



State of Utah

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Department of Natural Resources
Division of Oil, Gas and Mining

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March 24, 2021

TO: Utah Board of Oil Gas and Mining

THROUGH: Paul B. Baker – Mining Program Coordinator

FROM: Wayne H. Western – Environmental Scientist III
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Handwritten initials: PNB, KWC, and a red checkmark.

SUBJECT: 2021 Reclamation Surety Amounts for Exploration and Small Mining Operations Including Small Mine Three- and Five-Year Escalation

Rule R647-3-111.3.13 allows the Division to calculate the required surety for a small mining operation using the average dollars per acre costs for reclamation of similar operations as determined by the Division based upon approved surety amounts for current large mining operations. These average costs must be approved by the Board of Oil, Gas and Mining. This memorandum details the amounts recommended to the Board for the average costs to be used for small mines and exploration projects.

Small mine sites are areas with twenty or fewer acres of disturbance in unincorporated areas or ten or fewer acres in incorporated areas. For the purpose of calculating the cost per acre, the Division assumes there are no structures, that earthwork and revegetation will be required for each site, and earthwork and revegetation will be conducted at the same time, not in separate operations.

If a site has structures, including vent shafts or portals, the cost of structure removal will be calculated as a line item. Sites with unusual features, such as large underground openings, are calculated based on information from vendors and other sources, such as the Abandoned Mine Land Reclamation program.

For mine sites with five or fewer acres, the Division assumes that all reclamation work can be accomplished with an excavator and a pickup truck for support. For sites larger than five acres but smaller than ten acres, the Division assumes reclamation will require an excavator and a D-8 bulldozer with a pickup truck for support.

For sites that have received partial bond release for earthwork the Division assumes that surface preparation will be needed.

The reclamation cost estimates are escalated three or five years into the future for small mines using five years of the Average Means Historical Cost Index for Site



Construction, National Average. Costs for exploration projects are escalated one year into the future then re-evaluated if an operator requests an extension for the project.

In the past the Division assumed a 150-mile mobilizaion/demobilization cost. Beginning in 2014, the Division has allowed the mob/demob cost to be decreased to a minimum of 50 miles (if there are at least three contractors that could conduct reclamation based within 50 miles of the site). The mob/demob costs should be increased as shown in the tables if the haul distance is greater than 50 miles.

Exploration Notices

Project Size / Features	2021 Standard Surety Requirements 1-year escalation (thru 2022)	Comments
1 Acre (or less)	\$7,600 / acre	Minimum amount required; Includes \$2,600 mob / demob
Additional Acres	\$4,900 / acre (for projects under 5 acres) Projects over 5 acres may need more surety.	Partial acres rounded to next acre (e.g. 1.2 acres = 2 acres)
Additional Mob / Demob	< 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$1,100 101 - 150 miles (one way) - add \$2,600 151 - 200 miles (one way) - add \$3,500	In addition to surety for surface disturbance reclamation
Drilling (dry)	\$1,000 mob / demob, plus \$210 / hole (surface plug)	In addition to surety for surface disturbance reclamation
Drilling (wet), < 7-inch diameter < 2,500 feet depth	For holes less than 800 feet deep, \$8,000 mob / demob, plus \$5.00 / ft (subsurface plug)	In addition to surety for surface disturbance reclamation
	For holes 800 - 1,600 feet deep, \$12,000 mob / demob, plus \$5.50 / ft (subsurface plug)	
	For holes 1,600 - 2,500 feet deep, \$16,000 mob / demob, plus \$6.00 / ft (subsurface plug)	
Drilling, > 7-inch diameter > 2,500 feet depth Unusual conditions (e.g. units w/ oil/gas)	A third-party estimate may be needed.	In addition to surety for surface disturbance reclamation
Portals, 36 sq. ft. area max	\$2,000 / portal	In addition to above surety
Shafts, 6 ft. diameter max	\$3,000 / shaft	In addition to above surety
Large Portals / Shafts, Structures	Site-specific	In addition to above surety

Small Mining Operation Five or Fewer Acres Using an Excavator

Mine Size / Features	2021 Standard Surety Requirements		Comments
	3-year escalation (thru 2024)	5-year escalation (thru 2026)	
1 Acre (or less)	\$8,000 (3-year escalation) \$8,400 (5-year escalation)		Minimum amount required; (Includes \$2,600 mob/demob)
Additional Acres (5 total acres max)	\$5,200 / acre (3-year escalation) \$5,500 / acre (5-year escalation)		Partial acres rounded to next acre (e.g. 1.2 acres = 2 acres)
Cumulative Amount (5 acres, < 50 miles)	\$28,800 (3-year escalation) \$30,400 (5-year escalation)		\$1,600 difference between 3 and 5 year escalation
Additional Mob / Demob	3-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$1,200 101 - 150 miles (one way) - add \$2,700 151 - 200 miles (one way) - add \$3,700 5-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$1,300 101 - 150 miles (one way) - add \$2,900 151 - 200 miles (one way) - add \$3,900		In addition to surety for surface disturbance reclamation
Portals, 36 sq. ft. area max	\$2,000 / portal		In addition to above surety
Shafts, 6 ft. diameter max	\$3,000 / shaft		In addition to above surety
Large Portals / Shafts, Structures	Site-specific		In addition to above surety

Small Mining Operation over Five to Ten Acres Using a Dozer

Mine Size / Features	2021 Standard Surety Requirements		Comments
	3-year escalation (thru 2024)	5-year escalation (thru 2026)	
6 Acres	\$39,000 (3-year escalation) \$41,200 (5-year escalation)		Minimum amount required; Includes \$5,900 mob/demob.
Additional Acres (10 total acres max)	\$6,600 / acre (3-year escalation) \$7,000 / acre (5-year escalation)		Partial acres rounded to next acre (e.g. 5.2 acres = 6 acres)
Cumulative Amount (10 acres, < 50 miles)	\$65,400 (3-year escalation) \$69,200 (5-year escalation)		\$3,800 difference between 3 and 5 year escalation
Additional Mob / Demob	3-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$2,000 101 - 150 miles (one way) - add \$3,800 151 - 200 miles (one way) - add \$5,600 5-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$2,100 101 - 150 miles (one way) - add \$4,000 151 - 200 miles (one way) - add \$5,900		In addition to surety for surface disturbance reclamation
Portals, 36 sq. ft. area max	\$2,000 / portal		In addition to above surety
Shafts, 6 ft. diameter max	\$3,000 / shaft		In addition to above surety
Large Portals / Shafts, Structures	Site-specific		In addition to above surety

Small Mining Operation over Ten to Fifteen Acres Using an Excavator, Dozer, & Truck

Mine Size / Features	2021 Standard Surety Requirements		Comments
	3-year escalation (thru 2024)	5-year escalation (thru 2026)	
11 Acres	\$79,900 (3-year escalation) \$84,500 (5-year escalation)		Minimum amount required; \$6,200 mob/demob (pre-escal.)
Additional Acres (15 total acres max)	\$7,800 / acre (3-year escalation) \$8,200 / acre (5-year escalation)		Partial acres rounded to next acre (e.g. 10.2 acres = 11 acres)
Cumulative Amount (15 acres, < 50 miles)	\$111,100 (3-year escalation) \$117,300 (5-year escalation)		\$6,200 difference between 3 and 5 year escalation
Additional Mob / Demob	3-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$3,600 101 - 150 miles (one way) - add \$7,300 151 - 200 miles (one way) - add \$10,400		In addition to surety for surface disturbance reclamation
	5-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$3,800 101 - 150 miles (one way) - add \$7,700 151 - 200 miles (one way) - add \$11,000		
Portals, 36 sq. ft. area max	\$2,000 / portal		In addition to above surety
Shafts, 6 ft. diameter max	\$3,000 / shaft		In addition to above surety
Large Portals / Shafts, Structures	Site-specific		In addition to above surety

Small Mining Operation over Fifteen to Twenty Acres Using an Excavator, Dozer, & Truck

Mine Size / Features	2021 Standard Surety Requirements		Comments
	3-year escalation (thru 2024)	5-year escalation (thru 2026)	
16 Acres	\$129,700 (3-year escalation) \$136,900 (5-year escalation)		Minimum amount required; Includes \$8,600 mob/demob.
Additional Acres (20 total acres max)	\$9,200 / acre (3-year escalation) \$9,700 / acre (5-year escalation)		Partial acres rounded to next acre (e.g. 5.2 acres = 6 acres)
Cumulative Amount (20 acres, < 50 miles)	\$166,500 (3-year escalation) \$175,700 (5-year escalation)		\$9,200 difference between 3 and 5 year escalation
Additional Mob / Demob	3-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$4,800 101 - 150 miles (one way) - add \$9,600 151 - 200 miles (one way) - add \$13,900		In addition to surety for surface disturbance reclamation
	5-year escalation: < 50 miles (one way) - no additional surety 51 - 100 miles (one way) - add \$5,000 101 - 150 miles (one way) - add \$10,100 151 - 200 miles (one way) - add \$14,700		
Portals, 36 sq. ft. area max	\$2,000 / portal		In addition to above surety
Shafts, 6 ft. diameter max	\$3,000 / shaft		In addition to above surety
Large Portals / Shafts, Structures	Site-specific		In addition to above surety