



GOVERNMENT OF KARNATAKA

No. RD 465 TNR 2020

Karnataka Government Secretariat,
Vidhana Soudha,
Bengaluru, dated:12-11-2020

ORDER

Whereas, the State Government vide Revised Order No. RD 465 TNR 2020, dated 06-11-2020, had issued modified guidelines to celebrate Deepavali festivities, wherein, only Green Crackers are permitted to be sold by the licensed firecracker shops.

To bring in more clarity on the concept of Green Cracker and assist general public in differentiating Green crackers from the conventional crackers, the following facts about Green Crackers are given below.

As per the **Ministry of Environment, Forest and Climate Change, Government of India:**

“Green Crackers don’t contain harmful chemicals, thereby reducing air-pollution due to firecrackers considerably. These crackers are less harmful in comparison to conventional firecrackers.”

The Green Crackers are manufactured as per the formulation developed by **Council of Scientific and Industrial Research-National Environmental and Engineering Research Institute (NEERI) lab** (autonomous bodies under Ministry of Science & Technology, Govt. of India) and product approval for new formulation is given by **Petroleum and Explosives Safety Organisation (PESO)** which is under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industries, Govt. of India. Green firecrackers are available as sparklers, flowerpots, and maroons, etc.

A handwritten signature in blue ink, appearing to be the name 'Sri' followed by a flourish.

The Green Crackers packing can be identified through distinct **Green logo of CSIR-NEERI and PESO as well as a Quick Response (QR) coding system**. QR Code is a novel feature incorporated on the fire **crackers** to avoid manufacture and sale of counterfeit products. The specimen certificate issued by CSIR-NEERI is enclosed for reference. The above features will assist in differentiating Green crackers from conventional crackers.



(Anjum Parwez, IAS)

Principal Secretary to Govt., Revenue
Department (Disaster Management) and
Member Secretary, State Executive Committee

To:

The Compiler, Karnataka Gazette, Bengaluru

Definition of Green crackers

1.Improved fireworks/firecrackers:

Fireworks/firecrackers made with reduction in size of shell, elimination of ash usage etc., reduced usage of raw materials in the compositions, of uniform acceptable quality, and/or use of additives as dust suppressants to reduce emissions with specific reference to particulate matter(PM*) [SO₂ and NO₂ leading to:

- a minimum of PM reduction of 30 %
- a minimum of PM reduction of 20% and rest 10% of gaseous emission (mass of gases emitted based on composition) or more reduction of gaseous emission (mass of gases emitted based on composition)
- All of the above reduction shall be based on when compared with conventional composition for a given category of crackers/fireworks

2.New formulation fireworks/fire crackers:

Fireworks/fire crackers having new and improved formulations (substitution and reduction of raw materials in composition) to reduce emissions with specific reference to particulate matter(PM*), SO₂ and NO₂ as:

- a minimum of PM reduction of 30 %
- a minimum of PM reduction of 20% and rest 10% of gaseous emission (mass of gases emitted based on composition)
- All of the above reduction shall be based on when compared with conventional composition for a given category of crackers/fireworks

*metals are subset of PM



**CSIR-National Environmental Engineering
Research Institute, Nagpur - 440020**



REGISTRATION CERTIFICATE



To Whom so ever it may Concern

This is to notify that.....has signed Nondisclosure Agreement (NDA) with CSIR-NEERI for utilising the CSIR-NEERI's formulations of GREEN FIREWORKS. They are registered with CSIR-NEERI having registration No..

NE / TN / /2019

Issue Date: **20.08.2019**

Valid upto: **19.08.2021**

(Green fireworks are reduced emission fireworks/ crackers developed by CSIR-NEERI as per Honourable Supreme Court Order. Manufacturers may proceed to manufacture the Green Fireworks following the prevailing regulations/ orders of Government of India.)

(Sadhana Rayalu)
Sci. & Head, EMD

(Amit Bansiwal)
Sci. & Head, BDG