

EPA Report: "Analysis of the Transport and Fate of Metals Released From the Gold King Mine Into the Animas and San Juan Rivers"
Charge Questions for Peer Review

Part 1. Overall Project and Analysis

Question 1. Were project objectives clearly identified and did analyses address the objectives? Please explain.

Question 2. Given the data that were available to the researchers, were assumptions about data inclusion and use appropriate? How so?

Question 3. Does the analysis provide meaningful results and scientifically defensible conclusions regarding GKM plume movement and characteristics? Please explain.

Part 2. Fate and Transport

Question 4. Does the research appropriately characterize the metals concentrations and load produced from the Gold King Mine spill? Please explain

Question 5. Were empirical methods and modeling that were used to assess plume water quality characteristics appropriately applied and interpreted given available data? Please explain.

Question 6. Were empirical methods and modeling that were used to assess deposition and bed sediments appropriately applied and interpreted given available data? Please explain.

Question 7. Were the data statistically analyzed and visualized properly in regards to metal concentrations in the surface water in the post-plume period in the Animas and San Juan Rivers? Please explain.

Question 8. Were the data analyzed and visualized properly in regards to sediment metal concentrations in the streambed in the post-plume period in the Animas and San Juan Rivers? Please explain.

Question 9. Were the geochemical principles to characterize transport and fate of acid mine drainage regarding neutralization, precipitation and mineral saturation appropriately applied and interpreted? Please explain.

Question 10. Were exposure analyses based on GKM concentration results appropriately applied and interpreted? Please explain.

Question 11. Was the potential for groundwater uptake from the Gold King Mine appropriately applied and interpreted? Please explain.

Application of Soft-ware Based Analytical Models

Question 12. Does the final report appropriately and adequately respond to the mid-project external peer review comments regarding the development and application of the WASP model? Please explain.

Question 13. Does the final report appropriately and adequately respond to the mid-project external peer review comments regarding the development and application of groundwater modeling? Please explain

Question 14. Does the final report appropriately and adequately respond to the mid-project external peer review comments regarding the development and application of bioaccumulation modeling? Please explain.