

Industrial and Metallic Minerals Mine Reclamation in Missouri¹

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Abstract: Missouri is home to approximately 800 industrial and metallic mineral mining operations. Mine sites include the mineral extraction of lead, iron ore, limestone, sand, gravel, clay, granite, rhyolite, sandstone, shale, and traprock. These minerals enable the mining industry to generate nearly \$3 billion annually to the economy of Missouri. Missouri Department of Natural Resources' Missouri Geological Survey staff, mine operators, and industry dignitaries provide insights to a historical perspective of minerals mined in Missouri, an overview of mine sites, and high quality reclamation. The "Show-Me" state works to ensure the mined lands are reclaimed to productive land use such as agriculture, water impoundments, wildlife, and industrial uses, or a combination thereof. Missouri is unique in that Missouri mining laws require surface mine reclamation to be completed in a contemporaneous manner. Lead and iron ore mining results in the deposition of tailings in a waste management storage area. These tailings are covered with soil and reclaimed to wildlife habitat, water impoundments, and wetland areas. Industrial minerals typically are mined on the surface with reclamation results ranging from water impoundments one would want in their backyard to industrial pads now occupied by a Sam's Club located in the state's capital city, for example. Mining operations range in size from 1-acre in-stream gravel bars to limestone mine sites more than 1,000 acres in size. Multinational companies and a variety of mid-size companies, as well as small operators help contribute to Missouri's mineral economy. Examples of these efforts are combined in a short documentary to provide insight into Missouri mine reclamation.

Additional Key Words: Tailings, Wildlife, Wetlands.

1. Video presented at the 2019 National Meeting of the American Society of Mining and Reclamation, Big Sky, MT. Industrial and Metallic Minerals Mine Reclamation in Missouri. Published by Missouri Department of Natural Resources' Missouri Geological Survey, 111 Fairgrounds Road, Rolla, MO 65401.

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