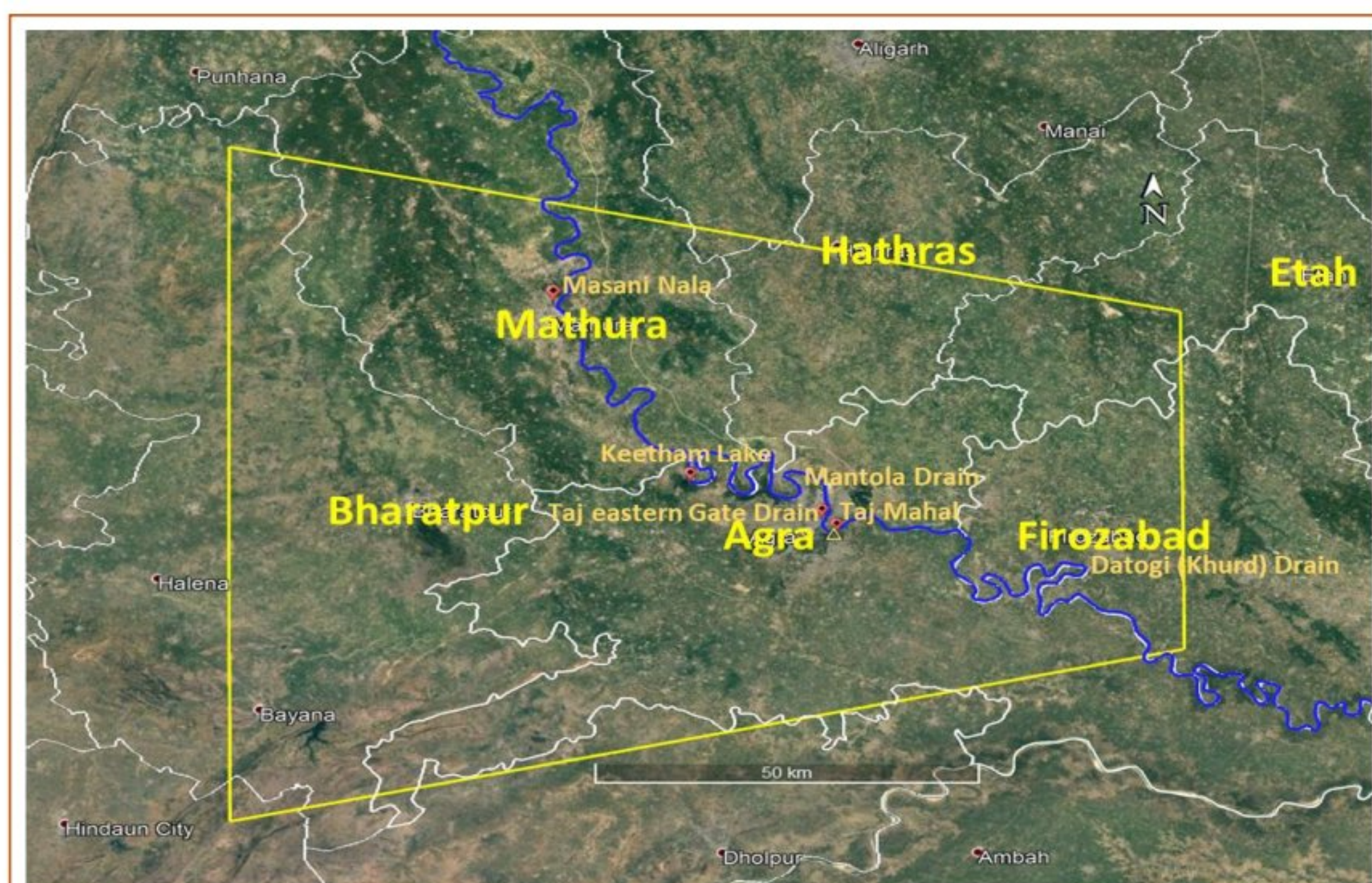


Final

***Guidelines for the Proposed Industrial Units/
Activities with Air Pollution Score between 11 & 20
and above, falling under the TTZ Area***

(prepared in compliance to the Hon'ble Supreme Court Order
dated December 8, 2021 in the matter of WP (Civil) No.
13381/1984, MC Mehta Vs Union of India & Ors.)



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Content

Item No.	Title	Page No.
	<i>Cover page</i>	1
	<i>Content</i>	2
1.0	Background	3
1.1	Hon'ble Supreme Court Direction and its Compliance	3
2.0	The Basis for the Guidelines	3
2.1	Discussions with Stakeholders / Concerned Regulatory Agencies	3
2.2	Industrial Sectors Categorization Criteria (as per CPCB)	4
2.3	Air Pollution Score Assignment Criteria (as per CPCB)	6
3.0	Suggested Sectorial Guidelines	7
3.1	Purpose of the Sectorial Guidelines	7
3.2	Scope of the Sectorial Guidelines	8
3.3	Suggested Approach for Environmental Clearance/ Permission of Industrial Units/Activities falling under the TTZ area	9
3.3.1	Projects falling under the purview of EIA Notification 2006	10
3.3.2	Projects falling under the SPCB Consent Mechanism	10
3.4	Mitigation Measures	14
3.5	Post Project Compliance Monitoring Mechanism	14
	Annexures	
	Annexure 1: Procedure for obtaining concurrence/opinion of NEERI	15-16
	Annexure 2: Suggested Mitigation Measures and General Instructions	17-29
	Annexure 3: Additional Studies/Actions required for Air Quality Improvement in the TTZ Area	20-21

1.0 Background

1.1 Hon'ble Supreme Court Direction and its Compliance

This has reference to the Hon'ble Supreme Court Orders dated December 6, 2019 and December 8, 2021 in the matter of Writ Petition (Civil) No. 13381/1984, M.C. Mehta V/s Union of India & Ors. in respect of the Taj Trapezium Zone (TTZ). Hon'ble Supreme Court Order dated December 8, 2021 has the following three points concerning NEERI:

1. *"A representative of NEERI shall be included as a member in the Environmental Appraisal Committee (EAC) and State Environmental Appraisal Committee (SEAC) constituted by the Ministry of Environment, Forest and Climate Change for dealing with industrial units falling in TTZ Area.*
2. *In respect of industrial units where the Air Pollution Score as per CPCB and UPPCB is between 11 & 20, sectorial guidelines shall be obtained from NEERI. No industrial units shall be cleared by the State till sectorial guidelines are obtained from NEERI.*
3. *For those industrial units having Air Pollution more than 20, the concurrence/opinion of NEERI will have to be obtained."*

In compliance to the Hon'ble Supreme Court Order dated December 08, 2021, Commissioner Agra and Chairman, TTZ Authority, Agra vide letter no. 499/TTZ(PMU)/NEERI_S.Guidelines/22 dated 04.02.2022 requested NEERI to prepare Sectorial Guidelines for the necessary and important industries/projects for implementation in the TTZ Area. In first phase, 31 industrial sectors/activity/projects were identified by TTZ Authority.

These guidelines are prepared as a response to the letter from TTZ Authority and to comply with the orders of Hon'ble Supreme Court.

2. The Basis for the Guidelines

2.1 Discussions with Stake holders/Concerned Regulatory Agencies

The matter was discussed with the officials of TTZ Authority by NEERI, and basic information with respect to the present status and need for additional industries under each sector-category, along with their location, capacity/production details, fuel usage pattern (type & quantity),

control systems adopted/ proposed etc. was requested for each of the districts under TTZ Area vide NEERI letter dated February 11, 2022. The information is being collected and compiled by the TTZ Authority. However, development is a continual and dynamic process that depends on many natural and socio-political factors. Therefore, exact prediction of the location and type of industry and industrial development is not practically feasible.

These issues were further discussed in a meeting held under the Chairpersonship of the Secretary, MoEF&CC on March 9, 2022 at MoEF&CC. After detailed deliberations, it was agreed that the sectorial guidelines would primarily be formulated within the existing regulatory framework of EIA process of MoEF&CC, however looking into the area-specific environmental settings/sensitivities associated with TTZ, and nature & magnitude of proposed activity, comprehensive environmental safeguards shall be required at the project approval stage and also strict compliance monitoring at the post project implementation stage.

With respect to the Hon'ble Supreme Court directions for inclusion of NEERI representative as member in the EAC and SEAC (UP & Rajasthan), Director, CSIR-NEERI nominated NEERI representative, vide letter dated March 15, 2022, which was subsequently notified by the MoEF&CC on April 1, 2022.

2.2 Industrial Sectors Categorization Criteria (as per CPCB)

For the preparation of Sectorial Guidelines for different categories of industries having air pollution score between 11 & 20 (as classified by CPCB or UPPCB), the final document circulated by CPCB vide letter No. B-29012/ ESS(CPA)/2015-16, dated March 7, 2016 and by UPPCB vide letter No. G 29267/ C-4/Sa 62/ 2019 dated 09.01.2019, which provides details of classification of different industrial sectors under Red/ Orange/ Green / White categories, have been referred.

As per CPCB (2016) document, the categorization of industries is done on the basis of the composite score (0-100 marks) of the pollution index, which is based on the air pollution, water pollution and hazardous waste generation potential of the industry. The parameters/criteria and weightage of air pollution, water pollution and hazardous waste is given in **Table 1.**

Table 1: Parameters/Criteria and Weightage of Air Pollution, Water Pollution and Hazardous Waste as per CPCB, 2016 document

Sr. No.	Particulars	Weightage
1.	Air Pollution Score based on parameters namely PM, CO, NO _x , SO _x , HMs, Benzene, Ammonia and other toxic parameters relevant to the industry	40 Marks
2.	Water Pollution Score based on parameters namely pH, TSS, NH ₃ -N, BOD, Phenol and other toxic pollutants relevant to the industry.	40 Marks
3.	Hazardous wastes (land fillable, incinerable, recyclable) as generated by the industry.	20 Marks
Note: Parameters to be decided on the basis of the nature of the wastes generating from the industrial sector. Industries having only either water pollution or air pollution, the score will be normalized wrt 100.		

Based on the relative pollution potential index of the industrial sectors and grouping of the industrial sectors based on the use of raw materials, manufacturing processes adopted and pollutants likely to be generated, the industrial sectors are categorized as:

- Industrial sectors having Pollution Index Score of 60 & above - Red category
- Industrial sectors having Pollution Index Score between 41 & 59 - Orange category
- Industrial sectors having Pollution Index Score between 21 & 40 - Green category
- Industrial sectors having Pollution Index Score upto 20 - White category

Total 242 types of industrial sector are identified, which are classified into 60 Red, 83 Orange, 63 Green and 36 white categories of industries. The final list of Red, Orange, Green and White categories of industries is given in CPCB (2016) document.

The industrial sector which doesn't fall under any of the above four categories (Red, Orange, Green and White), decision with regard to its categorization will be taken at the level of concerned SPCB/PCC in accordance with the scoring criteria specified by CPCB. The validity of consent given by SPCBs/PCCs is for 5 years for Red category industries, 10 years for Orange category industries and 15 years for Green category

industries, whereas white or non-polluting industries do not require consent.

2.3 Air Pollution Score Assignment Criteria (as per CPCB)

The air pollution sources are grouped in seven categories, and marks are assigned based on the type of pollutants released from a particular activity, as given in the **Table 2**.

Table 2: Criteria for Air Pollution Score Assigned to Different Types of Industries

Sr. No.	Air Pollutant Group	Range of Prescribed Standard of Criteria Pollutants	Marks Assigned
Part 1: Score A1 = Score based on type of expected criteria air pollutants present in the emissions. Maximum the following seven categories are to be taken.			
1.	Group A1A	Presence of criteria air pollutants having prescribed standard limits up to 2 mg/Nm ³ (Pollutants covered: Cd+Th, Dioxin & Furans, Mercury, Asbestos)	30
2.	Group A1B	Presence of criteria air pollutants having prescribed standard from 3 to 10 mg/Nm ³ (Pollutants covered: HF, Nickel + Vanadium, HBr, Manganese, Lead, H ₂ S, P ₂ O ₅ as H ₃ PO ₄)	25
3.	Group A1C	Presence of criteria air pollutants having prescribed standard from 11 to 50 mg/Nm ³ (Pollutants covered: Chlorine, Pesticide compounds, CH ₃ Cl, TOC, Total Fluoride, Hydrocarbons, NH ₃ , HCL vapours & Mist, H ₂ SO ₄ Mist, SO ₂)	20
4.	Group A1D	Presence of criteria air pollutants having prescribed standard from 51 to 250 mg/Nm ³ (Pollutants covered: CO, PM, NO _x)	15
5.	Group A1E	Presence of criteria air pollutants having prescribed standard from 251 mg/Nm ³ and above (Pollutants covered: NO _x with liquid-fuel, SO ₂ with liquid-fuel)	10
6.	Group A1F	Generation of fugitive emissions of particulate matters which are: <ul style="list-style-type: none"> • Not generated as a result of combustion of any kind of fossil-fuel. • Generated due to handling/processing of materials without involving the use of any kind of chemicals. • Which can be easily contained/controlled with simple conventional methods. 	10

7.	Group A1G	Generation of Odours which are: <ul style="list-style-type: none"> Generated due to application of binding gums/ cements/adhesives/enamels Which can be easily contained/controlled with simple conventional methods. 	10
Part 2: Score A2 = Score based on consumption of fuels and technologies required for air pollution control:			
6.	Group A2F1	All such industries in which the daily consumption of coal/fuel is more than 24 MT/day and the particular (particulate/ gaseous/ process) emissions from which can be controlled only with high level equipment/ technology like ESP, Bag house filters, High efficiency chemical wet scrubbers etc.	10
7.	Group A2F2	All such industries in which the daily consumption of coal/fuel is from 12 MT/day to 24 MT/day and the particular (particulate/gaseous/process) emissions from which can be controlled with suitable proven technology.	5
Overall Air Pollution Score = A1 + A2 = max. Marks 40			

3.0 Suggested Sectorial Guidelines

In view of the intent of the Hon'ble Supreme Court for Grant of Environmental Clearance/Consents (CTE/CTO) to projects with Air Pollution Index between 11 and 20, and above, the proposed guidelines have been worked upon the principle to ascertain that the pollution levels are within permissible limits and do not have a detrimental impact on the environment and human health.

3.1 Purpose of the Sectorial Guidelines

The main purpose for preparation of the Sectorial Guidelines for different category of industries/ projects/ activities falling in the TTZ Area is to ensure that the proposed developmental activities do not significantly contribute to air environment. This is to further ensure that the Taj Mahal as well as other historical/archaeological monuments, cultural/religious places of interest and also the public in general are not affected because of air pollution due to industrial activities. The industrial units mentioned in the Hon'ble Supreme Court Order dated December 8, 2021 also comprises of activities such as infrastructure facilities, services etc. which are non-industrial in nature but are expected to come up in the TTZ area.

It is important to mention here that the air pollution potential of an individual industry depends upon the nature and level of activity, type & consumption of various raw materials & production, manufacturing processes adopted, type of pollutants released, duration of plant operation, pollutants release pattern, control systems used & their efficacy etc., which all need to be accounted and quantified for an individual industry/activity. Therefore, each individual industry/activity/project needs to be critically evaluated with respect to its contribution in terms of air pollution, and also with respect to other environmental aspects so that development in the TTZ area can take place in an environmentally sustainable manner within the assimilative/carrying capacity of the region.

3.2 Scope of the Sectorial Guidelines

Based on the CPCB (2016) Industries categorisation as mentioned earlier in sections 2.2 & 2.3, it has been observed that out of total 242 types of industrial sectors, 41 industrial sectors have air pollution score upto 10, as many as 100 types of industrial sectors have air pollution score between 11 & 20 and only 34 industrial sectors have air pollution score more than 20, whereas air pollution score is not specified for 67 industrial sectors (which also include 36 white category industries). Category-wise number of industrial sectors under different air pollution scores are summarized in **Table 2**.

Table 2: Summary of Category-wise Industries and their assigned Air Pollution Score

Sr. No.	Industry Category	Total Number of Industries	Number of Industries with Air Pollution Score			
			Upto 10	Between 11 & 20	More than 20	Not Specified
1.	Red	60	0	14	33	13
2.	Orange	83	0	78	1	4
3.	Green	63	41	8	0	14
4.	White or non-polluting	36	0	0	0	36
	Total	242	41	100	34	67

Source: Derived from CPCB, 2016 document

Thus the proposed sectorial guidelines shall be applicable for 100 types of industrial sectors whose air pollution score is between 11 & 20. This shall also include the projects (34 Nos.) having air pollution score more than 20, wherein such projects have to be referred to NEERI for

opinion/ concurrence. These guidelines shall also be applicable for the industries categorised subsequently by CPCB and/or respective SPCBs.

In pursuance of Hon'ble court directions, NEERI has made efforts to collect, compile and analyse the data on 31 industrial activities identified for granting clearances/consent in phase 1 development as communicated by TTZ authority. Considering the limited data/information available on industrial environmental baseline and its associated impacts, including the details on unit industrial processes and related technologies, the guidelines are general in nature but with broad applicability. Accordingly, following approach has been suggested for Environmental Clearance/Permission to the Projects falling under the TTZ area.

Also, the air pollution potential of an individual industry depends upon the nature and level of activity, type & consumption of various raw materials & production, manufacturing processes adopted, type of pollutants released, duration of plant operation, pollutants release pattern, control systems used & their efficacy etc. which all need to be accounted and quantified for an individual industry/activity during the appraisal process.

3.3 Suggested Approach for Environmental Clearance/ Permission of Industrial Units/Activities falling under the TTZ area

The categorization of industries and air pollution score assigned to different industries (CPCB, 2016) is based on many assumptions and do not necessarily signify emission load of different pollutants and impact of individual industry on the surrounding environment. This is evident from, Hotels (< 3 star), hotels having more than 20 rooms and glass manufacturing industry/brick kiln/hot mix plant/stone crushers/ mining activity etc. are assigned equal air pollution score of 20, which appear inconsistent with ground level facts.

In this context, each industry/activity/project needs to be critically evaluated with respect to its contribution in terms of air pollution (having air pollution score between 11 & 20 and above), and also with respect to other environmental aspects so that industrial development in the TTZ area takes place in an environmentally sustainable manner.

For this purpose, the following appraisal mechanism is suggested for the projects already covered under the purview of EIA Notification 2006 and its subsequent amendments of MoEF&CC, and the projects covered under the consent to establish & consent to operate mechanism of State

Pollution Control Board, having air pollution score between 11 & 20 and above.

3.3.1 Projects/Activities falling under the purview of EIA Notification 2006

The projects/activities that fall under the schedule of EIA notification, 2006, shall be appraised as per the extent and provisions of the EIA notification, 2006 and its subsequent amendments, with the inclusion of aspects as suggested in **Box 1**, and having NEERI representative as member in the appraisal committee.

Subsequently, application for Consent to Establish (CTE)/ Consent to Operate (CTO) shall be applied and granted by the respective SPCBs, as per the prevailing procedures.

3.3.2 Projects/Activities covered under the SPCB Consent Mechanism

The projects/activities which are not covered under the purview of EIA Notification 2006 and its subsequent amendments shall follow the procedure described below:

Step 1: Apply for Consent to Establish with additional Report as per Box 1 (suggested by NEERI) at respective SPCBs

Step 2: Check for Air Pollution Score

Case 1: Air Pollution Score between 11 and 20

- *Critical Evaluation of Project Report (**Box 1**) by respective SPCBs for grant of CTE*

Case 2: Air Pollution Score more than 20

- *Concurrence/ Opinion of NEERI to be obtained by respective SPCBs for grant of CTE (as per procedure given in Annexure 1)*

Step 3: Grant of Consent to Establish (CTE) as per prevailing SPCBs procedures

TTZ Authority shall periodically review the status of air quality status in the TTZ area and issue further directions for its improvement.

The process to be followed for grant of EC/consents in TTZ area is summarized in **Figure 1**.

Note: The draft guidelines were discussed at MoEF&CC in a meeting held under the chairmanship of Shri Naresh Pal Gangwar, Additional Secretary, MoEF&CC on October 7, 2022, wherein the officials from UPPCB, RSPCB, TTZ Authority and NEERI participated. The guidelines were further referred to the committee constituted by UPPCB, who initially suggested for the need of such guidelines by NEERI, which was accepted by the Hon'ble Supreme Court, as appeared in the Order dated December 8, 2021. The Committee constituted by UPPCB further discussed the matter on October 19, 2022 and suggested some modifications which are suitably incorporated in the present guidelines. Revised guidelines were submitted by NEERI on November 4, 2022, which were again reviewed by the Committee and the Committee vide email dated November 14, 2022 recommended that:

"A separate guideline for the main air pollution industrial sector such as glass manufacturing units, foundry units and stone crusher units having air pollution score between 11 to 20 should be prepared by NEERI."

Therefore, the present guidelines shall be applicable to all the sectors, and additional guidelines shall be prepared for these three sectors separately once the information/data sought is received from respective SPCBs for these sectors.

BOX 1: Project Report

A. Air Pollution Contribution Assessment and Management

1. Details of project configuration with the description of Plant/Equipment/Facility along with process flow diagram of the proposed project/industry with identified sources of air pollution due to various project activities
2. Details of anticipated parameters of air pollution (like PM₁₀, PM_{2.5}, SO₂, NO₂, CO, HC, VOCs, NH₃, H₂S etc.) due to each activity of the project with emission rate in appropriate units (say kg/hr or kg/day)
3. Details of physical parameters of each stack of the industries such as height, diameter, exit velocity, gas temperature, flow rate
4. Details of roads/traffic movement within the premises and outside the premises of the proposed project till the main road, as in many cases, large number of movement of vehicles is expected, which become a major source of vehicular pollution as well as re-suspension of road dust (depending upon type of road). Likely movement of such activities needs to be quantified with daily emission load (vehicle exhaust and road dust re-suspension).
5. Details of DG sets as well as other heavy machinery with operational schedule & fuel consumption
6. Details of air pollution control systems proposed for each parameter of concern at each of the source of generation and their efficiency
7. Quantification of the net contribution (in kg/d or during the activity period) of air pollution parameters due to the proposed project (without and with control systems)
8. Identification of zone of influence of the air pollution sources of the proposed project on the surrounding area using appropriate air quality model and assessment of its significance level (with and without control systems). Depending upon activity level of the proposed project, different zones can be identified.
9. Assessment of prevalent ambient air quality status in the zone of influence and meteorological conditions (secondary or primary data)
10. Details of additional measures to be taken to offset the net contribution of air pollution from the proposed project and expected expenses to be incurred on these measures.
11. Landuse of the surrounding area on Google Earth Map including distance from any eco-sensitive zone, world heritage site etc. along with .kml file of the proposed industrial unit with clear marking of plant boundary.

B. Other Environmental Aspects

12. Proposed Infrastructure details covering Greenbelt, Social Infrastructure, Connectivity, Drinking water system, Sewage and effluent management system and Industrial and solid waste management
13. Details of other environmental components (water, land, noise, Solid and Industrial Waste, Storm Water/RWH, flora-fauna, social aspects etc.) with mitigation/ environment management plan including proposed expenditure to be undertaken during the construction, operation and the entire life cycle.
14. Financial and social benefits with special emphasis on the benefit to the local people including tribal population, if any, in the area.

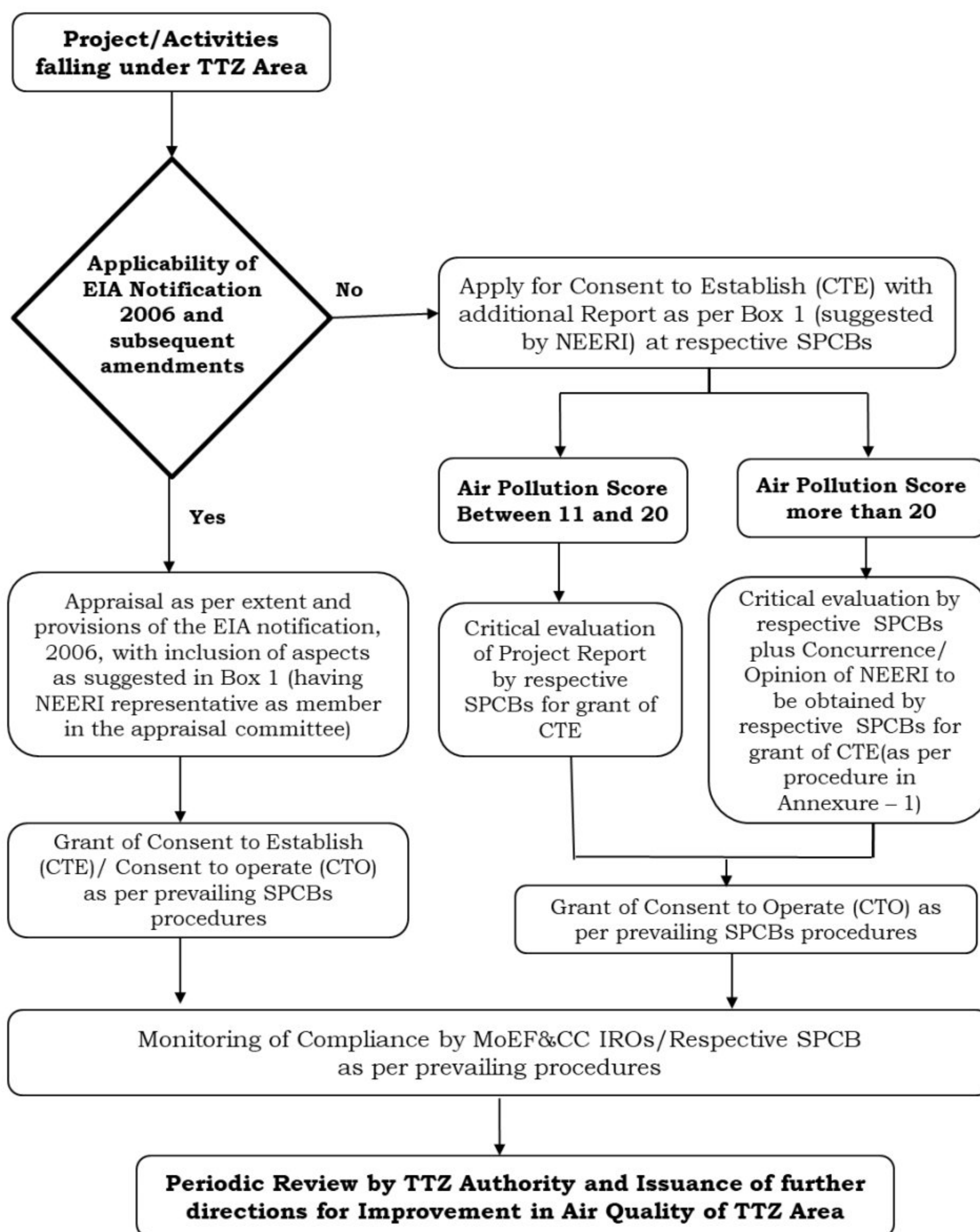


Figure 1: Flowchart depicting Project Appraisal Process in TTZ Area

3.4 Mitigation Measures

The major sources of air pollution in an industry include emissions from fuel combustion for the generation of heat/energy and process-related emission generated during the processing of raw material to convert it into the desired product. Additionally, emissions from the movement of vehicles are also one of the contributing sources of air pollution (vehicular exhaust & road dust re-suspension) directly or indirectly associated with industrial activities such as transporting raw materials, products and fuels, wherever applicable.

Given the above premises, the concerned authority may prescribe the additional conditions (over and above the environmental conditions specified by MoEF&CC/ SEIAA/ SPCB during appraisal) as mitigation measures, deemed fit for grant of Environmental Clearance (EC)/ Consent to establish (CTE)/ Consent to Operate (CTO) to those projects/ activities with air pollution score between 11 & 20 located in TTZ region. The detailed conditions are given in **Annexure 2**.

The above-mentioned measures and guidelines are suggested based on the review of literature and available in-house expertise on the subject. The contribution of individual industry/activity as well as specific mitigation measures shall be captured in the format of report as per **Box 1**, while granting environmental clearance/ consent to establish/ consent to operate/ NOC (as applicable).

3.5 Post-Project Compliance Monitoring Mechanism

The Project Proponent must ensure strict compliance to various rules/ regulations/norms/ guidelines applicable for specific sectors, notified by MoEF&CC, CPCB, SPCB and other concerned Central/ State Govt. Departments, and to the EC and CTE/CTO conditions as applicable. The compliance of the EC and consent conditions (as applicable) shall be monitored by MoEF&CC-IROs and respective SPCBs as per prevailing provisions and the extent of rules.

Further, in order to ensure environmental sustainability with respect to various air pollution sources, certain regular monitoring aspects are suggested. These are given in **Annexure 3**. TTZ Authority shall periodically review and oversee the compliance and may issue further directions for improvement in Air Quality of TTZ Area to respective stakeholders, as deemed fit.

Annexure 1

Procedure for obtaining Concurrence/Opinion of NEERI

Scope: This covers industries/activities having Air Pollution Score more than 20, not falling under the purview of EIA Notification 2006 and its subsequent amendments, but falling under the TTZ Area.

Procedure:

Step 1: Before forwarding the consent cases for Concurrence/Opinion of NEERI, the respective SPCBs shall ensure the following:

- a. The consent application is complete in all respect, as per the requirement, respective SPCB procedures and guidelines
- b. The Project Report (Box 1) is comprehensive, covering all the points, as applicable to the proposed project.
- c. The SPCB shall ensure visit to the project site as per the prevailing SPCB procedures.

Step2: The application shall be forwarded, on weekly basis, for Concurrence/Opinion of NEERI and shall include the following:

- a. Project Report (Box 1)
- b. All project-related documents submitted by the Project Proponent (PP) for consent application with necessary enclosures
- c. In case of Grant of CTE or extension of CTE
 - i. Site visit report with suggestions, observations and recommendations of respective SPCB
- d. In case of Grant of CTO or Renewal of CTO or Expansion
 - i. Site visit report with comments, suggestions, observations and recommendations of respective SPCB
 - ii. Compliance report of CTE/CTO, duly vetted by respective SPCB

p 3:

NEERI shall scrutinize and evaluate the proposal and forward its recommendations, in the form of a letter, to the respective SPCB for grant of consent, for inclusion in CTE or CTO, as applicable. If required, NEERI may seek additional information from the PP and may ask for presentation /discussion and also undertake site visit depending upon the nature of the proposed project before making any recommendations for grant of consent.

Evaluation Fee and Timelines

1. For evaluation of the projects, a minimum technical services fee shall be paid to NEERI by respective SPCBs, on a monthly basis, depending upon the number of projects evaluated. Depending upon the nature of the proposed project, in case site visit is to be undertaken by NEERI team, all the arrangements towards the travel, boarding, lodging and other logistics shall be made by the respective SPCB.
2. Any expenses towards attending the outstation meetings, convened by respective SPCBs, for obtaining opinion of NEERI for grant of EC/ CTE shall be borne by respective SPCBs, as per actuals within the extend of the SPCBs guidelines/procedures.
3. The technical services fee structure shall be as follows:

Sr. No.	Category with Classification	Evaluation Fee
1	Orange Category Industry with Air Pollution Score more than 20	Rs. 15,000/- + GST
2	Red Category Industry with Air Pollution Score more than 20	Rs. 25,000/- + GST

4. The prescribed time limit for processing the received application for Concurrence/ Opinion of NEERI, after receipt of all informations and fees, shall be as follows:
 - a. In cases where no site visit is required – Maximum 10 working days.
 - b. In cases where presentation/discussion/site visit is required – Maximum 20 working days.

Annexure 2

Suggested Mitigation Measures and General Instructions

1.0 Mitigation Measures

All industries shall use the best available technology to control process-related emissions by adopting the followings steps/strategies:

I. Industrial Process/Fuel

- I.1 Process furnaces/boilers shall preferably be based on electric or gaseous fuel like LNG, PNG etc. For example, Electric Arc Furnaces, Submerged Arc Furnaces /Induction Furnaces in place of cupola furnaces, or fume extraction systems at melting furnaces, wherever applicable.
- I.2 Furnaces based on solid fuel/fossil fuel/ liquid fuel like Petcoke/ furnace oil/ HSD/ LDO/ Kerosene etc. (if any) shall not be allowed.
- I.3 Only gas-based power generators with stack height conforming with the extant regulations and the CPCB guidelines shall be permitted as per G.S.R. 281(E).

II. Process emissions

- II.1 Stack emission levels shall strictly comply with industry-specific notified pollution standards with the provision of a sampling facility at all process stacks, and at quenching towers shall be provided as per CPCB guidelines (CPCB, Laboratory Analysis Technique, LATS/80/2013-14)
- II.2 Each industry shall regularly monitor criteria as well as hazardous pollutants, including heavy metals, within the industries premises periodically, wherever applicable.

III. Non-Process emissions

- III.1 The proponent shall adopt best practices/measures to prevent dust pollution during the construction, operation and demolition phase as per G.S.R 94 (E) along with an appropriate Air Pollution Control system to control Fugitive and dust emission, wherever applicable. For example, use of Anti-Smog Guns, installation of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs etc.
- III.2 Vehicles used/hired for transportation of materials and product shall have a valid Pollution Under Control (PUC) Certificate and

shall conform to applicable air standards, and shall be operated only during non-peak hours, (as per ULB regulations, if any)

IV. Health and Safety

IV.1 Each industry shall conduct occupational health surveillance of the workers six-monthly basis.

IV.2 Project-specific emergency preparedness plan and Disaster Management Plan shall be prepared and implemented. The unit shall make the arrangement for protection of possible fire hazards and fire-fighting system as per the norms.

V. Others

V.1 Increase of greenbelt area beyond the permissible requirements, wherever feasible. Stipulation of green cover outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc. may also be prescribed. Greenbelt/ Green cover shall use the species/trees/plants/scrubs with high air pollution absorbing/ adsorbing potential.

2.0 General Instructions

- i. All applicable standards/conditions stipulated by MoEF&CC, CPCB, SPCBs or any other government authority under any other acts/ rules/ court orders/ subordinates' legislations, etc. to be followed & monitored regularly, as may be applicable to the project.
- ii. Compliance of EC conditions/ Consent conditions/appraisal conditions (as the case may be) shall be submitted with third party audit every year to the concerned regulatory authority.
- iii. The project activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board. In case any additional condition(s) or stringent norms (e.g. Stack emission levels/effluent standards) stipulated by CPCB and SPCB while granting Consent to Establish/ Operate under Air & Water Act, the same shall prevail.
- iv. Monitoring system shall be calibrated from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- v. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- vi. Action plan for implementing environmental management plan and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority and implemented on ground.
- vii. No further expansion or modifications in the plant shall be carried out without prior approval of the concerned governmental organisation.
- viii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance/ approval/NOC and attract action under the provisions of Environment (Protection) Act, 1986.
- ix. The concerned authority may revoke or suspend the clearance, if implementation of any of the given conditions is not satisfactory.
- x. The concerned authority reserves the right to stipulate additional conditions if found necessary. The Project Proponent in a time bound manner shall implement these conditions.
- xi. The Project Proponent shall extend full cooperation to the officer(s) of the Regional Office of MoEF&CC/CPCB/SPCB/TTZ authority/ or any governmental authority by furnishing the requisite data / information/ monitoring reports as and when required.
- xii. Any appeal against the clearance/approval/NOC 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.

Annexure 3

Additional Studies/Actions required for Air Quality Improvement in the TTZ area

To protect the world heritage site/ monument "Taj Mahal" and other sites of archaeological, historical, cultural and religious places of interest/ protected forests/bird sanctuary etc. as well as to meet the socio-economic-cultural needs of the large number of people of the TTZ area comprising of 6 districts, environmentally sustainable industrial and infrastructural development is necessary. For regular upkeep of TTZ area the following studies to be carried out by the concerned organizations. *Overall responsibility for conduct of such studies and to maintain the better air quality in the area shall be of TTZ Authority with respective concerned departments.*

Table 1: Suggested Studies/Actions required in TTZ Area

Sr. No.	Study Component/ Action Plan	Implementation Responsibility	Monitoring and Reporting Time Frame (Approx.)																								
1.	a. Installation of online ambient air quality monitoring stations for PM ₁₀ , PM _{2.5} , SO ₂ , and NO _x along with met parameters in the TTZ area and its operation & maintenance	Respective SPCBs (Monitoring by TTZ Authority)	Continuous Annually																								
	<table><tr><th>District</th><th>Approx. Aerial Distance from Taj Mahal/ Direction</th><th>Minimum No. of CAAQMS Proposed</th></tr><tr><td>Agra</td><td>10-12 km, W</td><td>7</td></tr><tr><td>Mathura</td><td>50 km, NW</td><td>2</td></tr><tr><td>Vrindavan</td><td>56 km, NW</td><td>2</td></tr><tr><td>Firozabad</td><td>35 km, E</td><td>1</td></tr><tr><td>Fatehpur</td><td>38 km, SW</td><td>1</td></tr><tr><td>Hathras</td><td>45 km, N</td><td>1</td></tr><tr><td>Bharatpur</td><td>55 km, W</td><td>2</td></tr></table>			District	Approx. Aerial Distance from Taj Mahal/ Direction	Minimum No. of CAAQMS Proposed	Agra	10-12 km, W	7	Mathura	50 km, NW	2	Vrindavan	56 km, NW	2	Firozabad	35 km, E	1	Fatehpur	38 km, SW	1	Hathras	45 km, N	1	Bharatpur	55 km, W	2
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b. Assessment of Air Quality status along with meteorological parameters by analysing the online real time ambient air quality monitoring stations in the TTZ area	Respective SPCBs (Monitoring by TTZ Authority)	Continuous Annually																									

	(critical data analysis to be done by a subject expert third party, preferably Govt.). The report shall be brought out annually by June each year.		
2.	The Central and respective State Government to ensure construction and maintenance of dust free common roads for transport of materials and movement of public	Respective State Govt. Dept./ NHAI	Annual for road network
3.	Traffic/road inspection study addressing the condition of traffic/roads to be undertaken on annual basis. Further, detailed traffic study to be undertaken on every 5 yearly basis to ensure adequacy of road infrastructure in each of the regions. The study can be undertaken through reputed organization/ institute.	Respective State Govt. Dept./ NHAI (Monitoring by TTZ Authority)	Annual & Every 5 years
4.	Assessment of land use/ land cover changes in TTZ area using remote sensing data	Respective Development Authority, Local Bodies/Revenue Department (Monitoring by TTZ Authority)	Every 5 years
5.	The green space/green cover/greenbelt/ park should be strategically constructed to act as an air pollution sink in the region.	Respective State Forest Dept./ Bio-diversity Board (Monitoring by TTZ Authority)	2 years
6.	Environmental Carrying Capacity including Air Assimilative Capacity for each District in the TTZ area	Respective SPCBs (Monitoring by TTZ Authority)	Every 5 years

The data so generated for the region should be made available on the website of TTZ and also at respective SPCB website, so that it can be effectively utilized by project proponents for preparing EIA/EMP reports. Further, concerned authorities can also utilize the database available in evaluating the proposals while granting ToR or EC/Consent taking a holistic view of the region.

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