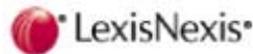
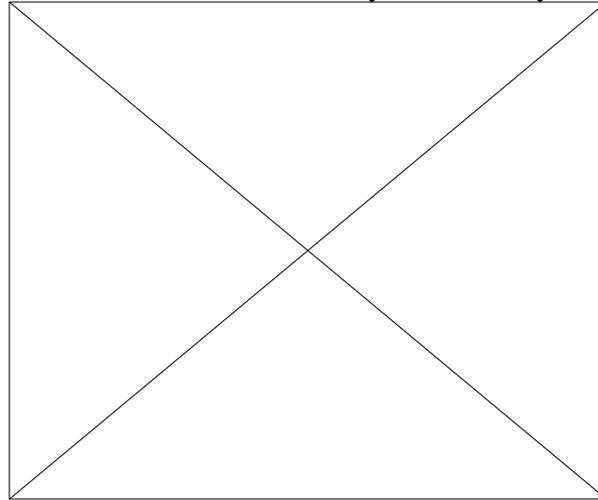


Plastic Recycling Gets on Track

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Sleepers made from recycled bumper scrap and old computer cases could soon be putting in an appearance on our railway tracks.

UK company Micron uses licensed technology to convert waste plastic into a strong, durable material, which is then used to make railways sleepers. The company has already approached UK rail track operator Network Rail in the hope of forming a partnership to produce composite sleepers for the UK. Network Rail has to hit a target of using 23% recycled material by 2012. Deepak Aggarwal, president of Micron, said: 'Plastic won't replace every sleeper but we believe this is a billion dollar market.' Micron forecasts annual revenues of 40m-60m [pounds sterling] in five years time.

Micron's sleeper technology is the brainchild of Tom Nosker, a materials engineer at Rutgers University in the US. Waste polystyrene and polyethylene are mixed to produce a material that combines polystyrene's rigidity with polyethylene's flexibility.

Sleepers are currently made from either wood or concrete, both of which have drawbacks. Concrete sleepers are very heavy, as much as 400kg, and require specialist equipment to install. They also crack and when one sleeper cracks, the stress released down the line can cause several more to crack. Wooden sleepers have to be turned halfway through their six-year lifetime and require extensive chemical treatment.

Years of stress tests have demonstrated that the plastic sleepers are at least as strong as concrete sleepers. They also have the advantage of being light. And because they can be

recycled several times to make new sleepers, they could potentially last several hundred years, making them substantially cheaper than either wood or concrete in the long term.

But Laura Wallace at Tube Lines, a London Underground track maintenance company, said that when London Underground considered plastic sleepers, fire safety was an issue.

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