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Benzothiazole (BT), 2-hydroxybenzothiazole (HOBT), and 2-(4-morpholino)benzothiazole (24MoBT) leach from crumb rubber material (CRM) and asphalt contg. 1-3% CRM. To det. whether benzothiazoles would be an environmental problem if roads contg. CRM-modified asphalt (CMA) were built in the State of Rhode Island, the source and fate of these compds. were studied. Benzothiazoles enter the environment from a no. of sources such as the leaching of rubber products, fine particles of automobile tires, and antifreeze. Compared to the fluxes of benzothiazoles currently entering rivers from urban runoff, CMA roads may initially deliver substantially more benzothiazoles to the environment; however, with time this source may diminish as the road ages. Because the benzothiazoles are water sol., it is unlikely that they will sorb to particles, settle to sediments, or be bioaccumulated. BT can be volatilized, and BT and HOBT can be microbially degraded. The environmental chem. of these compds. suggests that the inputs of benzothiazoles from CMA should not be harmful.