

Green Crackers

In a bid to resolve the crisis of air pollution, the Government has launched green firecrackers.

- These crackers are available as sparklers, flowerpots, maroons and atom bombs and have been developed by the National Environmental and Engineering Research Institute (NEERI), a Council of Scientific and Industrial Research (CSIR) lab.
- CSIR has signed agreements with 230 companies to manufacture green crackers and make them available for sale.
- As per the CSIR's assessment, green crackers would reduce particulate matter pollution by 30%.
- Green logo as well as a Quick Response (QR) coding system has been developed for differentiation of green crackers from conventional crackers.
 - QR codes is a novel feature incorporated on the fire crackers to avoid manufacture and sale of counterfeit products.

Background

- Concerned about the pollution levels and the role firecrackers played in exacerbating it, the Supreme Court in October 2018 banned the sale, use and manufacture of crackers that weren't 'green'.
- This meant that the crackers couldn't be loud beyond a certain limit, had to be approved by the **Petroleum and Explosives Safety Organisation (PESO)** and had to be free of mercury, arsenic and barium. However, compliant crackers weren't available in the market.
- The Supreme Court, in May 2019, allowed the bulk manufacture of green crackers after the CSIR said its labs had been able to make trial samples and had them approved by the PESO.
 - CSIR's project of development of green crackers adopted a two-pronged approach.
 - One stream of activity was focussed on improving the traditional crackers through reduction in the level of Barium Nitrate.
 - The second pathway aimed at **replacing Barium Nitrate** with a more benign Potassium Nitrate.
- The apex court is expected to take a decision on "improved crackers", which have reduced levels of barium nitrate on 22nd October 2019.

Petroleum and Explosives Safety Organisation

- PESO is an office under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industries.
- It was established in 1898 as a **nodal agency for regulating safety of substances such as explosives,** compressed gases and petroleum.
- Its head office is located in Nagpur, Maharashtra.

National Environmental and Engineering Research Institute

• Council of Scientific & Industrial Research (CSIR) is an autonomous body under Ministry of Science

& Technology, having ${\bf 38}$ ${\bf national\ laboratories}$ working in various areas of science and technology

CSIR-NEERI is one among those laboratories.

Source: TH

