) & (2).

**Concerns raised in the Letter dated 05.04.2019 & our reply:-**

S N	L&T Point	Reply
1	L&T is in business of manufacturing Ultra Critical equipment i.e. Super Critical Turbine Generators, Nuclear equipment and K9 Vajra Self-propelled Howitzer guns at Hazira Manufacturing Complex. Above mentioned production facilities are within 1 km radius of the proposed project of Sanghi Industries Limited. Cement and Coal dust will adversely impact the quality & on field performance of such Critical products of National Security / Safety importance, which could impact to our Business, as well as Nation and Community at Large.	Our proposed location of Grinding Unit is located at Hazira Industrial Area. Hajira is known as the "gateway port" to serve the hinterlands of North, West and Central India as it is situated in the midst of one of the most industrialized area in the country. The existing industrial portfolio of Hajira includes mega industrial projects such as petrochemicals, fertilizers, heavy engineering, steel, Cement, energy, edible oil, LNG Terminal and port related activities having investment of more than 1.8 lakhs crores. More than 20 large and medium companies are located in Hajira, including Bharat Petroleum Corporation, Cairn Energy, Essar Power, Essar Steel, Hindustan Petroleum and Larsen & Toubro, Reliance, NTPC, GSECL, Vadraj Cement, Adani Wilmer among others. Shell has established an LNG Terminal at Hajira in 2004.

CIN No. : L18209TG1985PLC005581

Registered Office : P.O. Sanghinagar, Hayatnagar Mandal, R R District, Telangana - 501511.

Tel. : 08415 - 242240 E-mail : companysecretary@sanghicement.com

Website : www.sanghicement.com

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The major industrial units operating in nearby area in the Hazira Industrial Area are shown on the Google Map attached at Annexure - A.

The L&T Defence Unit of the L&T is near Gate No. 20, which is at a distance of Approx 1.25 km away from our proposed project. Site. The Defence Unit of L&T is surrounded by Red Category Industries of its own units viz. L&T MHPS Turbine, MHPS Boilers, Special Steels & Heavy Forgings, Heavy Engineering, Piping Centre etc.

SIL has taken utmost care to control the fugitive emission through the operation of the proposed grinding unit. With High Efficiency APC Devices and implementation of Stringent mitigation measures, the fugitive emission through the plant operation will be negligible.

As per the baseline study conducted during October - December 2018, in crosswind direction maximum GLC value is  $PM_{10}$ - 0.77  $\mu\text{g}/\text{m}^3$ ,  $So_x$ - 0.53  $\mu\text{g}/\text{m}^3$  and  $No_x$ -0.61  $\mu\text{g}/\text{m}^3$ . After Addition of Incremental value in baseline data Resultant concentration will be  $PM_{10}$ - 87.17  $\mu\text{g}/\text{m}^3$ ,  $So_x$ -14.83  $\mu\text{g}/\text{m}^3$  and  $No_x$ - 21.01  $\mu\text{g}/\text{m}^3$ . This shows that even after implementation of Grinding Unit of SIL there will not be any significant increase in levels of  $PM_{10}$ ,  $So_x$  and  $No_x$ .

Predominant wind direction in study region is NE to SW and in downwind direction there is no village. Nearest village from the project site is Suvali which is 1.2 km in WSW direction. Maximum incremental concentration of  $PM_{10}$ - 0.77  $\mu\text{g}/\text{m}^3$  at Suvali. L&T defense project is appx. 1.25 km away from project site and in NNW direction. The location of Defence Unit of L&T is in crosswind direction. Hence there will be no impact of dust emission at L&T defense site due to proposed project.

Moreover SIL has Proposed a Thick Green belt to the tune of 33% surrounding the project boundary. The plantation shall comprise of large canopy thick foliage and high stomatal Index. This will help in dust absorption and ensure that fugitive dust will not go outside the project premises.

Looking to this, there will be no impact on Air emission

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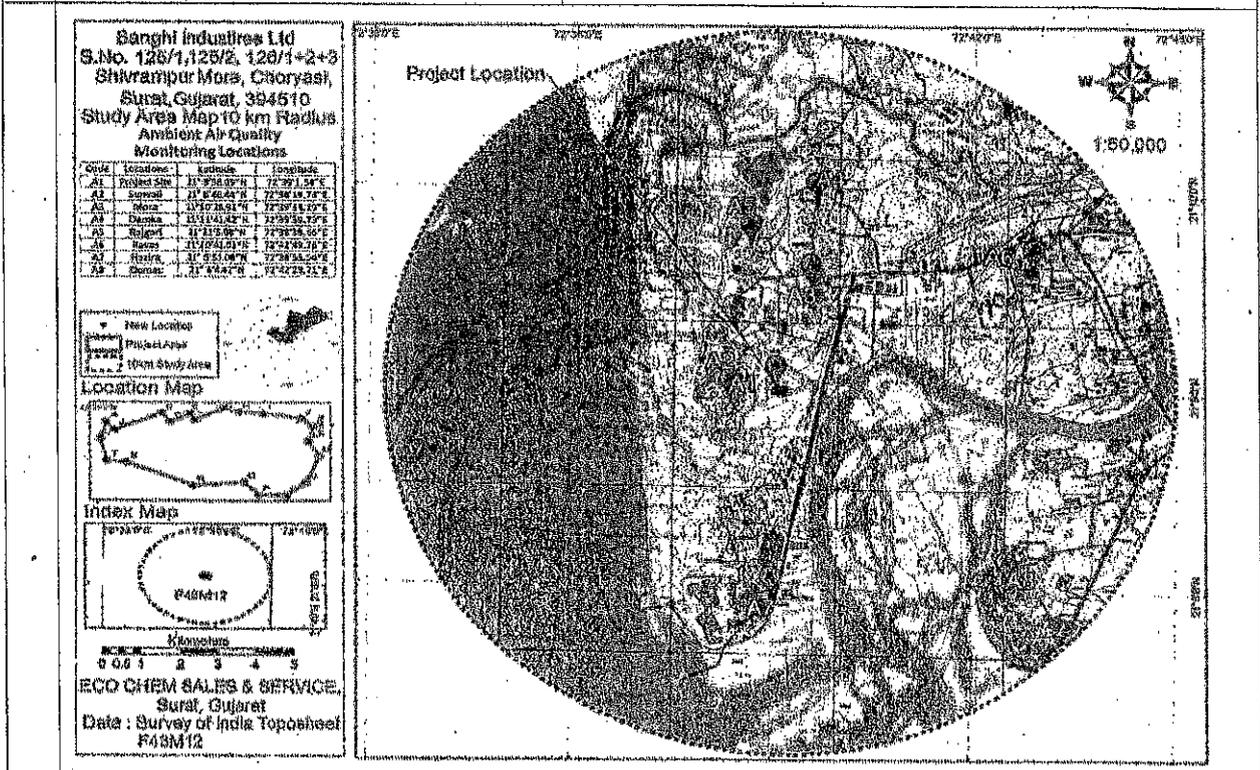
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	parameter, which will not adversely impact the quality and on field performance of such critical products of National Security / Safety importance.
<p>2. Transportation, loading, storage, Transfer Operation &amp; Unloading of Coal, Fly Ash, Clinker &amp; Slag will lead to substantial increase in Process / Non-process related Fugitive Emission. This may lead to irreversible damage to us including surrounding Environment.</p>	<p>A list of sources of Air Pollution and mitigation measures taken by SIL to control the process / non-process related Fugitive Emission is attached at Annexure - B.</p> <p>SIL will strictly implement the mitigation measures and regular monitoring will be carried out to ensure that ambient air quality parameter will always meet the norms of CPCB/GPCB.</p>
<p>3. Increased PM2.5 &amp; PM10 exposure may lead to serious health hazards specifically Respiratory and Lung diseases (cancer) to people operating in close vicinity.</p>	<p>In Crosswind direction maximum GLC value is PM<sub>10</sub>- 0.77 µg/m<sup>3</sup>, So<sub>x</sub>- 0.53 µg/m<sup>3</sup> and No<sub>x</sub>-0.61 µg/m<sup>3</sup>. After Addition of Incremental value in baseline data Resultant concentration will be PM<sub>10</sub>- 87.17 µg/m<sup>3</sup>, So<sub>x</sub>-14.83 µg/m<sup>3</sup> and No<sub>x</sub>- 21.01 µg/m<sup>3</sup>. This shows that even after implementation of Grinding Unit of SIL there will not be any significant increase in levels of PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>.</p>



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Code	Location	Distance/Direction from the Project site	Selection Criteria
A1	Project Site	-	-
A2	Sunvali	1.2 km/WSW	Crosswind
A3	Mora	2.9 km/NNE	Upwind
A4	Damka	5.0 km/N	Crosswind
A5	Rajgari	3.8 km/NNW	Crosswind
A6	Kavas	7.4 km/NE	Upwind
A7	Hazira	5.7 km/S	Crosswind
A8	Dumas	7.9 km/SE	Crosswind

Predominant wind direction in study region is NE to SW and in downwind direction there is no village. Nearest village from the project site is Sunvali which is 1.2 km in WSW direction. Maximum incremental concentration of PM<sub>10</sub> - 0.77 µg/m<sup>3</sup> at Sunvali. L&T defence project is approx. 1.25 km away from project site and in NNW direction. The location of Defence Unit of L&T is in crosswind direction. Hence there will be no impact of dust emission at L&T defence site due to proposed project.

**Clarification sought in the Letter dated 22.04.2019 & our reply:-**

S.N.	Particular	Concerns / Impacts	Reply
1	Air Pollution	<p>1) Cement dust deposition on water bodies will degraded the potable water quality</p> <p>2) Health Hazard – SPM is known to pose health hazards in person working in nearby areas. PM2.5 itself may lead to respiratory diseases like lung fibrosis, mesothelioma of lung, tuberculosis and skin problem</p> <p>3) Quality of Products: a) Super Critical Turbine Generators Cement Dust exposure will affect the High Voltage endurance capacity. Tan Delta, thereby limiting the life of the winding insulation after assembly which makes the Rotor &amp; Stator Coil assembly not acceptable as per ICE 60034.</p>	<p>The reply is as per the reply given for point no. 1 to 3 of the letter dated 05.04.2019.</p> <p>SIL has taken utmost care to control the fugitive emission through the operation of the proposed grinding unit. With APCM and mitigation measures, the fugitive emission through the plant operation will be negligible. Hence there will not be degraded the potable water quality, no adverse impact on the health and quality of Defence products.</p> <p>SIL will ensure best in class Air Pollution Control Measures.</p> <p>SIL will ensure that there will be no further increase in SPM, SOx and NOx level due to operation of the proposed Grinding Unit. Hence, there will not be any impact on L&amp;T manufacturing</p>

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		(b) & (C) Critical equipment of this project shall be manufactured and maintained in Dust free environment. Dust exposure may affect the reliability & functionality of Defence Product.	facilities and other industries located in the area.  The Defence Unit of L&T is surrounded by Red Category Industries of its own units viz. L&T MHPS Turbine, MHPS Boilers, Special Steels & Heavy Forgings, Heavy Engineering, Piping Centre etc.  Continuous Ambient Air quality monitoring station will be installed and report of the same will be submitted to GPCB as per the direction.  Third Party monitoring will be carried out on monthly basis through GPCB approved Third Party and report will be submitted to GPCB.
2	Use of PetCoke / Lignite as Fuel	Use of low quality grade Lignite & Pet coke will lead to high emission of SO <sub>x</sub> , NO <sub>x</sub> and PM.	There will not be use of lignite and petcoke. Undertaking for no use of Lignite and petcoke submitted to the SEAC.
3	Green Belt Damage	Our developed Green belt will be directly exposed to the Cement dust deposition and other process & non-process related fugitive emission. Besides, green belt development proposed by you will take 5 years to grow, which is very much longer time.	With adoption of the mitigation measures, there will be no fugitive emission due to operations of the plant, which will not affect the developed green belt of L&T as envisaged.  SIL will develop 33% Green Belt. However, belt on the periphery of the plant will be developed before commencement of the operations and green belt within the plant are will be developed in shortest possible time. On the periphery, green belt width would be approximately in the range of 6 mtr to 8 mtr based on selection of species and location in the plant area. Greenbelt within the plant are will be developed with width ranging from 20 - 30 mtrs. Equal distance between the layers will be maintained. Our green-belt will help to control fugitive emission. Moreover, the green-belt developed at the premises of the L&T will also control fugitive emission.

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			There shall be no impact on developed greenbelt by L&T in their premises.
4	Ground Level Concentration of Pollutants	<p>What will be the level of GLC of SPM, SOx and NOx considering the downwind directions?</p> <p>Moreover, we feel that the proposed project site is within 500 meters of Forest Area. (Ref. GPCB Guidelines for Coal Handling Units)</p>	<p>The reply is as per the reply given for point no. 3 of the letter dated 05.04.2019.</p> <p>Our proposal is for standalone cement grinding unit. As such as location criteria defined by GPCB Guideline is not applicable to us. However, we will ensure all compliance of the coal and ash handling guidelines applicable to cement plant.</p>
5	Total Nos. of Road Trips (Raw Material + Finished Good) Per Day	<p>Capacity of proposed project is 2.0 Million TPA, which means approx. 550 nos. of Trucks movement in a day.</p> <p>This will create frequent traffic issue and non-process related fugitive emission.</p> <p>What is your Traffic Management Plan including Parking facilities.</p>	<p>Daily 363 Nos. of Trips (in &amp; Out) will be required for transport of cement and raw material during the operations of the Grinding Unit.</p> <p>The proposed route of the trucks movement is attached at Annexure - C.</p> <p>The Traffic Management Plan with Parking facilities is attached at Annexure - D.</p>
6	Exact mode and route of Transportation for Raw Materials and Finished Goods.	<p>The proposed project site is in the middle of various L&amp;T Manufacturing.</p> <p>Trucks transportation through internal roads and trucks loaded with clinker, coal, Slag and Fly Ash &amp; Cement will create heavy traffic and non process related fugitive emission.</p>	<p>The google map of the proposed site alongwith the distance of the each unit of the L&amp;T is attached at Annexure - E.</p> <p>The proposed location is in industrial zone. The L&amp;T Units are on the N.H on which daily movement of Heavy Vehicle Traffic are already in existence.</p> <p>Our proposed site is connected to major National High Way which is utilized by all the industries of Hazira. Daily average basis 1421 PCU / Hour passing through Highway presently. There will be increase of 48 PCU / Hour due to our proposed project, which is very nominal @ 3.38%. Hence, the additional load on the carrying capacity of the concern road is not likely to have any significant effect.</p>

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			<p>SIL will ensue best in class Air Pollution Control Measures. Hence, there will be no any non-process related fugitive emission during transportation.</p> <p>After survey of the various sites, SIL has already invested for procuring land in the industrial zone and therefore it is not possible to explore alternate location for the proposed project. Moreover, there is a concern of disposal of fly ash and slag generated in Hazira by Power Plant and Steel Industry. Government is also encourage disposal of fly ash and slag in safe and scientific manner under AFR. Our proposed plant will be one of the solution for disposal of slag and fly ash generated in the area.</p>
7	Responsibility & Liability	If any damage will occur to our Green Belt, Water, Health of Employees, Product Quality and Business due to your operation, who will be responsible for the same?	<p>Our proposed project having sophisticated machinery and control systems and approximate 300 nos. of persons will work in our site. Our prime responsibility is to ensure Health and Safety of our people, plant and neighbors. The Cement is not carcinogenic material. It is hazard less material, which can not have any impact. However, we will take adequate measures not for just L&amp;T but also our own people, plant, neighboring industries.</p> <p>We assure that with implementation of the mitigation plan and regular monitoring, there will not be any degradation of environment, which adversely affect the Green Belt, Water, Health of Employees, Product Quality and business of L&amp;T and other neighboring units.</p>
8	Project Expansion in Future	As Cement Industry falls under 17 Categories of High Polluting Industries declared by GPCB, we will be the direct suffers if at all there is any chance of setting up integrated / full fledged cement plant.	<p>The Defence Unit of L&amp;T is surrounded by Red Category Industries of its own units.</p> <p>The proposed project is only a standalone Grinding Unit. There is no chance of setting up an integrated / fledged cement</p>

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			<p>plant as there is no limestone in the vicinity.</p> <p>SIL has already invested for procuring land in the industrial zone and therefore it is not possible to explore alternate location for the proposed project.</p>
9	Location of proposed Project	Proposed Project site is surrounded by various L&T Manufacturing Units. Hence, there will be having direct impact due to our operation.	<p>With the implementation of the mitigation measures, there will not be any chance of degradation of Environment, which will direct impact on L&amp;T Manufacturing Unit. Alternate site study has been done and most suitable site has been selected for the proposed project based on the siting criteria guidelines.</p> <p>SIL has already invested for procuring the land in the industrial zone, it is not feasible to shift the project site to any other location. Moreover, there is a concern of disposal of fly ash and slag generated in Hazira by Power Plant and Steel Industry. Government also encourages disposal of fly ash and slag in safe and scientific manner under AFR. Our proposed plant will be one of the solution for disposal of slag and fly ash generated in the area.</p>

We humbly submit to the State Level Expert Appraisal Committee (SEAC) that the concerns / issues raised by L&T with respect to the fugitive emission due to our proposed project (process / non-process area operation) and effect of the same on their developed green-belt / water body / manufacturing facilities and products are absolutely unwarranted, far from the truth and only imaginary. As explained above, we submit that the Standalone Grinding Unit is not at all a polluting industry as projected by the L&T. Moreover, we have taken abundant precaution in selecting the technology for Grinding Unit, Air Pollution Control Pollution Equipment, Development of Green Belt on periphery and in and around Grinding Unit. Further, we would like to categorically state that there will be no impact of our operations to the nearby located industries.

It is further submitted that the existing manufacturing facilities of L&T must be complying with conditions of the approvals / clearances / permission issued to them by various authorities. Moreover, L&T must have also taken into consideration the existing large scale industries in Hazira Industrial Area as well as future development before setting up their facilities. We feel that

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Opp. L&T Piping Center, Gate No. 9,  
Hazira, Surat - 394510, Gujarat.



the L&T must have taken necessary safeguards to ensure that their manufacturing facilities are not affected due to existing as well as future industrial development of the area.

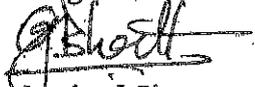
All the points raised by L&T has already been adequately covered while preparing Environment Impact Assessment Report (EIA) and we once again inform that during Public Hearing held on 22.03.2019, L&T representatives has accepted that APCM has well planned by us and points raised during PH were clarified to their best satisfaction. We feel that L&T is interested in shifting our present location on frivolous ground. It is hereby submitted that it is absolutely not possible at this juncture to shift the location to alternate location as we have already made huge investment in the land and project planning has been done including placing of orders for major Plant & Machinery.

We once again reiterate that we have taken abundant precautions for our standalone grinding unit with respect to the pollution parameters (Process / non-process area) as is evident from submitted EIA. It will have no impact to L&T or other industries located nearby.

In view of the above, we request the Hon'ble Committee to kindly take a suitable decision in the interest of the overall development in the region.

Thanking you,

Yours faithfully,  
for Sanghi Industries Limited

  
Authorized Signatory

Encl: As above

Email

Sundar Ramanathan

---

**Re: Expert Committee meeting held on 13/04/2021 and 17/05/2021 in pusuance to the Hon'ble NGT Order in Appeal 36 of 2020**

---

**From :** gjbhatt@sanghiment.com

Thu, Jul 01, 2021 06:57 PM

**Subject :** Re: Expert Committee meeting held on 13/04/2021 and 17/05/2021 in pusuance to the Hon'ble NGT Order in Appeal 36 of 2020

2 attachments

**To :** Sundar Ramanathan <r.sundar@nic.in>**Cc :** cnpandey@iitgn.ac.in, jkishwan@gmail.com, sv godavarthi <sv.godavarthi@gmail.com>, munish chandel <munish.chandel@gmail.com>, M Suresh Kumar <ms\_kumar@neeri.res.in>, Ankur Tiwary <ankur.cpcb@nic.in>, rps3@hotmail.com, kamyotra@yahoo.co.in, ahupadhy@rediffmail.com, avasalarajagan@gmail.com, sksinghdce@gmail.com, mkg cppri <mkg\_cppri@rediffmail.com>, siddhartha singh74 <siddhartha.singh74@gmail.com>, tejaswini acf <tejaswini.acf@gmail.com>, MAHENDRA PHULWARIA <m.phulwaria@gov.in>, ssmishtha@gmail.com

Dear Sir,

We submit our reply in response to your email dated 06.06.2021 as attached herewith.

Regards

**Gaurang Bhatt**

Sr. Vice President - Corporate Affairs &amp; Legal

**Sanghi Industries Limited**10th Floor, Kataria Arcade, Off.S.G. Road,  
Makarba, Ahmedabad-380051, Gujarat,  
INDIA.**www.sanghiment.com**

Tel.: +91 79 2683 8000

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**Sanghi Industries Limited**

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Off S. G. Highway, Post - Makarba, Dist : Ahmedabad - 380051.  
Tel : 079 - 25838000 Fax : 079 - 25833111  
E-mail : sanghicmo@sanghicement.com



July 1, 2021

To,  
The Hon'ble Expert Committee  
Ministry of Environment, Forest & CC  
Industry - 1  
New Delhi

**Sub: Expert Committee Meeting held on 13th April 21 and 17th May 2021 pursuant to Order dated 20.01.2021 passed by the Hon'ble National Green Tribunal, Principal Bench in Appeal No 36/2020**

Dear Sir,

1. This in reference to your email dated 06.06.2021 and our subsequent e-mails dated 08.06.2021 and 16.06.2021, whereby we have been advised to respond to your email dated 06.06.2021 on the load bearing capacity of the Panchayat Road proposed to be utilized by us for our Cement Grinding Unit In Hazira Industrial Area. In accordance with IRC 1997 Guidelines.
2. Pursuant to your directions, we engaged of Multi-Media Consultants Pvt. Ltd., a renowned consultant empanelled with the Roads & Building Department of the Govt. of Gujarat, various Municipal Corporations as well as major Urban Development Authorities within the State, to assess the load bearing capacity of the Panchayat Road in question. They have prepared a report dated 01.07.2021 which is attached herewith for your kind consideration as response to your email dated 06.06.2021.
3. In addition to, and without prejudice to the above, we deem it appropriate to bring to your attention the following points in relation to the said Panchayat Road:
  - a. The Panchayat Road, for which the load bearing capacity was impugned by the L&T, was constructed by L&T Ltd. itself pursuant to directions of the Hon'ble High Court of Gujarat in Special Civil Appeal No 10850/2009 titled as "Sukhabhai Bhikhabhai Aahir & 29 others. Vs. Principal Secretary & 3 others".
  - b. In this Special Civil Application, which was filed by residents of village Sunvalli against L&T, the Hon'ble High Court, vide an Order dated 23.02.2010 directed as follows:

*"We direct the L&T (Respondent No. 4) to construct the proposed road stated in its affidavit and shown in the enclosure annexed to the affidavit, at an early date, preferably within six months. In the meantime, if the 4th Respondent raises level of its land before construction of road and drainage, it must ensure that some space is left for drainage of storm water of the land or Revenue Survey No. 445 to 497. To ensure that road and drainage are properly constructed, we*

CIN No. : L18209TG1985PLC005581

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## Sanghi Industries Limited

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Off S. G. Highway, Post : Miskarba, Dist : Ahmedabad - 380051.  
Tel : 079 - 26838000 Fax : 079 - 26838111  
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*are imposing the map of the proposed road and proposed drainage plan as submitted by the 4th respondent as part of this judgment at Annexure "A" and "B".*

- c. As will be evident from the above, the Panchayat Road was caused to be constructed by L&T Ltd. In terms of the directions passed by the Hon'ble High Court; and in accordance with condition imposed by the Collector, Surat in its Land Allotment Order dated 23.08.2010. In terms thereof, L&T was required to construct the Panchayat Road in compliance of applicable regulations and standards applicable in industrial areas, and after obtaining approvals from Ex-Engineering ( R&B Department, Circle 1, Surat) and execute agreement also.
- d. Furthermore, the Panchayat Road has been disclosed and sanctioned to be a 22 Meter long road under the sanctioned SUDA Development Plan.
4. As such, this will make it evident that the Panchayat Road has been constructed pursuant to judicial directions and in accordance with applicable regulations and standards, is a 'Panca' road and is in fact being used for movement of commercial vehicles such as the 34 tonner trucks proposed to be used by the SII.
5. You may further appreciate that the Panchayat Road currently belongs to Roads & Building Department, Government of Gujarat, who is in charge of its maintenance and upkeep. Upon inquiries, we have been given to understand that the R&B Department (Panchayat), Surat Office has already proposed to the government for improvement of the road and on approval they will take further action.
6. In the meanwhile, the surrounding industries are also making efforts to maintain the Panchayat Roads for smooth vehicular movement.

We hope above submission meet the requirements and request Honorable committee to humbly give due consideration to the above submission and will examine the same with a pragmatic view in the interest of sustainable development.

Thanking you,

Yours faithfully,

For Sanghi Industries Limited

Gaurang Bhatt

Sr. Vice President

Encl: as above



# Multi Media Consultants Pvt. Ltd.

401, Shivalik Shilp, Iskcon Cross Roads, S.G. Highway, Ahmedabad-380 058.

Phone : (079) 40399079, 40399233 e-mail : info@mmcpl.co.in • Website : www.mmcpl.co.in

CIN : U74140GJ1984PTC007476

MMCPL/07-21/806

July 1, 2021

To

**Sanghi Industries Limited  
10th Floor, Kataria Arcade,  
Off S G Highway  
P.O. Makarba  
Ahmedabad- 380051**

Dear Sir

Pursuant to our appointment as consultants to carry out a study for the load-bearing capacity of the stretch of approach Road to R.S no. 125 & 126 at Village – Shivrampura, Dist - Surat, Our Observations on the same are as follows:

1. We have studied the geotechnical investigation report and existing pavement investigation report provided by you. As per this report, the Ground CBR varies from 2.6% to 5.4% with average value of 3.5%, and the average Asphalt Thickness is about 85mm.
2. We have also examined the traffic analysis report submitted to us, pursuant to which there is an observed movement of 1290 commercial vehicles per day (“CVPD”), on the subject road.
3. It may be noted that the following codes issued by the IRC (Indian Roads Congress) are potentially relevant in determining the load-bearing capacity of a road:
  - a. IRC:81-1997
  - b. IRC:SP:72-2015
4. As per the codal provisions and looking at the current condition of the road, the subject road, in our opinion, possesses the load bearing capacity to handle the current traffic.
5. We have further been informed that you are planning to establish a cement unit which will, generate a movement of 363 CVPD (34-ton) while operating at full capacity. Assuming 10 years design life, vehicle damage factor of 2.89 and growth rate of 5%, resulting traffic will be (assuming *ceteris paribus*) around 2 MSA, which is a miniscule increase to the existing traffic. In fact, even this too will happen after 5 years as we are informed that this will take roughly 2 years for construction and 3 years for development.
6. It is our opinion that assuming the addition of traffic generated on the subject road on account of commercial operation of your plant, and assuming remaining traffic to be at the same level, evaluation of the road shall be carried out again at the end of you construction period. Decision of overlay / reconstruction shall be taken based on the result of that evaluation data

We remain available to discuss the above.

Yours truly



**For,  
Multi Media Consultants Pvt Ltd**



An ISO 9001:2015 Company



1622245

**COASTAL ZONE MANAGEMENT PLAN**  
GUJARAT

Sheet No: F 43 M 12/SE  
Projection: UTM Datum: WGS 1984  
Map No.: GJ 44

**Legend**

- Point
- Light House
- Fishing Harbours
- Reef
- Railway Line
- Canal
- High Tide Line
- Low Tide Line
- Manicured Urban Areas
- Village Boundary
- Tank Boundary
- Coastal District Merging CRZ
- Districts Out of CRZ

**Legend**

- 20 Burrow Pits
- Point Line
- Ecologically Sensitive Zone
- Division of Reserved Forest
- CRZ Lines & Boundary
- 100 m Line on CRZ III Area
- 500 m CRZ Line - NDZ
- CYCA Boundary
- Band Dune Beyond CRZ Boundary
- CRZ Boundary

**CRZ I CATEGORY**  
CRZ - IA: 50 m Mangrove Buffer Zone - CRZ IA  
CRZ - IB

**CRZ II CATEGORY**  
CRZ - II

**CRZ III CATEGORY**  
CRZ - III  
No Development Zone  
200 to 500 m from HTL

**CRZ IV CATEGORY**  
CRZ - IV  
CRZ - IVA  
CRZ - IVB

**DATA SOURCE**  
Map No. F 43 M 12/SE  
Scale: 1:100,000  
Date: 2011

**ABBREVIATIONS**  
CRZ: Coastal Regulation Zone  
HTL: High Tide Line  
NDZ: No Development Zone  
CYCA: Coastal Zone Control Area

**PREPARED AS PER COASTAL REGULATION ZONE NOTIFICATION, 2011**

<p>Checked by</p> <p>Director (Environment) Government of Gujarat</p>	<p>Certified by</p> <p>Director Government of Gujarat</p>	<p>Approved by</p> <p>Minister, Coastal Zone Management Authority</p>
<p>Prepared by</p> <p>Technical Study Committee National Centre for Sustainable Coastal Management, NCSM &amp; CC</p>	<p>Prepared by</p> <p>National Centre for Sustainable Coastal Management, NCSM &amp; CC Forest &amp; Environment Department Government of Gujarat</p>	<p>Prepared for</p> <p>Ministry of Environment, Forests &amp; Climate Change (Channel - 800 025)</p>

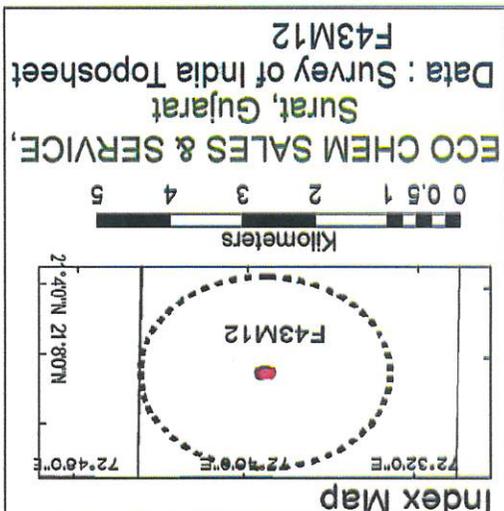
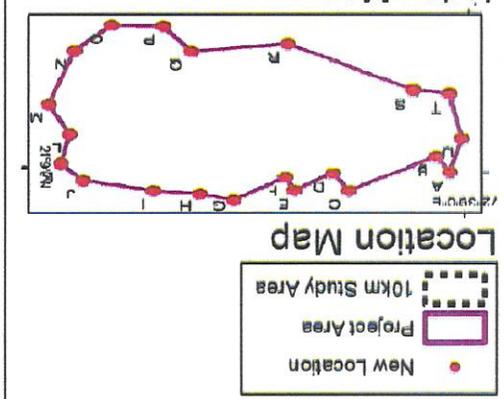
National Centre for Sustainable Coastal Management  
Government of Gujarat  
Channel - 800 025

Prepared for  
Government of Gujarat  
Forests and Environment Department

FORSTS AND ENVIRONMENT DEPARTMENT  
Government of Gujarat



S.No. 35/1, 125/2, 126/1+2+3  
 Shikarpur Mora, Choryasi,  
 Surat, Gujarat, 394510  
 Study Area Map 10 km Radius



ECO CHEM SALES & SERVICE,  
 Surat, Gujarat  
 Data : Survey of India Toposheet  
 F43M12