

2025 RECLAMATION COST ESTIMATE UPDATE

New Mexico Mining and Minerals Division

Old Main Pit + Explosive Magazine Area**General Information**

April 2025

Operator/Permitee	St. Cloud Mining Company	Contact:
	PO Box 198	Jason Stevens
	Winston, New Mexico 87943	(575) 743-5215
Permit Number	SI006RE	
Number of Acres	1	
Type of Operation	Existing Surface Mine / Zeolite	
Location	Sierra County, New Mexico	
Cost Estimate Calculation		\$3,383
Escalated Estimate		\$3,999

2025 RECLAMATION COST ESTIMATE UPDATE

Old Main Pit + Explosive Magazine Area

Old Main Pit + Explosive Magazine Area

April 2025

Earthmoving & Grading

Area/Acres

Regrade Explosives Storage Magazine Area

Regrade Total:

1

Revegetation

Revegetation of Pit area, overburden/interburden stockpile area, access road, sediment ponds and ditches.

Other

2025 RECLAMATION COST ESTIMATE UPDATE

Material volumes

Old Main Pit Area + Explosives Magazine Area

April 2025

≤ 3H : 1V Final Reclamation Slopes

Old Main Pit Explosives Magazine Storage

Item	Description	Origin	ave. Haul/Push Distance (ft)	Grade	Equipment
1	Backfill/final grade	Surrounding Berm	200	0%	D9T
Earth volume to move (lcy)			2,962		

BOND AMOUNT CALCULATION		St. Cloud Mining Company Permit # S1006RE	
New Mexico Mining and Minerals Division			Page 4
2025 RECLAMATION COST ESTIMATE UPDATE			
Old Main Pit Area + Explosives Magazine Area			
Bulldozer Performance			April 2025
Description:	Regrade Explosives Storage Magazine Area		
Equipment:	D9T		
	Adjacent Berms 200' avg push		
Volume	2,962 cy	Time	3.50 hours
		Productivity	847 cy/hr-doz
PERFORMANCE FACTORS			
material	1.20	operator	0.75
grade	1.60	work hour	50 min/hr
soil weight correction	2,606 lb/cy	visibility	1.00
prod. method/blade	1.00	elevation	1.00
normal production	800 cy/hr	direct drive trans.	1.00

Productivity and Hours Required for Dozer Use---Grading

April 2025

2025 RECLAMATION COST ESTIMATE UPDATE

Old Main Pit Area + Explosives Magazine Area

Description: Recontour Berms and Explosives Storage Magazine Area

Equipment: D9T-Grade reclaimed slopes at 0% grade

Area	1.0 ac	Time	0.4 hours
		Productivity	2.66 ac/hr-dozer
PERFORMANCE FACTORS			
material	1.00	operator	0.75
grade	1.40	work hour	50 min/hr
soil weight correction	2606 lb/cy	visibility	1.00
prod. method/blade	1.00	elevation	1.00
effective blade width	14.2 feet	direct drive trans.	1.00
speed	2 miles/hr		

Equipment: D9T

Volume	2,962 bcy	Time	3.4
		Productivity	880.88 bcy/hr
Performance Factors			
Rip Spacing	5.00 ft	Speed	1.00 miles/hr
Penetration	1.50 ft	Speed	88 ft/min
Rip distance	200 ft	Turn around time	0.25 min
Road width	0.00 ft	Cycle time	3 min/cycle
Work hour	50.0 min/hr	Cycles / hr	19.82 cycles / hr
Efficiency (experience)	1	Volume per cycle	56 bcy / cycle
Max Production	1101 bcy / hr		

TOTAL HOURS: 3.7

BOND AMOUNT CALCULATION		St. Cloud Mining Company			Permit S1006RE		
New Mexico Mining and Minerals Division					Page 6		
		2025 RECLAMATION COST ESTIMATE UPDATE					
<i>Summary Calculation of Earthmoving Costs</i>		Old Main Pit Area + Explosives Magazine Area					
		Total Cost \$1,002			April 2025		
Equipment Type	Ownership / Operating Cos (\$/hr)	Labor Cost (\$/hr)	Time Req'd (hrs)	Total Cost (\$)	Total Production	Prod. Unit	Unit Cost (\$/unit)
Dozer - Earthmoving Explosives Storage Area Berms Grading & Ripping							
D9T	\$251.70	\$34.79	3.5	\$1,002	2,962	cy	\$0.34
TOTALS			3.5	\$1,002			

2025 RECLAMATION COST ESTIMATE UPDATE

Revegetation Costs

Old Main Pit Area + Explosives Magazine Area

Description:

April 2025

Apply mulch, fertilizer, and seed mix to areas and harrow

No Location Adjustments	100.0%
Total Cost	\$1,200

	Area	Unit Cost	Subtotal Cost
Area	(acres)	(\$/acre)	(\$)
Explosives Magazine Storage Area	1.0	\$1,200	\$1,200
	1.0		\$1,200

Revegetation Materials Costs:	Cost/acre
Revegetation Seed Mix (Table 1)	\$327.15

Old Main Pit Area + Explosives Magazine Area

Other Reclamation Activity Costs

April 2025

Zeolite Fines Storage Area & Parts Storage Area & Plant Site

Activity	Quantity	Unit	Unit Cost (\$/unit)	Item Cost (\$)
Vegetation monitoring		years		\$0
Total				\$0

2025 RECLAMATION COST ESTIMATE UPDATE

Permit No. SI006RE

New Mexico Mining and Minerals Division

Page 10

Reclamation Bond Summary

Old Main Pit Area + Explosives Magazine Area

April 2025

DIRECT COSTS	1st time revegetation		\$1,200
	Earthmoving		\$1,002
	Revegetation @ 5%/yr failure rate	25%	\$250
	Other (vegetation monitoring, etc)		\$0
		Subtotal	\$2,452
INDIRECT COSTS	Mobilization and Demobilization (1%-10%)	5%	\$122.58
	Contingencies (3%)	3%	\$73.55
	Engineering Redesign Fee (3%)	3%	\$73.55
	Contractor Profit and Overhead	15%	\$367.73
	Project Management Fee	5%	\$122.58
	MMD Procurement Cost (2%-5%)	3%	\$73.55
	Bonding and Insurance	4%	\$98.06
		Subtotal	\$932
TOTAL BOND AMOUNT		38%	\$3,383

St. Cloud Mining Co. Zeolite Operation

Permit No. SI006RE

BOND AMOUNT CALCULATION*Page 1***Area/Timeframe 1 Plant Site Area, Zeolite Fines, Materials Storage****General Information****RECLAMATION COST UPDATE**

April 2025

Permit Holder	St. Cloud Mining Company	Contact:
	PO Box 198	Jason Stevens
	Winston, New Mexico 87943	(575) 743-5215
Permit Number	SI006RE	
Number of Acres	2.6	
Type of Operation	Processing Plant Area	
Location	Sierra County, New Mexico	
Cost Estimate Calculation		\$8,635
Escalated Estimate		\$10,206

St. Cloud Mining Co. Zeolite Operation

Permit No. SI006RE

BOND AMOUNT CALCULATION

Page 2

Area/Timeframe 1 Plant Site Area, Zeolite Fines, Materials Storage

Project Area/Component

2025 RECLAMATION COST UPDATE

April 2025

	<u>Area/Acres</u>
Earthmoving	
Backfill & regrade Zeolite Fines Storage Area	1.5
Regrade Miscellaneous Parts & Materials Storage Yard	1
Ripping	
Rip 2.6 acres	2.6
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	Backfill, Regrade & Rip 5
	2.6
Revegetation	
Revegetation: Pit area, overburden/interburden stockpile area, sediment ponds and ditches and swales	2.6
Other	
Monitor vegetation regrowth	2.6

Material volumes

≤ 3H : 1V Final Reclamation Slopes

April 2025

Item	Description	Dozer/ Backfill Volume (lcy)	Origin	Destination	ave. Haul/Push Distance (ft)	Grade	Equipment
1	Zeolite Fines Storage Area	4,840	W + Materials Storage Area	Zeolite Storage	300	-30%	D9T
2	Materials Storage Area - Surface		E, W & S Stockpile Material	Zeolite Storage	300	-30%	D9T
	Earth volume to move (lcy)	4,840					

Description: Backfill & Regrade Zeolite Fines Storage & Materials Storage Areas

Equipment: D9T
Adjacent areas + OB/IB stockpile; 200' average push downhill

Volume	4,840 cy	Time	5.71 hours
		Productivity	847 cy/hr-dozer

PERFORMANCE FACTORS

material	1.20	operator	0.75
grade	1.60	work hour	50 min/hr
soil weight correction	2,606 lb/cy	visibility	1.00
prod. method/blade	1.00	elevation	1.00
normal production	800 cy/hr	direct drive trans.	1.00

Description: Recontour all disturbed areas
Rip / scarify compacted soils

April 2025

Equipment:

D9T-Grade reclaimed slopes at -30% grade or flat at pit bottom

Area	2.6 ac	Time	1.0 hours
		Productivity	2.66 ac/hr-dozer
PERFORMANCE FACTORS			
material	1.00	operator	0.75
grade	1.40	work hour	50 min/hr
soil weight correction	2606 lb/cy	visibility	1.00
prod. method/blade	1.00	elevation	1.00
effective blade width	14.2 feet	direct drive trans.	1.00
speed	2 miles/hr		

Total Hours: 1.0

BOND AMOUNT CALCULATION

St. Cloud Mining Co.

Permit No. SI006RE

Area/Timeframe 1 Plant Site Area, Zeolite Fines, Materials Storage

Page 6

Summary Calculation of Earthmoving Costs

2025 RECLAMATION COST UPDATE

April 2025

Equipment Type	Ownership / Operating Cost (\$/hr)	Labor Cost (\$/hr)	Time Req'd (hrs)	Total Cost (\$)	Total Production	Prod. Unit	Unit Cost (\$/unit)
Dozers-Earthmoving - Zeolite Fines Storage Area & Surface							
D9T	\$291.70	\$34.79	6.7	\$2,184	4,840	cy	\$0.45
TOTALS			6.7	<u>\$2,184</u>			

Revegetation Costs Calculations

2025 RECLAMATION COST UPDATE

Description:

April 2025

Reseed & Mulch Area (acres): 2.6

No Location Adjustments	100.0%
Total Cost	\$3,389

Area	Area (acres)	Unit Cost (\$/acre)	Subtotal Cost (\$)
Zeolite Fines + Materials Storage areas	2.6	\$1,303	\$3,389
	2.6		\$3,389

Revegetation Materials Costs:	Cost/acre
Revegetation Seed Mix (Table 2)	\$327.15
Mulch (2 tons/acre)	\$211.12
Labor & Equipment	\$765.00
TOTAL:	<u>\$1,303.27</u>

Revegetated Area 2.6

Activity	Quantity	Unit	Unit Cost (\$/unit)	Item Cost (\$)
Vegetation monitoring		12 years	0	\$0

Total **\$0**

NOTE: REVEGETATION MONITORING WILL BE DONE FOR ALL RECLAIMED AREAS BY ONE CREW, ONCE PER YEAR AT AN ANNUAL COST OF \$800.00. THIS COST IS INCLUDED FOR THE AREA/TIMEFRAME 4 = SOUTH SIDE 1 AREA, TO APPLY TO ALL RECLAIMED AREAS AND REVEGETATION MONITORING COSTS

Reclamation Bond Summary

April 2025

DIRECT

COSTS	1st time revegetation		\$3,389
	Earthmoving		\$2,184
	Revegetation @ 5%/yr failure rate	25%	\$847
	Other (vegetation monitoring, etc)		\$0
		Subtotal	\$6,420

INDIRECT

COSTS	Mobilization and Demobilization (1%-10%)	5%	\$321.00
	Contingencies (2%-10%)	2%	\$128.40
	Engineering Redesign Fee	0%	\$0.00
	Contractor Profit and Overhead	15%	\$963.00
	Project Management Fee	5%	\$321.00
	MMD Procurement Cost (2%-10%)	2%	\$128.40
	Bonding and Insurance	4%	\$256.80
	Labor Liability Cost	1.5%	\$96.30
		Subtotal	\$2,215

TOTAL

BOND

AMOUNT		38%	\$8,635
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Cost Escalation Period	5 years
Cost Escalation Rate	3.4 %

TOTAL ESCALATED BOND AMOUNT	\$10,206
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(Escalation applied to both direct and indirect costs.)