

# Metro rail fights birds with a tube of gel

## Nests Cause Short Circuits, Stalling Train Services



U.Tejonmayam@timesgroup.com

**B**irds love statues to perch, metro rail overhead equipment cables to nest. And when they bring metal wires to build nests, short circuits stall trains. Now, Chennai Metro Rail Limited (CMRL) has found a weapon to keep them away: a tube of gel.

The non-toxic bird-deterrent gel, a water-based repellent, also makes the surface slippery for the birds that come to roost on critical power systems. "Birds were a major problem," said an official who has been

overseeing the use of the gel at the Vadapalani and Arumbakkam stations where the menace was big. "We have very few birds on the cables now," the official said.

Three months ago, CMRL struggled with frequent power snags at these two stations that led to disruption of train services. The insulators and beams that connect overhead traction power systems need generous portions of the gel, the officer explained. These systems supply electricity for train operations through overhead equipment cables.

"The overhead cables carry 25,000 volt power supply for operation of trains. Its support structures are at earth potential (earth grid). When birds carrying metal wire to build nests drop them over the cables, the metallic wire bridges the 25,000V wire with earth potential, causing short circuit and breakage of cable. This grinds trains to a halt," he said.

Construction sites provide a steady supply of these conducting wires to birds looking for nesting material. "So far we have had six incidents and one of them caused a

major snag when we took a long time to restore train service," he said.

In 2017, CMRL got ultrasonic bird repellents and strobe lights to chase away birds that were roosting on the rafters of its depot at Koyambedu and littering its modern train rakes with its droppings. "The uric acid in the droppings can, in the long run, corrode the steel outer shell of the rakes," said the official.

The device, which emits high frequency sound waves that annoys birds and drive them away, did not work. "The gel works better."