## Roll on the JCBs!

How do you get the muck out? This is one of the most disturbing issues that has arisen during the current PMC-NGO toilet Demolition and Reconstruction drive. Before building a new block, you have to take the old one down, and that includes removing years' worth of old sludge from the old aqua-privy tank.

Despite real achievements in liberating scavengers, it has still been necessary to employ safai kamgars to get into the tanks and shovel out raw sewage.

With this issue on our minds, plus the need to move fast to meet the Municipal Commissioner's deadline for the whole project, Shelter Associates decided to follow the suggestion of engineer Rahul Puntambekar, and experiment with using an **earth-moving vehicle** (JCB) for the demolitions.



The JCB smashes the slab at Sangam Wadi: in half a day the tank was completely demolished

Although the JCB method looks horribly costly at first glance, the costs work out about even. With the JCB we're talking about 25 hours at the very most from the moment the first hammer is wielded at the superstructure to a completely clear aqua-privy. Without a JCB it can take 6 weeks with 6 labourers working.

Unfortunately the JCB isn't the complete solution: the excavator scoops out most of the uck, but teeth on the front can't manage the last 4". Some manual work is still needed, but a lot less than before. The JCB is also only an answer for accessible sites: toilets tucked away in high density areas will still have to be cleared by safai kamgars until we can work out another alternative.



A speedy way to scoop up rubble and sludge after the slab has been demolished

JCBs do attract a lot of attention, especially when used to demolish the superstructure. It's very dramatic and crowds gather: there can be a real need for some sort of crowd control to avoid a dangerous situation.

There are two main plus points to using earth-movers:

- they hugely reduce the need to employ people to clear out raw sewage manually
- they speed up the demolition process enormously.



The JCB in action at Adarsh Indira Nagar, smashing the superstructure and tank to the excitement of onlookers

It was exciting to hear that along with SA, other NGOs in this project also started using these earth-moving vehicles to demolish and remove sludge, reducing the need to employ scavengers to remove muck manually.

JCBs aren't the perfect solution, but they're a great big step in the right direction

> Shelter Associates/ Baandhani, 2001