

Recommended Practices for Opencut Operations Water Resources

Protecting Montana's Waters: How Opencut Operations Do Their Part

The Montana Contractors Association (MCA) is committed to protecting Montana's valuable water resources. Opencut operations, like sand and gravel mining, play an important role in our state's infrastructure, but they also have a responsibility to minimize impacts on water quality. This fact sheet explains the regulations and best practices in place to ensure clean water for everyone.

Working Together for Clean Water

Opencut operators work closely with the Montana Department of Environmental Quality (DEQ) and Department of Natural Resources and Conservation (DNRC) to follow regulations and implement best practices. This ensures our water stays clean for our communities, wildlife, and recreation.

A study conducted in Hancock County, Maine, examined the effects of sand and gravel mining on groundwater resources. The research found that existing regulations in Maine provide some protection to water resources. The study highlighted that while there was scant evidence of significant changes in water quantity, the impact of mining activities on groundwater quality and quantity can vary. The study emphasized the importance of effective regulation and monitoring to ensure that sand and gravel mining can coexist with the protection of water resources. (Peckenham, J.M., Thornton, T., & Whalen, B. (2009). *Sand and gravel mining: effects on ground water resources in Hancock County, Maine, USA. Environmental Geology.*)

Planning for Success

Before any work begins, a thorough assessment is conducted to identify potential impacts on water resources. This helps develop a plan to minimize risks and protect water quality.

Key Practices

- **Settling Ponds and Berms:** These control sediment runoff, preventing it from entering waterways and harming aquatic life.
- **Clean Water Diversion:** Clean water sources are diverted away from mining activity to avoid contamination.
- **Equipment Maintenance:** Regular maintenance prevents leaks and spills that could pollute water.
- **Secure Storage:** Fuels, lubricants, and other chemicals are stored and handled properly to minimize the risk of spills.
- **Stream Protection:** Streambeds and surrounding areas (riparian zones) are disturbed as little as possible.
- **Water Monitoring:** Regular monitoring ensures any potential issues are identified and addressed quickly.
- **Stormwater Management Plans:** These plans outline steps to prevent stormwater runoff from carrying pollutants into waterways.
- **Best Management Practices (BMPs):** These include techniques like vegetated buffers, detention ponds, and erosion control mats to minimize stormwater runoff and keep pollutants out of our water.
- **Dust Suppression:** Practices like water sprays with flocculants or tackifiers not only control dust but also reduce erosion, protecting water quality.

- **Water Conservation:** Plans are developed to minimize water usage during operations, ensuring this valuable resource is used responsibly.
- **Reclamation:** After operations conclude, the land is restored to minimize long-term water quality impacts. This includes restoring natural drainage patterns and using native, drought-tolerant vegetation that requires minimal water.

Working with the MCA

The MCA offers resources and training to help opencut operators implement these best practices. Together, we can ensure a sustainable future for Montana's water resources.

For More Information

- Montana Contractors Association (MCA): <https://www.mtagc.org/>

Remember, clean water is essential for all Montanans. By working together, we can ensure this vital resource is protected for generations to come!