

Reclamation Bond Optimization using 3d-dig Plus¹

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Abstract: Annual Reclamation Bonds are a critical process to ensure that mining operations can be effectively reclaimed if the site or company ceases operation. Calculation of the reclamation bond can occupy one or a team of engineers in a multi month project during bond estimation. From final mine design to calculation of productivities, multiple different types of workflows are utilized. 3D-Dig is a mine simulation software that can quickly simulate Dragline, Truck/Shovel, Dozer, Environment Reshaping, and blasting. By using 3d-dig an engineer can design a final surface, calculate fleet productivities, and get an accurate total cost of excavation and fleet operating costs. The simple functionality of 3d-dig can speed up the process of the bond design and calculation, and run alternative scenarios. Using 3d-dig can help to ensure an accurate and realistic bond estimate, which could save time and money in both the estimation and actual total bond cost.

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