As Maximum City grows, so does its construction debris

New rules to dispose debris will take effect in April, but with lack of facilities to process the rubble, can they really be enforced?

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MUMBAI: Towering cranes, rising skylines – as Mumbai's urban renewal churns out 10,000 tonnes of construction debris every day, builders and the civic authorities are grappling with a daunting question: where will the old city rest? And there's more. As earthmovers and jackhammers make way for a Mumbai of the future, construction and demolition (C&D) waste is projected to double in the near future.

With little oversight until now, developers and contractors have been offloading C&D waste into wetlands, mangroves sites and creeks, along highways and on vacant plots, and even in forested stretches in Aarey and the Sanjay Gandhi National Park.

A 38-acre plot of mudflats and mangroves in Anjur, Thane, for instance, has been largely filled up with C&D waste, said Stalin, director of environmental group Vanashakti. "Salt pan lands in Wadala, too, are being filled by such debris, central government land that has escaped monitoring," he added.

The only land authorised for the dumping of construction debris are sites registered with the Brihanmumbai Municipal Corporation (BMC) for this purpose, regardless of their environmental status. This was the outcome of a Supreme Court verdict in 2018.

Too little, too late

Fuelled by a surge in redevelopment in the last couple of years and massive infrastructure projects that generate mountains of soil and debris, the BMC has launched two C&D waste-processing plants. These plants, one in Dahisar and the other in Daighar in Thane, ramped up operations in November last year. They can be used by private individuals undertaking small-scale repairs and renovation work, as well as builders, for a price.

At these two plants, construction debris is recycled after being pulverised into a sand-like aggregate that can be used to make non-structural items such as paver blocks, road dividers, sidewalk stones, benches, etc.

The civic administration hopes its two plants will be a game-changer. Since November, they have processed a combined 150,000 tonnes of debris. They have a combined processing capacity of 1,200 tonnes a day, of which 625 tonnes is being used, a little over half their capacity.

But these numbers are dwarfed by the sheer volume of C&D waste – civic sources peg it at 10,000 tonnes – the city produces each day. And, as large redevelopment projects such as the one at Dharavi and Motilal Nagar in Goregaon get underway, and tunnelling for infrastructure projects in south Mumbai and under SGNP start, construction debris will increase exponentially.



Onus on builders or BMC?

Come April 2026 and the law will require developers and contractors to dispose of C&D waste in a sustainable manner. It's when the central government's Construction and Demolition Waste Management Rules, 2025, kick in. Builders will have to recycle a minimum 25% of the construction waste they generate, a minimum 2,500 tonnes per day, double the quantity the two municipal plants can currently handle.

Developers are already taking note. Keval Valambhia, chief operating officer of CREDAI-MCHI, a body representing 2,200 developers in Mumbai, says. "Ideally, there should be one C&D waste-processing centre in every three municipal wards. This is what we requested of the BMC when we wrote to them in March."

So, how do builders currently dispose of the construction waste they generate? Sidestepping the unauthorised disposal by contractors, Valambhia says, "We have a large network of builders and send a portion of this waste to each other when there is a need to fill excavated foundations at project sites. Apart from the BMC's C&D plants, there are transportation contractors who dispose of the debris at dumping sites approved by the BMC."

Prashant Sharma, president of NAREDCO Maharashtra, the other prominent umbrella body of builders, concurs, "There are practical challenges, including limited availability of approved facilities, transportation logistics, and the high cost of compliant disposal. This sometimes slows smooth waste management."

From April 2026, the new rules introduce Extended Producer Responsibility (EPR), making them responsible for managing C&D waste through its life cycle. Their C&D wastedisposal practices will be monitored and tracked to ensure compliance. But, Valambhia argues, "Isn't it unfair to pin the onus on builders when the infrastructure for this doesn't exist?"

The civic administration says it is prepared to set up more plants. "But, where is the land?" said a senior official with the BMC's solid waste management department. The plants in Dahisar and Daighar, he explained, cost upwards of ₹1,000 crore each, 90% of this on the acquisition or renting of land.

New C&D plants

The official said the BMC plans to start a C&D plant at the largely defunct Deonar dumping ground, after a portion of the landfill is biomined. "Deonar is BMC land," he said, "The plant will have a capacity of 2,000 tonnes per day and will cost only around ₹100 crore, including the cost of equipment, operation and transportation vehicles."

Kiran Dighavkar, deputy municipal commissioner, solid waste management, claims the daily C&D waste output is 8,500 tonnes. "Our aim is to increase the capacity of the C&D plants in Dahisar and Daighar, which is possible up to 1,500 tonnes per day, combined, to meet the minimum processing mandate by April, 2026. We then plan to expedite the C&D plant at Deonar to meet the growing demand. In the end, our aim is to scientifically process the entirety of C&D waste."

Collaborating with BMC

Developers say the cost of acquiring land makes it unviable for them to set up their own C&D plants. "If it weren't for that, we could make a profit by offering other builders subsidised rates," said Valambhia. "That's why we're looking to collaborate with the BMC, to find a middle-ground, and why we're requesting incentives like property tax rebates or higher FSI to take on the expenditure."

Sharma said NAREDCO Maharashtra too is open to active dialogue with the BMC and other stakeholders to explore setting up additional plants, streamlining the collection system, and incentivising recycling practices.

However, buried in the small print is a nuance that raises another concern, says the civic official. While the new rules do not distinguish between excavated earth and soil from built-up C&D material such as cement, bricks, steel rods, aluminum and glass, it is only the latter that can be processed at the C&D processing plants. Arrangements will have to be made to

dump the excavated soil elsewhere.

But, for now, even built-up debris poses a challenge. With the proposed plant at Deonar a distant possibility, and even that along with the two new sites accounting for only a fraction of the current required capacity, the BMC will have to figure out a solution if the rules are to be enforced.

A major cause of concern are the mega-infrastructure projects being planned and executed by the Mumbai Metropolitan Region Development Authority (MMRDA). "MMRDA is one of the biggest generators of C&D waste in the MMR, what with the Atal Setu, metro projects, bullet train, etc. And yet, they don't have a C&D waste policy. The irony is that they might escape the ambit of the new rules as they are infrastructure developers, not builders," said the civic official.

A spokesperson for the MMRDA said their C&D plan varies from project to project. "Additionally, we have a general consultant to verify if the authorised process is being followed."

According to environmental expert, Rajkumar Sharma, the BMC has woken up too late. "The BMC must create the infrastructure needed to enforce the rules," said Sharma, whose PIL in the Bombay High Court ultimately led to an order from the Supreme Court in 2018, which allowed C&D waste to be dumped on public and private land approved for this purpose.