

20.03.17

To

Dr. A. B. Akolkar

Member Secretary

Central Pollution Control Board

**Sub:** Comments on draft guideline by the Central Pollution Control Board for “**Environmental Management of C&D Waste Management in India**”

Dear Sir,

This has reference to the draft guideline issued by CPCB to deal with environmental management of C&D waste in India.

We have gone through the proposed draft guideline and henceforth sending our comments and suggestions. We would be available for providing any further clarifications or information as well as for participation in any consultation meetings on the subject.

Yours sincerely,

1. Dr. R. Sreedhar, Director, Environics School of Management Sciences
2. Kankana Das, Deputy Director, EIA Resource & Response Centre (eRc)

Central Pollution Control Board vide its order dated 7<sup>th</sup> March put up the Draft Guideline on “Environmental Management of C&D Waste Management in India” inviting public comments.

We are a group of like minded organization committed towards betterment of environment are hereby submitting our comments/suggestion on the same

***Background:***

Construction and demolition waste in India is regulated and managed by the Construction and Demolition Waste Management Rules, 2016. A series of environmental degradation is happened due to rampant dumping of construction and demolition waste in India, some of which includes clogging of drains and resultant flooding of large urban landscape, health hazard to children and adults etc.

A recently filed petition in NGT by NGO Citizens for Collective Consciousness, claimed that huge accumulation of construction material like 'rori', sand, stones etc on more than 35 acres of land in village Fatehpur Beri is causing health hazard to children and even adults.

Given this background, an attempt has been made to give our comments on the draft guideline.

***Comments/Suggestions:***

**1. Guideline is not meant to describe the Rule again**

The guideline of C&D waste management is meant under the C&D Waste Management Rules of 2016. It must details out the procedure of managing the waste. Instead of doing so, the draft document has increased the volume by repeating the definitions and various other provisions of the Rule, which are already a part of the main Rule.

**2. Irrelevance to the subject**

The guideline lacks very basic need of how to step wise manage the C&D waste. Why to define the concept of 3Rs, which is already well established and which has nothing to do with management guideline for C&D waste. The guideline nullifies the very purpose of its existence by continuously repeating the various process of municipal solid waste disposal through waste management hierarchy, use of landfill and talking about the profit of managing and reusing the C&D waste.

It seems that, it has no clue of the problem and therefore repeats the same mistakes of the past. We need location specific information, institutions and solutions to each of the problems identified.

**3. Discussion on Air Pollution and its mitigation measures is missing in the guideline**

Any handling of construction and demolition waste eventually results in air pollution through fugitive emission, causing problem of dust pollution. Various activities including demolition of structures, reshaping and sizing of the construction waste materials, handling of construction dust etc lead to the dust generation thereby contributing to air pollution. All construction and demolition waste handling will result in generation of high levels of dust typically from handling of concrete, cement, wood, stone, silica and this can carry for large distances over a long period of time. Construction dust is classified as PM10 - particulate matter less than 10 microns in diameter, invisible to the naked eye.

The guideline has remained silent on how to deal with this huge generation of dust from various handling of construction and demolition waste. It must come out with a plan to deal the fugitive emission taking place from the handling of construction and demolition waste at every stage.

#### **4. Nothing to do with uncertainty in waste generation quantity**

The guideline must list out the probable management and handling options for each type of waste generation based on its characteristics, as the management procedure can be determined keeping in mind the composition and characterisation of waste, infrastructure, finance and expertise available to handle such waste. Uncertainty with respect to waste quantity can not be a parameter of not coming out with procedure needed for management and handling of such waste.

#### **5. Data Generation on C&D Waste should be priority**

Data generation from across the country on how much waste has been generated under the various components of C&D waste should be the prior mandate of any government. The guideline has referred 'n' number of times about the data deficiency, when it comes to the quantification of C&D waste generation in India, however, nothing has been proposed to address the same, as the country lacks comprehensive data on both the composition and quantum generated to each category of C&D waste.

#### **6. How to prevent waste generation**

The guideline has proposed "Prevention" as the most desirable waste management option as it eliminates the need for handling, transporting, recycling or disposal of waste. But there should be the prescribed procedure for prevention of C&D Waste. According to the International Journal of Advanced Science and Technology (2015), prevention of waste generation should be brought about by minimising the resources needed to do the required job, some of which include:

- ensuring materials are ordered on an "as needed" basis to prevent over supply to site;
- purchasing coverings, panelling or other materials in shape, dimensions and form that minimises the creation of excessive scrap waste on site;
- ensuring correct storage and handling of construction materials to minimise generation of damaged materials/waste e.g., keeping deliveries packaged until they are ready to be used;
- ensuring correct sequencing of operations; and
- signing individual responsibility (through appropriate contractual arrangements) to sub-contractors for the purchase of raw materials and for the management of wastes arising from their activities, thereby ensuring that available resources are not expended in an extravagant manner at the expense of the main contractor.

### **7. Ambiguity in deciding buffer area**

The guideline has failed in demarcating and/or proposing standard protocol for setting up the buffer zone or area of no development zone around the waste processing facilities. The setback area of 50m to 300m will again be of no use, given the varying nature of process and associated impacts on various land uses.

The distances when compared with EPA recommendation seems fairly low and leaves the question of whether the separation distances provided by the CPCB Draft Guidelines are enough to prevent the risk of pollution in the surrounding area.

The buffer area should be process specific and location specific. An impact assessment study on the surrounding environment and human health must be carried out before deciding on the buffer area. In absence of so, the operators of C&D waste management facilities can tweak the term according to their convenience, thus causing improper handling of wastes and increasing the risk of pollution in the surrounding areas.

### **8. Selection of vegetation species**

The guidelines is needed to be specific about the need and maintenance of a proper green zone within the buffer zone of the processing facility, setting a definite threshold level of acceptance of the green zone, in terms of area to be used. Also, the type of trees planted in the green zone should be specified, per se, indigenous species must be encouraged and growing exotic species like Lantana should be highly discouraged.

### **9. Exemption under norms of dust and noise pollution**

The guideline has exempted projects having sufficient buffer areas from the norms of dust and noise pollution. The word sufficient is again a vague terminology which gives leverage to the project proponent from deciding on the site selection and buffer area demarcation.

#### **10. What about the storage, disposal and handling practices**

The guideline must come out with a procedure of handling the waste from generation till its treatment and final disposal. There must be a process detailing out the storage, transportation, treatment and final disposal of each type of waste.

The storage area within the C&D waste management plant must have compartments to store separate category of waste. The storage area must be having boundary wall in order to protect any intrusion of outsiders.

#### **11. Setting up of collection point for non-bulk generators**

The municipality should first come up with the estimation of ward wise/region wise C&D waste generation before finalizing the collection points, as in India setting up of collection points at an interval of 2.5 km to 3 km will not practically implementable.

#### **12. Location specification for setting up C&D management operations**

The guidelines for setting up C&D management operation can not just randomly talks about the appropriateness of any location. It has to come out with specific siting criteria with respect to maintenance of minimum distance from residential and educational institutions and hospitals at large.

#### **13. Other Pollution Abatement Measures**

As part of the “Other pollution abatement measures and safety issues”, it is mentioned that treated wastewater would be imported from other STPs for dust suppression/ sprinklers. What is going to happen in case of absence of any STP in the nearby areas?

#### **14. Maintenance of Documentation by Recycling Facility**

Maintenance of proper documentation of the amount of waste recycled or disposed of every day at the recycling facilities under strict supervision. A comprehensive and verifiable record (by weight) of all materials that leave the site, either as trash or recyclables; documentation of where these materials have been sent; and information on the costs of hauling and disposing of all wastes and recyclables. According to the International Journal of Advanced Science and Technology (2015), The Waste Management Plan needs to spell out procedures to collect and manage this information along with the cost implications of each of them.

### **15. Focus must be on deconstruction and not demolition**

A policy level change must be pushed for by promoting deconstruction instead of demolition. Deconstruction is the planned breakdown of any building structure with a focus on recycling of the construction material. Deconstruction should be especially included in the guidelines so as to further promote recycling of C&D waste and should be highly encouraged.