

U.S. STRATEGIC METAL'S MINING SITE POSES A RISK TO PUBLIC HEALTH AND THE ENVIRONMENT

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U.S. Strategic Metals (formerly Missouri Cobalt) has submitted a permit application to build a vertically integrated mining and processing site in Madison County, MO, right outside of Fredericktown, **endangering the nearby community and environment.** While this permit is for construction of a hydrometallurgical (“hydromat”) plant, The company also intends to develop an underground mine and a fresh ore processing plant. All of these planned facilities have the possibility of contaminating air and water quality near you.

Cobalt itself has been classified by the CDC as “reasonably anticipated to be a human carcinogen,” indicating that **exposure to cobalt from mining operations will increase the community’s risk of cancer.** In addition to the harms of cobalt exposure, this facility will emit large quantities of pollutants that will harm the health of the surrounding environment and community. These pollutants include the following:

Particulate Matter (PM): Can cause lung and respiratory irritation, asthma, heart disease

Carbon Monoxide (CO): Reduces the amount of oxygen transported to vital organs in your bloodstream

Nitrogen Oxides (NO_x): Contributes to acid rain, atmospheric ozone formation and smog. Can irritate eyes, nose, throat, and lungs

Sulfur Dioxide (SO₂) & Sulfuric Acid Mist: Damages foliage, contributes to acid rain, and harm the respiratory system

Volatile Organic Compounds (VOCs): VOCs can cause liver damage, kidney damage, and damage to the central nervous system, eye, nose and throat irritation. Some VOCs are known carcinogens in animals, and may cause cancer in humans

Lead (Pb): Lead is a neurotoxin that causes damage to the brain and nervous system, which can create learning and behavioral issues, headaches, hearing issues, and slowed growth

Metal compounds including: Lead compounds, cobalt compounds, nickel compounds, manganese compounds

Hazardous air pollutants (HAPs) from natural gas combustion and solvent extraction

Sources:

[Cobalt | ToxFQAQs™ | ATSDR](#)

[Health and Environmental Effects of Particulate Matter \(PM\) | US EPA](#)

[Basic Information about Carbon Monoxide \(CO\) Outdoor Air](#)

[Pollution | US EPA](#)

[Nitrogen Oxides | ToxFQAQs™ | ATSDR](#)

[What are some of the health effects of lead? | US EPA](#)

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Residents of Fredericktown will be exposed to all of these pollutants released into the air and groundwater. Significantly, **there is a Head Start program and an additional daycare for children ages 6 months to 12 years a mere half mile from the proposed facility.** Children experience particularly high health risks associated with Cobalt, and as such, the CDC recommends that children avoid playing in areas that may be contaminated with Cobalt.

Little Blackcats Daycare

Fredericktown Head Start



Mine Site

U.S. Strategic Metals wants their new mine and associated facilities to be regulated as a “de minimis” source of pollution, meaning a pollution source that will have negligible impacts on human health and the environment. Yet in its permit application, **it demonstrates that it will exceed de minimis threshold for NO_x and will approach the thresholds for CO and HAPs.** If the calculations included in the permit application in any way underestimate the actual emissions, the plant should be regulated as more than just a “de minimis” source of pollution. **The mine is also currently on the national priority list for CERCLA, and has a history of multiple significant violations of the Clean Water Act.**

We Need Missouri Department of Natural Resources (DNR) to:

- **Provide a nontechnical explanation of U.S. Strategic Metal’s permit application** that includes explanations of exposure risks to contaminants, and clarifies the distances of the proposed facilities to the community, especially daycares.
- **Regulate this mining operation beyond the requirements for de minimis sources**
- **Make the results of pollution monitoring publicly available and accessible to Missourians, especially those within the neighboring communities**
- **Require U.S. Strategic Metals mining facility should conduct ongoing fence line monitoring** to ensure accurate reporting of pollutants