Few doubts of concrete can help limit air pollution

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This finding serves as an important premise in the strategy of using materials thought to cause pollution and making it an environmental protection solution in urban design and waste management in the future.

They also said that this finding is an important step towards using waste concrete to reduce air pollution.

"Although concrete production causes air pollution, concrete buildings in urban areas can make a sponge-like activity capable of absorbing sulfur dioxide at a high level . " - Alex Orlov, a professor at Stony Brook University in the US, said in a statement.

"Our findings open up the possibility that concrete waste derived from building demolition can be used to absorb these contaminants," Orlov said.

According to the World Health Organization (WHO), up to 7 million premature deaths worldwide may involve air quality and hazardous pollution.

Previously, sulfur dioxide emissions were one of the most common air pollutants, typically plants that emit the most sulfur dioxide.

Moreover, cement kilns also produce about 20% of sulfur dioxide dioxide emissions. And concrete is still the most widely used material in the world and the price is not too expensive for everyone.

Researcher Girish Ramakrishnan from Stony Brook University used cement and concrete construction materials to conduct their experiments.

They used the Fourier Transform infrared spectroscopy (Diffuse Spectroscopy Reflectance Infrared Fourier Transform - DRIFTS) and X (XANES) spectra to determine the extent of sulfur dioxide adsorption on these materials.

Researchers note that concrete's ability to absorb pollutants will decrease over time because of its age.

However, old concrete crushed, made into new materials can restore these pollution-removing properties.