

Harmful to environment: Bengaluru citizens' group slams instant compost machines

The burning of mixed waste, high power consumption, emission of toxic smoke and dumping of the compost into the soil is hazardous to the environment.

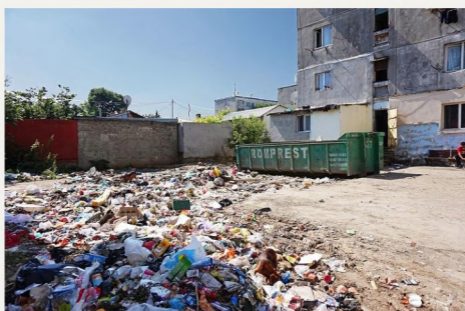


Image for representation

news Waste management Thursday, November 22, 2018 - 17:10

Many apartment complexes, hotels, malls and other commercial establishments in Bengaluru have been using the so-called '24-hour composting units' to treat the large amounts of solid waste that they generate. While the vendors of these automatic composting machines claim that they are eco-friendly, citizens' group Solid Waste Management Round Table (SWMRT) disagrees.

"The vendors say the machines are organic waste converters. But in reality, they are just incinerators. Instead of producing compost, the machines generate burnt carbon with high electrical conductivity. And this, when added to soil, is harmful for the plants," said Savita Hiremath, a member of SWMRT. She also claimed that these machines are being sold in the market without permits from the Bruhat Bengaluru Mahanagara Palika (BBMP) and the Karnataka State Pollution Control Board (KSPCB).

The city's garbage problem being what it is, these composting machines have gained popularity. Some of the leading brands of such machines are Reddonatura, Aruna Green and Ecoman (Foodie). However, many residents claim that the machines, which cost between Rs 8 and 10 lakh, consume a high volume of electricity and emit hazardous smoke.

"We purchased the unit two years ago and things were fine initially. But gradually we realised that the electricity bill was going up to Rs 30,000 per month. Also, the vendor who agreed to collect the generated end product has stopped doing so for the last eight months. We have been trying to contact them but they are avoiding our calls," said S Sudhakar, a resident at the Salarpuria Symphony apartment complex. Once the smoke from the machine at Salarpuria Symphony rose to such an extent that it had to be directed towards an empty site, residents said.

SWMRT's allegations

According to a SWMRT report, the machines violate World Health Organization (WHO) guidelines that recommend a temperature of 800°C and above as the standard for burning waste. Contrarily, the automatic composting machines burn waste at lower temperatures of 100 °C to 200 °C, causing them to release cancerous compounds such as dioxins and furans.

"The converter reduces the waste by 30% and the end product has a calorific value that makes it an excellent soil conditioner. Also, our machine has been approved by the pollution control board," claimed someone from Aruna Green's senior management, who did not want to be named. He also denied the allegations about the toxic nature of the compost produced by the machines. "How can organic waste turn poisonous when mixed with soil?" was his retort to the SWMRT report.

The report further suggested a high acidic level in the compost derived from the machines, along with an electrical conductivity that was 130 times higher than the international standard. Also, the sample showed a carbon-nitrogen ratio of 18:06, against the accepted value of 30:1.

According to SWMRT, the automated composting machines are causing pollution at all levels. The burning of mixed waste, high power consumption, emission of toxic smoke and dumping of the same into the soil is triggering groundwater pollution. All of these are hazardous to the environment. Its report also suggests sustainable decomposing methods that are safe and natural as they rely only on microorganisms.

KSPCB negligence?

KSPCB had mandated buildings that produce large volumes of organic waste to set up composting units. "Since these 24-hour compost-making machine vendors are doing heavy marketing, buildings are purchasing them to get approvals from the KSPCB. Actually, the KSPCB is supposed to inspect and then give the NOC (No objection certificate), but they are not doing so," said NS Ramakanth, a founding member of SWMRT.

SWMRT has submitted a letter to the KSPCB, urging the body to issue an advisory stating that the machines are not composters but incinerators, thereby laying an embargo on the buying and selling of the machines. The letter also requests an official inquiry and a ban on these machines. It brings to notice a case where an environmental engineer from KSPCB accompanied the vendor to an apartment in Electronic City and gave a green signal to a machine that cost Rs 8.5 lakh. SWMRT is yet to receive an answer.

When asked about the letter, KSPCB Chairman Lakshman said, "We have not given any permission for these machines. We are going to take action against our officers who are promoting these machines and an inquiry will be conducted on the illegal trading of these machines."