



TAMIL NADU POLLUTION CONTROL BOARD



ABSTRACT

TNPCB - "REVISED GUIDELINES FOR HOT MIX PLANT IN TAMIL NADU" IN LINE WITH THE TNPCB EXISTING GUIDELINES DATED 29.07.2016 FOR HOT MIX PLANTS IN TAMIL NADU AND ENVIRONMENTAL STANDARDS FOR HOT MIX PLANT OF THE MOEF & CC VIDE NOTIFICATION NO. G.S.R. 376 (E) DATED 18.05.2023 – ORDERS – ISSUED

B.P.No.64

dated: 29.07.2024

- Read:
1. TNPCB Existing Guidelines dated 29.07.2016 for Hot Mix Plants in Tamil Nadu
 2. Environmental standards for Hot Mix Plants of the MoEF&CC Notification No.G.S.R.376 (E), dated: 18.05.2023
 3. Board Resolution No.294-2-14, dated: 12.07.2024

The Tamil Nadu Pollution Control Board in compliance with the orders of the Hon'ble National Green Tribunal, dated 17.02.2016 in Application No.10 of 2016 has issued Guidelines for Hot Mix Plant in Tamil Nadu, dated 29.07.2016.

Now, the Ministry of Environment, Forest and Climate Change has notified Environmental Standards for Hot Mix Plant vide Notification No. G.S.R. 376 (E) dated 18.05.2023 with certain guidelines for compliance.

Hence, the Board decided to issue a "Revised Guidelines for Hot Mix Plant in Tamil Nadu", as two guidelines with respect to Hot Mix Plant is now available. Also, the Board Standing Counsel has opined as follows in this regard:

"TNPCB is well within its powers to revise the guideline in a more stringent manner and does not conflict with the MoEF Notification which is further emboldened by the provision of Rule 3(2) of the Environment Protection Rules, 1986."

Therefore, based on the detailed comparison between the existing "TNPCB Guidelines for Hot Mix Plant In Tamil Nadu, 29.07.2016" and "Environmental Standards for Hot Mix Plant" of the MOEF & CC vide notification no. G.S.R. 376 (E), dated 18.05.2023, the TNPCB decided to issue "Revised Guidelines for Hot Mix Plant in Tamil Nadu".

In view of the above, the above subject matter was placed before the 294th Board meeting held on 12.07.2024. The Board vide Resolution No.294-2-14 resolved to approve the following "Revised Guidelines for Hot Mix Plant In Tamil Nadu".

Siting Criteria for the proposed Hot Mix Plants:

The Hot Mix Plants shall be established from the following siting criteria:

- 1 km from boundary of cities and towns,
- 0.5 km from habitation.
- 0.5 km from Schools or Colleges and temples:
- 1 km from Hospital, court and tourist spot.
- 200 meters away from National / State highways and distance shall be measured from the edge of the metalled road to the physical/administrative boundary of the hot mix plant
- In respect of the wild life sanctuary / reserve forest / national monuments / air ports / air strips, hot mix plant shall be established five kilometers away (or) buffer zone / eco sensitive zone declared.
- At least 250 meters away from the boundary of another hot mix plants.
- Hot mix plants shall have a minimum land requirement of one acre for better operating conditions.

Siting Criteria for the Existing Hot Mix Plants:

- The existing hot mix plants that are not meeting the above siting criteria is allowed with the condition that minimum 6-meter-high compound wall of GI sheets along the plot periphery shall be installed.
- All existing hot mix plants shall not undertake expansion activity without prior consent of the Board.
- If the unit applies for expansion, it is to be considered as a proposed industry and recommended siting criteria to be adhered with.



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Point Source Emission - Air Pollution Control Measures

- The hot mix plant shall be equipped with appropriate air pollution control devices as mentioned below so as to ensure optimum efficiency to achieve the standards. namely: -
 - Drum Type: Cyclone or multi-clones with wet scrubber;
 - Batch Type: Multi-clones with bag fillers.
- Hot Mix plant should discharge flue gases after the dust control system through a stack with minimum height of 6m (from ground level) with necessary platform and port holes for periodic collection of stack emission samples.
- It is preferable to have dry dust collection system of bag filter arrangement with air pulse jet cleaning system. Trained technical persons should be employed to handle pollution control systems.

Fugitive Emission Pollution Control Measures

- The aggregates loading into hopper bin area shall be closed on three sides with metal sheets and the access side shall have plastic air curtains/ multisheet rubber flaps so as to arrest the emission generated during loading.
- Aggregates of various sizes shall be stored in such a manner that the fine aggregates are stored in between the coarser aggregates to control dust emanation.
- All aggregates stored within the premises shall not be stacked beyond the height of 3m from ground level.
- Compound wall shall be provided on all four sides of the unit using RR or brick masonry to the height of 4meter from ground level, above which wind fence (made up of steel structures)/panels/nets to be provided for further height of 2meter.
- Water sprinkling system shall be provided in all possible dust emanating area for suppression.
- Conveyor belts shall be fully covered (top and sides).

- All roads/vehicular movement areas at site of hot mix plant should be well paved and cleaned regularly to mitigate dust.

Standards for Hot mix Plant

- Emission standard - Particulate matter in (mg/Nm³.)
 - Batch type Hot Mix Plant – 150
 - Drum type Hot Mix Plant – 300

Notes:

1. The minimum stack height for Hot Mix Plant shall be calculated as: Stack height (H,) = 14(Q)" where. Q is the SO₂ emission rate in kg/Hr.
 2. Only approved fuel as specified by State Pollution Control Boards or Pollution Control Committees shall be used.
- Provisions of the Noise Pollution (Regulation and Control) Rules, 2000 shall be followed and workers shall be provided with personal protective equipment.

Green Belt Development

The industry should plant three rows of spreading crown & fast-growing varieties of evergreen thick foliage tall trees all along the boundary

Other Good Practices and House Keeping:

- A dedicated energy meter to be provided for the motor attached to the dust control system and reading to be recorded on daily basis.
- All hot mix plants shall use diesel/LDO only and fuels such as solvents, industrial wastes, fire wood shall not be used.
- Use of Recycled Asphalt Pavement (RSP) shall be allowed in the aggregates.
- Any process rejects or left over of the hot mix shall be recycled in the process.
- The site shall be reinstated at the end of operation phase i.e. after dismantling the plant.



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- Stack/AAQ/ANL survey to be periodically (once in a year) conducted and reports should be furnished to TNPCB.
- Maintain good housekeeping practices wherever possible within the unit premises to control fugitive dust emission.
- Wherever possible, day time operation is to be preferred rather than night time operation to take advantage of favorable metrological condition prevailing during day time.
- Adequate measures of safety for workers working in hot mix plant shall be taken. Personal protective devices such as goggles, mask, helmet and safety shoes shall be provided to workers.
- All machineries (pumps and blowers) details to be displayed along with their capacity (HP) and power consumption (kW) in addition to the total power consumption in the hot mix plant for inspection purpose.

Handwritten signature
31/7/24
For Chairperson

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31.07.2024

To

The Joint Chief Environmental Engineer-I,
Tamil Nadu Pollution Control Board,
Corporate Office.

Copy to

1. ACEE, TNPCB, Corporate Office
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