



Top Ten Ways to Underestimate Mining Impacts to the Environment

Top Ten+ Ways to Underestimate Mining Impacts to the Environment

- ⑩ If acid generation potential is low, other contaminants will not leach either
- ⑩ Rely on flawed untested conceptual model
- ⑩ Using averages – concentrations, K, precipitation, flow…
- ⑩ Assuming "attenuation" will decrease concentrations to below standards (certain solid phases will precipitate when not justified; soils will adsorb contaminants)
- ⑩ Assuming treatment needs will occur far in future and bond can be low (discount rate)
- ⑩ Inadequate sample numbers - should be commensurate with ore delineation
- ⑩ Don't update models or check with actual conditions

Top Ten+ Ways to Underestimate Mining Impacts to the Environment

- ⑩ Assume no delayed reactions/processes (there is infiltration through waste rock in arid areas)
- ⑩ Inadequate sampling – timing (need ongoing characterization, find peak concentrations)
- ⑩ Assume silicates will provide neutralizing potential
- ⑩ Mitigation, e.g., blending, encapsulation, will prevent any water quality problems (instead use redundant mitigation)
- ⑩ Kinetic tests need to be run for only 20 weeks; kinetic tests showing AGP from static tests won't occur; using non-standard static/kinetic tests
- ⑩ Social conditions won't change – more homes, water use