

Safety Alert



Impoundment Safety After Heavy Precipitation Events

Heavy rainfall and flooding across mining regions can increase the risk of impoundment instability and potential failures. Mine operators and contractors must manage these risks and take proactive steps to ensure the safety of all impoundment structures.

Key Issues:

- Saturation of embankments and foundations can lead to loss of structural integrity.
- Blocked or overwhelmed spillways increase the risk of overtopping.
- Inadequate inspections after weather events delays identification of potential hazards.
- Erosion or seepage along slopes and embankments may go unnoticed.



Best Practices

- Conduct visual inspections of all impoundments soon after significant rain or snowmelt events.
- Document and photograph all findings, especially signs of erosion, seepage, cracking, or settlement and promptly correct any deficiencies.
- Ensure spillways, drains, and emergency overflow channels are clear and functioning.
- Evaluate freeboard levels and adjust water management practices as needed.
- Notify appropriate personnel and MSHA when hazards are identified.
- Maintain qualified personnel for impoundment inspection and response, on-site or on-call.
- Update your Emergency Action Plan (EAP) and review it with all personnel.