

Mitigation of Radiological Hazards in Parks Explained

During compilation of the NPS inventory of abandoned mineral lands, Colorado Plateau park managers raised concern over the issue of radiation at abandoned uranium mine and mill sites. Geologist John Burghardt, with the NPS Geologic Resources Division in Denver, has recently written the paper, "Effective Understanding and Management of Radiological Hazards at Abandoned Uranium Mine and Mill Sites," in response to these concerns.

The paper describes that the Colorado Plateau was heavily mined for uranium from the late 1940s through the 1950s, and that uranium mining has continued on a small scale through the present. These sites, and others that were mined for different commodities that contained radioactive elements in their ore, are hazardous due to potentially elevated radioactive emissions. While guidelines are available for land management agencies to establish their own regulations and policies, no federal regulations presently address management of the hazardous sites. Burghardt describes effective and safe management of these sites beginning with the fundamental concepts of radioactivity, environmental characterization

methods, pathways of exposure, and data interpretation. Further discussion links site management and cleanup to the planned uses of the sites, their levels of radioactivity, and typical duration of public exposure anticipated.

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