

Tamilnadu Pollution Control Board

Guidelines for Hot Mix Plant in Tamilnadu – 29.07.2016 [With regard to NGT order in Application No.10 of 2016, dated 17.02.2016]

A. Proposed Hot Mix Plants

I. SITING CRITERIA

- a. No hot mix plant shall be allowed within 500meters from approved habitation/approved layouts.
- b. Hot mix plant shall be allowed 200meters away from national/state highways and distance shall be measured from edge of the metalled road to the physical/administrative boundary of the hot mix plant.
- c. In respect of wild life sanctuary/reserve forest/national monuments/air ports/ air strips, hot mix plant shall be established five kilometer away (or) buffer zone declared for the same.
- d. Hot mix plants shall have a minimum land requirement of one acre for better operating conditions.
- e. There should be at least 250 meters distance between the two hot mix plants boundaries.

II. AIR POLLUTION CONTROL MEASURES

a) 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.

- b) 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.
- c) 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.
- d) Conveyor belts shall be fully covered (top and sides).

III. FUGITIVE EMISSION CONTROL

- a) 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.
- b) All aggregates stored within the premises shall not be stacked beyond the height of 3m from ground level.
- c) Compound wall shall be provided on all four sides of the unit using RR or brick masonry to the height of 4m from ground level, above which wind fence(made up of steel structures)/panels/nets to be provided for further height of 2m.
- d) Water sprinkling system shall be provided in all possible dust emanating area for suppression.
- e) All roads/vehicular movement areas at site of hot mix plant should be well paved and cleaned regularly to mitigate dust.

IV. STANDARDS FOR HOTMIX PLANT

a. Emission standard - Particulate matter - Not more than 150mg/Nm³.

- b. National Ambient Air Quality Standards CPCB Notification No.- B-29016/20/90/PCI-I Dated 18.11.2009 to be followed.
- c. The Noise Pollution (regulation and Control) Rules,2000 as Notified by MoEFS.O.123(E) dated 14.02.2000 to be followed.

V.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.

VI.OTHER REQUIREMENTS

- All hot mix plants shall use diesel/LDO only, in no case fuels such as solvents, industrial wastes, fire wood shall be used.
- b) A dedicated energy meter to be provided for the motor attached to the dust control system and reading to be recorded on daily basis.
- c) Stack/AAQ/ANL survey to be periodically (once in a year) conducted and reports should be furnished to TNPCB.
- d) Maintain good housekeeping practices wherever possible within the unit premises to control fugitive dust emission.
- e) Wherever possible, day time operation is to be preferred rather than night time operation to take advantage of favourable metrological condition prevailing during day time.
- f) 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.

g) 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.

B. Existing Hot Mix Plants

I. <u>SITING CRITERIA</u>

All existing hot mix plants shall not undertake expansion activity without prior consent of the Board. If the unit apply for expansion, it is to be considered as a proposed industry and recommended siting criteria to be adhered with.

II. AIR POLLUTION CONTROL MEASURES

- a) 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. And adequate stack height shall be provided for bitumen heating system.
- b) It is preferable to have dry dust collection system of bag filter arrangement with air pulse jet cleaning system. However if the unit already has wet scrubber dust control system, necessary waste water treatment plant should be installed meeting the surface water discharge standards. The sludge should be used with in the plant or for brick manufacture. Trained technical persons should be employed to handle pollution control systems.
- c) 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.
- d) Conveyor belts shall be fully covered (top and sides).

III. FUGITIVE EMISSION CONTROL

- a) Aggregates of various sizes shall be stored in such a manner that the fine aggregates are stored in between the coarser aggregates and also wherever possible fine aggregates should be stored within the plant away from residential areas.
- b) All aggregates stored within the premises shall not be stacked beyond the height of 3m from ground level.
- c) Compound wall shall be provided on all four sides of the unit using RR or brick masonry to the height of 4m from ground level, above which wind fence(made up of steel structures)/panels/nets to be provided for further height of 2m.
- d) Water sprinkling system shall be provided in all possible dust emanating area for suppression.
- e) All roads/vehicular movement areas at site of hot mix plant should be well paved and cleaned regularly to mitigate dust.

IV. STANDARDS FOR HOTMIX PLANT

- a. Emission standard Particulate matter Not more than 150mg/Nm³.
- b. National Ambient Air Quality Standards CPCB Notification No.- B-29016/20/90/PCI-I Dated 18.11.2009 to be followed.
- c. The Noise Pollution (regulation and Control) Rules,2000 as Notified by MoEF S.O.123(E) dated 14.02.2000 to be followed.

V. 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

VI. OTHER REQUIREMENTS

- a) All hot mix plants shall use diesel/LDO only, in no case fuels such as solvents, industrial wastes, fire wood shall be used.
- b) The unit shall provide separate water flow meter and maintain log book for the water consumed for the industrial activity each day, if the wet system of Pollution Control devices is installed.
- c) A dedicated energy meter to be provided for the motor attached to the dust control system and reading to be recorded on daily basis.
- d) Stack/AAQ/ANL survey to be periodically (once in a year) conducted and reports should be furnished to TNPCB.
- e) Maintain good housekeeping practices wherever possible within the unit premises to control fugitive dust emission.
- f) Wherever possible, day time operation is to be preferred rather than night time operation to take advantage of favourable metrological condition prevailing during day time.
- g) 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.

h) 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.

Note: The existing hot mix plant shall comply with the above recommendations within a period of four months.

Thiru. Hans Raj Verma, I.A.S, CHAIRMAN