



State of Utah

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Lieutenant Governor

Department of Natural Resources
Division of Oil, Gas and Mining

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December 18, 2023

TO: General File

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RE: Reclamation Cost Escalation Factor for 2024: 4.85%

The following table contains published estimated Historical Cost Index data (R.S. Means) and the Division's Calculated Escalation values for determining large mine reclamation surety amounts. Current reclamation costs are forecast five years into the future. These Calculated Escalation Factors are also used for determining small mine and exploration reclamation surety amounts for two-, three-, and five-year periods.

Year	Historical Cost Index ¹	Calculated Escalation
2008	173.0	
2009	185.9	
2010	182.8	
2011	185.0	
2012	192.8	
2013	197.6	2.69%
2014	202.7	1.84%
2015	206.7	2.49%
2016	207.2	2.29%
2017	208.5	1.58%
2018	215.8	1.78%
2019	227.3	2.32%
2020	239.1	2.95%
2021	236.7	2.69%
2022	261.6	4.64%
2023	318.8	8.12%
2024	288.1	4.85%

1. Estimated annual January values from *Heavy Construction Costs with RS Means Data* (Gordian), with each value coming from the edition corresponding to the year specified.



The Division determines Calculated Escalation values using this slightly reformatted equation from Gordian's *Construction Cost Indexes with RS Means Data, January 2017* (see page 31):

$$\text{Average Annual Change} = \left[\left(\frac{\text{Present Index}}{\text{Former Index}} \right) - 1 \right]^{(1 / n)} \times 100$$

where:

Average Annual Change = the average historical annual rate of change, or the Calculated Escalation value.

Present Index = the January estimate of the current year's Historical Cost Index.

Former Index = the January estimate of the Historical Cost Index from five years in the past.

n = the number of years between the Present and Former Index values.

This equation is essentially a re-arranged net present value equation, and the Division assumes that the calculated Average Annual Change (Calculated Escalation) approximates the average annual change in Utah reclamation costs. In its calculation, the Division assigns n to be equal to five years, assuming that the estimated Average Annual Change during the past five years will approximate the Average Annual Change over the next five years.

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