

CHMRP - SRCE 2.0 Models Summary

Item / Topic	MMD Permit SF002RE	NMED Permit DP - 55	NMED Permit AP - 27
2023 Cost Estimate	\$680,077	\$ 2,288,361	\$ 8,478,122
NPV 0.58% Real Discount Rate	Not Applicable	\$ 1,785,132	\$ 6,609,374
Cashflow Model Years	2023 to 2037 (15 years)	2023 to 2122 (100 years)	2023 to 2122 (100 years)
Schedule	The assumption in the cashflow sheet is that final closure of the remaining surface features will take place in the years 2023, 2024 and 2025. The post closure period is defined in the cashflow model for 12 consecutive years.	The assumption in that the cashflow sheet is a 100 year with an ongoing site monitoring program that will take place in the year 2023 to 2122.	The assumption in that the cashflow sheet is a 100 year with an ongoing site monitoring program that will take place in the year 2023 to 2122.
Resources Rates	Resource rates used in the cost estimate model are an average of available 2022 New Mexico contractor rates for similar work and published State of Nevada SRCE cost date file rates. Local New Mexico contractor resource rates are derived from proprietary contracts which cannot be publicly released.		
Contractor Overhead & Profit	Contractor Overhead and Profit is included in the resource rates; therefore, not applied as a percentage for total work.		
Engineering & Design	A 5% allowance is applied for engineering and design work for remaining reclamation work.		
Contingency	Contingency is included in specific work activities and inflation/discount rates for market conditions; therefore, not applied as a percentage for total work.		
3 rd Party Contract Admin	A 5% allowance is applied for a third party managing the final reclamation activities.		
Closure Planning	Borrow material location study is included in the DP-55 cost estimate.	As a contingency, the study of a borrow material area for the repair of 8 acres on the Waste Rock Pile is included for \$ 50,000.	Borrow material location study is included in the DP 55 cost estimate.
Demolition	<ol style="list-style-type: none"> Buildings and structures listed below will be demolished (no salvage) with demolition debris removed and disposed off-site at an authorized Landfill Facility. Foundations and slabs will be broken up with a Rock Hammer, buried in place with a 24-inch layer of Growth Media material and re-seeded. The following buildings and structures are to be demolished: <ul style="list-style-type: none"> Lime Silo CN Pond Pumphouse Residue Pile Pumphouse 	<ol style="list-style-type: none"> Buildings and structures listed below will be demolished (no salvage) with demolition debris removed and disposed off-site at an authorized Landfill Facility. Foundations and slabs will be broken up with a Rock Hammer, buried in place with a 24-inch layer of Growth Media material and re-seeded. The following buildings and structures are to be demolished: <ul style="list-style-type: none"> ARD Pumphouse 	Not Applicable
Mobile and Fix Equipment	Mobile and Fix equipment such as the Air Compressor at the Lime Silo and the Weather Station will be removed and disposed off-site.	Not Applicable	Not Applicable
Ponds	<ol style="list-style-type: none"> Ponds not needed for the ongoing water management and quality monitoring program under NMED AP-27 or DP-55 will be decommissioned and reclaimed. Residual water in the ponds will be pumped out and disposed into the evaporation ponds on top of the WRD. The liner will be cut at the anchor trench on top and folded inwards to contain any residual sediments and or salts. The depression the pond leaves behind with the folded in liner will be graded/backfilled to ensure positive drainage. The following ponds will be reclaimed: <ul style="list-style-type: none"> Residue Pond A Residue Pond B ARD Lime Treatment Pond A ARD Lime Treatment Pond B ARD Lime Treatment Evaporation Pond A ARD Lime Treatment Evaporation Pond B 	<ol style="list-style-type: none"> Ponds not needed for the ongoing water management and quality monitoring program under NMED AP-27 and or DP-55 will be decommissioned and reclaimed. Residual water in the ponds, if any will be pumped out and disposed of at the nearest Municipality Water Treatment Plant. The liner will be cut at the anchor trench on top and folded inwards to contain any residual sediments and or salts. The depression the pond leaves behind with the folded in liner will be graded/backfilled to ensure positive drainage. The following ponds will be reclaimed: <ul style="list-style-type: none"> ARD Collection Pond 1 ARD Collection Pond 2 	<ol style="list-style-type: none"> Ponds not needed for the ongoing water management and quality monitoring program under NMED AP-27 and or DP-55 will be decommissioned and reclaimed. Residual water in the ponds, if any will be pumped out and disposed of at the nearest Municipality Water Treatment Plant. The liner will be cut at the anchor trench on top and folded inwards to contain any residual sediments and or salts. The depression the pond leaves behind with the folded in liner will be graded/backfilled to ensure positive drainage. The following ponds will be reclaimed: <ul style="list-style-type: none"> Water Treatment Evaporation Pond A Water Treatment Evaporation Pond B

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Reclamation-Ex Building, Structures and Pond Areas	<ol style="list-style-type: none"> 1. After the Building and or Structure has been completely removed and the concrete slab broken up with a Rock Hammer. The area will be re-graded as needed with a Dozer and or Grader and covered with a 24-inch layer of Growth Media material, following by re-seeding the area. 2. Backfilled ponds will be re-graded as needed with a Dozer and or Grader and covered with a 12-inch layer of Growth Media material, following by re-seeding the area. 	<ol style="list-style-type: none"> 1. After the Building and or Structure has been completely removed and the concrete slab broken up with a Rock Hammer. The area will be re-graded as needed with a Dozer and or Grader and covered with a 24-inch layer of Growth Media material, following by re-seeding the area. 2. Backfilled ponds will be re-graded as needed with a Dozer and or Grader and covered with a 12-inch layer of Growth Media material, following by re-seeding the area. 	<ol style="list-style-type: none"> 1. Backfilled ponds will be re-graded as needed with a Dozer and or Grader and covered with a 12-inch layer of Growth Media material, following by re-seeding the area.
Reclamation-Borrow Areas	<ol style="list-style-type: none"> 1. Growth Media (4,000 cy) will be extracted from an onsite Stockpile for the rehabilitation of areas reclaimed during the final surface reclamation work. 2. Fill material (2,230 cy) will be extracted from an onsite source for the Process Pond Area backfill. 3. Borrow area rehabilitation costs are covered in the DP-55 cost estimate. 	<ol style="list-style-type: none"> 1. Growth media (7,450 cy) will be extracted from an onsite Borrow for the rehabilitation of areas reclaimed during the final surface reclamation work. The Borrow area is estimated to be approximately 1 ac and 5 feet deep. 2. Local soil / fill material (43,608 cy) will be extracted from an onsite Borrow area for the Process Pond Area backfill. The Borrow area is estimated to be approximately 5 acres and 8 feet deep. 3. After the materials are extracted, the Borrow area will be re-graded and reclaimed. 	<ol style="list-style-type: none"> 1. Growth media (6,042 cy) will be extracted from an onsite Borrow for the rehabilitation of areas reclaimed during the final surface reclamation work. The Borrow area is estimated to be approximately 1 ac and 5 feet deep. 2. Local soil / fill material (42,760 cy) will be extracted from an onsite Borrow area for the Process Pond Area backfill. The Borrow area is estimated to be approximately 5 acres and 8 feet deep. 3. After the materials are extracted, the Borrow Area will be re-graded and reclaimed.
Well Plugging and Abandonment	<ul style="list-style-type: none"> • Not Applicable 	<ol style="list-style-type: none"> 1. Inactive and or obsolete Monitoring, Injection and Recovery Wells will be plugged and abandoned in accordance with the NM regulations and obtained permits. 2. The following wells will be plugged and abandoned. <ul style="list-style-type: none"> • (14) Inactive Monitoring, Injection and Recovery Wells will be plugged and abandoned as soon as possible and when permit is granted. • (35) Active Monitoring, Injection and Recovery Wells will be gradually plugged and abandoned towards the end of the 100-year monitoring period. 	<ol style="list-style-type: none"> 1.-Inactive and or obsolete Monitoring, Injection and Recovery Wells will be plugged and abandoned in accordance with the NM regulations and obtained permits. 2.-The following wells will be plugged and abandoned. <ul style="list-style-type: none"> • (4) Active Monitoring Wells will be gradually plugged and abandoned towards the end of the 100-year monitoring period.
Fence Removal	All fences around the decommissioned and reclaimed ponds will be removed and the fencing material is disposed off-site.		
Fence Installation	An 8 feet tall chain link perimeter Fence (3,450 ft) will be installed around the inner access road of the open pit.	Not Applicable	Not Applicable
Pipeline System Removal	All obsolete piping and pipe fitting materials will be removed and off-site disposal		
Site Source Control	Not Applicable	Not Applicable	<p>The roads, collection pipes and channels around the pit will be maintained and repaired on an assumed interval of every 5 years.</p> <ul style="list-style-type: none"> • Roads Roads around the pit will be maintained to limit surface water from contacting the pit wall rock formation. Imported crushed limestone will be used to cap and regrade the roads. • Collection Pipes Aging and damaged collection pipes will be replaced to promote surface water directly into the pit lake and limiting surface water from contacting the pit wall rock formation. • Collection Channels As needed collection channel liner system and rip rap rock armor will be repaired as the infrastructure is aging over time.

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Site Water Management - Pumping	Not Applicable	<p>Dolores Plume For a period of 12 years (2026-2037), the Dolores Plume water will be pumped back to ARD Pond #1 at a rate of 1 gpm.</p> <p>Residue Pile Plume For a period of 3 years (2023, 2024 and 2025), the Residue Pile Plume water will be pumped back to ARD Pond #2 at a rate of 1 gpm.</p>	Not Applicable
Site Water Management - Treatment	Not Applicable	Not Applicable	Pit Water Treatment is scheduled to continue 2023-2024 reducing constituents of concern to sustainable levels with source controls. Forecasted pit water quality is estimated to be sustainable with source controls after 2024; however, as a contingency it is assumed water treatment would occur on 20-year intervals for three consecutive years per interval.
Maintenance-Reclaimed Area	Maintenance (erosion repairs and reseeding) on 20% of the 2.7 acres reclaimed is assumed.	As a long-term maintenance contingency, one (1) foot of cover material on eight (8) acres of the waste rock pile is assumed. Maintenance (erosion repairs and reseeding) on 20% of the 1 acre reclaimed is assumed.	Maintenance (erosion repairs and reseeding) on 20% of the 3.8 acres reclaimed is assumed.
Maintenance – Site Roads	Site roads will be repaired and maintained during the final site reclamation work (3 years) and in the 12-year post-closure monitoring period. (2023 to 2037)	Site annual road maintenance will continue in the DP 55 FA model years 2038 to 2122. 2 days a year is assumed for site road maintenance.	Site annual road maintenance will continue in the AP 27 FA model years 2038 to 2122. 3 days a year is assumed for site road maintenance.
Maintenance – Monitoring Wells	Not Applicable	Active monitoring wells will be serviced, repaired and maintained at an assumed 5-year service interval over the 100 years period.	Active monitoring wells will be serviced, repaired and maintained at an assumed 5-year service interval over the 100 years period.
Maintenance - Ponds	Not Applicable	The Liner system on the ARD ponds will be inspected and repaired at an assumed 5-year interval. Replacement of the Pond Liner is assumed an assumed 30-year interval.	The Liner system on the WTP Evaporation Ponds will be inspected and repaired at an assumed 5-year interval. Replacement of the Pond Liner is assumed an assumed 30-year interval.
Monitoring – Reclaimed Area	The total reclaimed area (2.7acres) will be monitored annually on a quarterly basis (4 times) for a period of 12 years.	The total reclaimed area (1acres) will be monitored annually on a quarterly basis (4 times) for a period of 12 years.	The total reclaimed area (3.8acres) will be monitored annually on a quarterly basis (4 times) for a period of 12 years.
Monitoring - Water Quality	Not Applicable	<ol style="list-style-type: none"> The Groundwater quality and where applicable surface water quality will be monitored for 100 years. Water Quality Monitoring sampling is as follows: <ul style="list-style-type: none"> Year 2023 to 2034 WRP and Residue Pile Plume - 36 samples x 4 events per year for 12 years. Surface Water Monitoring - 3 samples x 4 events per year for 12 years Year 2035 to 2042 WRP - 14 samples x 2 events per year for 8 years. Surface Water Monitoring - 2 samples x 2 events per year for 8 years Year 2043 to 2122 WRP - 7 samples x 2 events per year for 80 years. Surface Water Monitoring - 2 samples x 2 events per year for 80 years 	<ol style="list-style-type: none"> The Groundwater quality and where applicable surface water quality will be monitored for 100 years. Water Quality Monitoring sampling is as follows: <ul style="list-style-type: none"> Year 2023 to 2034 Well and Pit Lake Water - 13 samples x 4 events per year for 12 years. Year 2035 to 2042 Well and Pit Lake Water - 13 samples x 2 events per year for 8 years. Year 2043 to 2122 Well and Pit Lake Water - 13 samples x 2 events per year for 80 years.