TAMIL NADU POLLUTION CONTROL BOARD

ABSTRACT

TNPCB - CATEGORISATION OF M-SAND UNITS AND TO EVOLVE GUIDELINES TOWARDS SITING OF M-SAND UNITS AND ON PROCESSING OF CONSENT APPLICATION PERTAINING TO M-SAND UNITS – ORDER ISSUED.

B.P. No. 26 **Dated: 30.07.2018**

Read: Board Resolution No. 274-1-18 Dated 26.07.2018

The Committee constituted by Chairman, Tamil Nadu Pollution Control Board, to study the M-sand manufacturing units and to arrive the guidelines for the M-sand manufacturing units, has given report along with certain recommendations. Based on the Committee report, Agenda was prepared and got approved.

Later, during the Review meeting on 17.07.2018 conducted by the Hon'ble Minister for Environment and Principal Secretary / Chairman (FAC), Tamil Nadu Pollution Control Board, the said subject was discussed.

Based on that, suggestions regarding distance criteria, type of crushing machinery, APC Measures and Effluent Treatment and Disposal were obtained from the field officers.

With the inputs given by the field officials, the subject was discussed with the Head of the Departments of Corporate office and subsequently the following recommendations were arrived.

Recommendations For M-Sand Units

1) All M-sand units can be established either as an extended facility of existing stone crusher or newly establishing as an integrated facility of stone crusher or stand alone M-sand units.

76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22353140, 22353141
Fax : 044-22353068
Email : tnpcb@md3.vsnl.net.in Web : www.tnpcb.gov.in

2) Based on pollution index **M-sand units** with or without stone crushers shall be treated as **"Orange"** category.

3) Existing stone crushers, manufacturing M-sand within the consented quantity shall not be treated as expansion activities. Due to process modification, these units shall apply and obtain fresh consents of Board under Water and Air Acts to include M-sand as one of the products in the consent.

4) All consented stand alone M-sand units shall be verified and ensured to carry out its activities only with vertical shaft impactor (VSI) crusher machine. No primary crusher like jaw crusher, secondary crusher and cone crusher shall exist in the consented premises.

5) As in PWD circulars dated 30.08.2012, 14.09.2017 etc on the instructions to M-sand units inter alia, the following shall be complied.

   - Vertical shaft impactor (VSI) crusher is the best machine for making M-sand and this type of machinery alone should be permitted.
   - Crushed stone (M-sand) should comply with all provisions in the BIS codes.
   - Product approval certificate from PWD assessment committee.
   - Quality test report from the Government laboratories such as National Test House or MSME Laboratories and Laboratories of Government Academic Institutions such as IIT, IIT Incubator Laboratories, Anna University, etc., are to be obtained to fulfill notified BIS-standards.

6) As there is a practice of producing M-Sand by washing the stone dust generated from stone crushers, which will not satisfy the quality criteria prescribed by PWD for M-Sand, such units should not be allowed to set up.

7) All existing consented M-sand units operating with Horizontal shaft impactor (HIS) crushers shall change over to vertical shaft impactor (VSI) crusher machine by 31.12.2018.

8) M-sand units shall have adequate land area within the premises for storage of waste sediments till disposal for beneficial use.

9) M-sand units shall ensure complete recycling of wastewater generated.

10) All M-Sand units with the vertical shaft impactor (VSI) and vibratory screen shall be provided with adequate dust suction and collection arrangement with closed storage for the stone dust collection.

11) Siting criteria for M-Sand Units:

A. **Distance Criteria:**

I. Stand alone M-Sand Units

a) The boundary of the Stand alone M-Sand units, shall be located at 300metres away from the approved habitations.

b) Stand alone M-Sand Units shall be located 100 metres away from the boundary of NH/SH.

c) There will be no distance criteria between the standalone M-sand units

II. Stand alone M-Sand Units located within Stone crushers shall adopt the Criteria under B.P.Ms.No.4, dt. 02.07.2004 and the B.P.Ms.No.55, dt. 06.10.2005,

B. **Air Pollution Control Measures:**

Air pollution control measures for M-sand units with or without stone crushers shall be as below:

I. Recommended Dust Containment And Dust Suppression System

a) **Dust Containment System:**

Dust containment system comprises of building enclosures over the major dust emission sources such as crusher and sieve so as to contain the dust emission within the housing.

Salient Features of Dust Containment System:

- Enclosures to be constructed of G.I sheets (1.66 mm and 1.25 mm thick) and supported on angle structures so that it can with stand strong wind.
- Roof to be given a gradual slope / curvature so as to prevent accumulation of water. Material transfer point such as hopper bottom / product unloading conveyor to be covered suitably to prevent dust release into the atmosphere.
- Locations where complete enclosures are not possible such as openings in vertical shaft impactor (VSI) side and bottom, are to be covered suitably (GI sheets / rubber flap or any other material) to prevent dust release into the atmosphere.
- Openings fitted with doors are to be provided for inspection and access in the enclosures.

b) **Dust Suppression System:**

Since dust generation from transfer points are quite substantial, dust suppression system, comprising of spraying of fine water mist through special nozzles, should be carried out over the dust generation sources to suppress the dust cloud.

c) **Construction of Compound Wall:**

All M-Sand units shall construct Compound wall to a height of 10 feet all around its boundary and shall erect wind net/metal sheet of 5 feet height to prevent dust carryover to the nearby areas.

d) **Green Belt:**

Green belt of 5 meter width shall be provided all around the inner periphery of the unit premises.

II. General Conditions:

1. Periodical cleaning of water spray nozzles should be carried out to avoid choking.
2. Fine dust accumulated in the unit should be periodically cleaned and the dumps should be covered with tarpaulins to arrest erosion by wind.
3. The drop height of the processed material should be kept at a minimum during loading and unloading.
4. Conveyor chutes should be provided at the discharge points.
5. There should be bilane road system to approach the crusher.
6. The approach road should be properly laid with tar and concrete and should be sprayed with water. Similarly, the approach roads to individual crusher should be made in good condition and watered.
7. Within the unit, a minimum distance of 20 metres should be made for roads.
8. The green belt will restrict the spread of particulate matter and trees should be evergreen high foliage type like neem, tarmarind, gold mohar, fire of the forest and any other local varieties are recommended.
9. Ornamental trees like Asoka along the roads on both sides leading to crushing area should be encouraged to improve the aesthetics of the working environment.

10. As an occupational safety, all the workers should be provided with personal protective equipments.

With the above recommendations the subject was placed before the Board at its 274th Board meeting held on 25.07.2018 and the Board vide item no.274-1-18 resolved to approve the proposal regarding categorization of M-Sand units, recommendations for M-Sand units, distance criteria, Air Pollution Control measures, dust containment and dust suppression system and general conditions as stipulated in the agenda for strict implementation.

Sd/-xxxxx
D. Sekar
Member Secretary

30/7/18

For Member Secretary

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3017

To

1. Joint Chief Environmental Engineer (P&D) – For Necessary action.
2. All Joint Chief Environmental Engineers (Monitoring)
3. All District Environmental Engineers

Copy to

1. Sr. PA to Chairman
2. PA to Member Secretary
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