

**TABLE 2-1
TYRONE MINE SURFACE IMPOUNDMENTS**

Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
<i>DP-27 SA</i>				
<i>Northern Mangas Valley Tailing Area</i>				
CB-2A	NA	Perimeter stormwater	--	Reclaimed
CB-2B	NA	Perimeter stormwater	--	Reclaimed
CB-2C	NA	Perimeter stormwater	--	Reclaimed
CB-2D	NA	Perimeter stormwater	--	Reclaimed
CB-2E	NA	Perimeter stormwater	--	Reclaimed
CB-2F	NA	Perimeter stormwater	--	Reclaimed
CB-2G	NA	Perimeter stormwater	--	Reclaimed ²
CB-2H1	0.2	Perimeter stormwater	--	Reclaimed
CB-2H2	0.6	Perimeter stormwater	--	Reclaimed
CB-2H3	NA	Perimeter stormwater	--	Reclaimed
CB-2H4	0.58	Perimeter stormwater	--	Reclaimed
CB-2I	NA	Perimeter stormwater	--	Reclaimed ²
CB-2J1	NA	Perimeter stormwater	--	Reclaimed ²
CB-2J2	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K1	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K2	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K3	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K4	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K5	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K6	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K7	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K8	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K9	NA	Perimeter stormwater	--	Reclaimed ²
CB-2K10	NA	Perimeter stormwater	--	Reclaimed ²

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Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
CB-2K11	NA	Perimeter stormwater	--	Reclaimed ²
CB-2L	NA	Perimeter stormwater	--	Reclaimed ²
CB-3A	NA	Perimeter stormwater	--	Reclaimed
CB-3B	NA	Perimeter stormwater	--	Reclaimed
CB-3D	NA	Perimeter stormwater	--	Reclaimed
CB-3E	NA	Perimeter stormwater	--	Reclaimed
CB-3F	NA	Perimeter stormwater	--	Reclaimed
CB-3G	NA	Perimeter stormwater	--	Reclaimed
CB-3H	NA	Perimeter stormwater	--	Reclaimed
CB-3I	NA	Perimeter stormwater	--	Reclaimed
CB-3J1	NA	Perimeter stormwater	--	Reclaimed
CB-3J2	NA	Perimeter stormwater	--	Reclaimed
CB-3K1	NA	Perimeter stormwater	--	Reclaimed
CB-3K2	NA	Perimeter stormwater	--	Reclaimed
CB-3K3	NA	Perimeter stormwater	--	Reclaimed
CB-3L	NA	Perimeter stormwater	--	Reclaimed
CB-3M1	0.7	Perimeter stormwater	--	Reclaimed
CB-3M2	NA	Perimeter stormwater	--	Reclaimed
CB-3N	NA	Perimeter stormwater	--	Reclaimed
CB-3O	NA	Perimeter stormwater	--	Reclaimed
CB-3R	NA	Perimeter stormwater	--	Reclaimed
CB-3S	NA	Perimeter stormwater	--	Reclaimed
CB-3T	NA	Perimeter stormwater	--	Reclaimed
CB-3U	NA	Perimeter stormwater	--	Reclaimed
CB-3V	NA	Perimeter stormwater	--	Reclaimed
CB-3W	NA	Perimeter stormwater	--	Reclaimed
CB-3XA	0.3	Perimeter stormwater	--	Reclaimed

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Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
CB-3XA1	NA	Perimeter stormwater	--	Reclaimed
CB-3XC	NA	Perimeter stormwater	--	Reclaimed ²
CB-3XD	0.4	Perimeter stormwater	--	Reclaimed
CB-3XD1	NA	Perimeter stormwater	--	Reclaimed
CB-3XE	NA	Perimeter stormwater	--	Reclaimed
CB-3XF	0.41	Perimeter stormwater	--	Reclaimed
CB-3XF1	NA	Perimeter stormwater	--	Reclaimed
CB-3XG	NA	Perimeter stormwater	--	Reclaimed
CB-3XL1	NA	Perimeter stormwater	--	Reclaimed
<i>Facility Area 2 - Southern Mangas Valley Tailing</i>				
CB-1AA	2.12	Perimeter stormwater	--	Existing
CB-1AB	NA	Perimeter stormwater	--	Existing
CB-1AC	NA	Perimeter stormwater	--	Existing
CB-1XA	0.05	Perimeter stormwater	--	Existing
CB-1XB	0.06	Perimeter stormwater	--	Existing
CB-1XC	0.12	Perimeter stormwater	--	Existing
CB-1XD	0.09	Perimeter stormwater	--	Existing
CB-1XE1	1.41	Perimeter stormwater	--	Existing
CB-1XE2	0.64	Perimeter stormwater	--	Existing
CB-1XE3	0.59	Perimeter stormwater	--	Existing
CB-1XF	0.16	Perimeter stormwater	--	Existing
CB-1XG	0.05	Perimeter stormwater	--	Existing
CB-1XH	NA	Perimeter stormwater	--	Existing
CB-1XI	NA	Perimeter stormwater	--	Existing
CB-1XJ	NA	Perimeter stormwater	--	Existing
CB-1XK	0.27	Perimeter stormwater	--	Existing
CB-1XL	NA	Perimeter stormwater	--	Existing

**TABLE 2-1
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Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
CB-1XM	0.7	No. 2 TDRW Pond	Clay	Existing
CB-1XN	NA	Perimeter stormwater	--	Existing
CB-1XO	NA	Perimeter stormwater	--	Existing
CB-1XQ	1.33	Perimeter stormwater	--	Existing
CB-1XR	NA	Perimeter stormwater	--	Existing
<i>DP-166 No. 2 Leach System, SX/EX Plant, Open Pits</i>				
Seep Collection DC2-1	0.02	Seep	Synthetic	Existing
Seep 2 Collection	0.002	Seep	None	Existing
Seep 3 Collection	0.02	Seep	Clay	Existing
Seep 4 Collection	0.02	Seep	Clay	Existing
Seep 5E Collection	NA	Seep	Clay	Existing
Seep 8 Collection	0.005	Seep	Clay	Existing
Seep 9 Collection	NA	Seep		Existing
Copper Mountain Pit Sump	0.44	Seep	None	Existing
Lube Shop Pond	0.09	Stormwater	None	Existing
No. 2 PLS Pond	0.46	PLS	Synthetic & Shotcrete	Existing
North Racket Sump	0.64	PLS	None	Existing
SX/EW PLS Feed Pond	0.25	PLS	Synthetic	Existing
5E Pond 1	NA	Seep	Synthetic	Existing
5E Pond 2	0.36	Seep	Synthetic	Existing
<i>DP-286 No. 3 Leach System</i>				
Canyon 1 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 2 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 3 PLS Catchment	NA	PLS	Clay/Concrete	Existing

**TABLE 2-1
TYRONE MINE SURFACE IMPOUNDMENTS**

Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
Canyon 4 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 5 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 6 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 7 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 8 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 9 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 10 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 11 PLS Catchment	NA	PLS	Clay/Concrete	Existing
Canyon 11 PLS Catchment	NA	PLS	Synthetic	Existing
No. 3 PLS Pond	1.22	PLS	Synthetic	Existing
No. 3 PLS Overflow	0.58	PLS	Synthetic	Existing
Crusher Pond	0.37	Stormwater	None	Existing
Keener Pond a	0.15	Stormwater	Clay	Reclaimed
Keener Pond b	0.39	Stormwater	Clay	Reclaimed
Land Farm and Stage Pond (two)	0.62	Stormwater	Synthetic & Concrete lined	Existing
Niagara Stormwater	0.16	Stormwater	None	Existing
Other Thickeners (six)	0.46	Stormwater	Synthetic & Concrete lined	Existing
Plant Oxidation Pond (a)	0.28	Sewage	Synthetic	Existing
Plant Oxidation Pond (b)	0.3	Sewage	Synthetic	Existing
SPCC Pond	0.96	Stormwater	Synthetic	Existing
<i>DP-363 No. 1A Leach System</i>				
Historic 1A PLS Pond	0.5	PLS	Clay	Reclaimed
1A PLS Tank	NA	PLS/Seepage	Stainless Steel	Existing
No. 1A PLS Overflow Pond	0.5	PLS	Synthetic	Existing

**TABLE 2-1
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Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
No. 1A Stormwater Pond	0.11	Stormwater	Clay	Existing
<i>DP-383 No. 1B Leach System</i>				
Historic 1B PLS Pond	0.33	PLS	Clay	Reclaimed
1B PLS Tank	NA	PLS/Seepage	Stainless Steel	Existing
No. 1B Overflow Pond	0.6	PLS	Synthetic	Existing
<i>DP-396 No. 1C Waste Rock Stockpile</i>				
7C Seepage Collection Pond	0.16	Stormwater/Seepage	Synthetic	Reclaimed
No. 1C Stormwater Pond	0.09	Stormwater/Seepage	Synthetic	Existing
Oak Grove Pond	0.18	Stormwater	Synthetic	Existing
Oak Grove Sediment Basin	2.2	Stormwater	None	Existing
<i>DP-435 No. 2A and 2B Leach Systems, and 2B and 9A Waste Rock Stockpiles</i>				
No. 2A (a) aka Seep 5E Pond Discharge	0.1	Stormwater	None	Existing
No. 2A (b) Surge Pond	0.46	PLS	Synthetic	Existing
No. 2A East PLS Overflow	0.12	PLS	Synthetic	Existing
2B Stormwater	0.65	Stormwater	Clay	Reclaimed
<i>DP-455 Gettysburg Pit and Leach System</i>				
Gettysburg Collection Pit (a)	0.17	PLS	Unlined	Existing
7B PLS Pond	0.06	PLS	Synthetic	Existing
6C-2 PLS Collection Pond	NA	PLS	Synthetic	Existing
<i>DP-670 Savannah Pit and East Main Leach System</i>				
East Main Booster Pond	0.05	PLS	Synthetic	Existing
Savannah Pit Sediment Collection Pond	NA	Sediment Control	Synthetic	Existing
Savannah Pit Seepage Sump	0.07	Stormwater	Synthetic	Existing

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Impoundment Designation¹	Surface Area¹ (acres)	Mine Use¹	Liner¹	Status
<i>DP-896 No. 1 Leach Stockpile</i>				
A Sump (BMCC 2 (a))	0.86	Stormwater	None	Existing
C Sump (BMCC 2 b)	1.08	Stormwater	Clay	Reclaimed
B Sump (former No. 1 PLS Pond)	0.9	PLS/Stormwater	Clay	Existing
No. 1 Stockpile Seepage AST	NA	Seepage Collection	Fiberglass	Existing
No. 1 Overflow Pond	NA	Overflow for Seepage Collection	Synthetic	Existing
Precipitation Plant Launderers	0.1	Stormwater	Synthetic & Concrete lined	Existing

Notes:

NA = not analyzed

PLS = Pregnant leach solution storage, collection, conveyance structure

TDRW = Tailing Decant Return Water

¹ Original information from DBS&A. *Tyrone Mine Surface Impoundment Study Work Plan, DP-1341 Condition 87*. November 13, 2006. Modified based on current reclamation.

² Based on MWH. As-built topography of the 1 Series tailing impoundments provided in July 2007.

Tyrone Mine Closure/Closeout Plan Update

October 11, 2007

073-80012

**TABLE 2-2
SUMMARY OF TYRONE CLOSURE/CLOSEOUT-RELATED PERMITS**

Permit or Requirement	Agency	ID Number	Area Covered
Registration	U.S. Department of Labor, Mine Safety and Health Administration		Mine
Mining Act Permit	New Mexico Mining Minerals Division	GR010RE Revision 01-1 to GR010RE	Mine Mine
Groundwater Discharge Plans	NMED Ground Water Quality Bureau	DP-1341, DP-166, DP-286, DP-363, DP-383, DP-396, DP-435, DP-455, DP-670, DP-896	Mine/Stockpile Unit & East Mine Unit
Settlement Agreement	NMED Ground Water Quality Bureau	SA-27	Mangas Valley Tailings
NPDES Stormwater General Permit	U.S. EPA (Region 6)	NMR05A918	Mine
Water Rights	New Mexico Office of State Engineer	GSF-02260, GSF-3020 M2680, M4978, M4979, M4980	Surface water & groundwater Groundwater
Air Quality	NMED Air Quality Bureau U.S. EPA (Region 6)	2448 PSD-NM-2448A PSD-NM-2448B P147	SX/EW Plant Power Plant Portable Screening Plant Title V Mine-wide
SARA Title III			
Hazardous Waste Generator/	U.S. EPA/New Mexico Department of Public Safety	NMD035806405	Mine
Hazardous Materials Transporter	U.S. Department of Transportation	062406-550-001OP	NA
Individual Liquid Waste Permit	NMED, Construction Industries Division	SC060183	Mine
Plan of Operation	Bureau of Land Management	Approved on 9/11/03	Copper Mountain South Pit Expansion

SX/EW = Solution extraction/electrowinning
NMED = New Mexico Environment Department

U.S. EPA = United States Environmental Protection Agency
NA = Not applicable

TABLE 2-3

EXISTING AND PROPOSED REGULATORY STATUS OF TYRONE MINE OPERATIONAL PERMITS

Mine Unit	Discharge Plan		Description	Facilities/Impoundments/Infrastructure	
	Number	Status		Currently Included Under DP	Proposed for Inclusion under DP
Mine/Stockpile Unit	DP-166	Active 5/27/05 – 5/27/10	Main, Valencia, San Salvador Hill, and Copper Mountain Pits, SX/EW Plant, and No. 2 leach System	Main, Valencia, San Salvador Hill, and Copper Mountain Pits, SX/EW Plant and associated facilities (including raffinate tanks), No. 2 leach System, No. 2 leach (newly named 4A, 4B, and 4C leach stockpiles and newly named 7C waste stockpile), Main Pit stockpile (newly named 8C waste stockpile), Copper Mountain stockpile, PLS collection and overflow impoundments, PLS collection wells 2L3 and 2L5, five Main Pit production wells, SX/EW PLS feed pond, pipelines, lined North Racket Sump, 5E seepage collection pond, seepage interceptor trenches and collection ponds located in Deadman Canyon	NA
	DP-286	Pending (renewal application 12/18/06)	No. 3 leach system	No. 3A stockpile, PLS collection and overflow impoundments, seepage collection and interceptor/barrier systems, perched and regional groundwater collection systems, PLS pumping station and pipelines, pumpback system	No. 3B stockpile, No. 5A stockpile, Tyrone Mill Site old fuel dock No. 1 site and diesel fuel storage tanks
	DP-363	Active 10/31/06- 10/31/11	No. 1A leach stockpile and associated facilities	No. 1A leach stockpile, No. 1A PLS overflow pond, No. 1A stormwater pond, 1A PLS tank, pumps, and pipelines, PLS collection system, seepage collection trenches along the perimeter of the No. 1A stockpile and in Oak Grove Wash and associated pipelines and pumpback systems	NA
	DP-383	Active 1/12/05 – 12/13/09	No. 1B leach stockpile and associated facilities	No. 1B leach stockpile, No. 1B PLS overflow pond, 1B PLS tank, pumps, and pipelines, PLS collection system, two seepage collection trenches along the perimeter of the No. 1B stockpile and associated pipelines and pumpback systems	NA
	DP-396	Active 05/18/07- 05/18/12	No. 1C waste stockpile and associated facilities	No.s 1C, 7A and South Rim Pit waste rock stockpiles, Oak Grove Pond, No. 1C Collection Pond, and 7C Seepage Collection Pond (has been removed), seepage collection sumps/trenches located along the perimeter of the No. 7A stockpile and associated pipelines and pumpback systems	NA

TABLE 2-3

EXISTING AND PROPOSED REGULATORY STATUS OF TYRONE MINE OPERATIONAL PERMITS

Mine Unit	Discharge Plan		Description	Facilities/Impoundments/Infrastructure	
	Number	Status		Currently Included Under DP	Proposed for Inclusion under DP
Mine/Stockpile Unit (con't.)	DP-435	Active 11/7/06 – 10/31/11	No. 2A and 2B leach systems, 2B and 9A waste rock stockpiles and associated facilities	Nos. 2A, 2B, and 2C leach stockpiles, No. 2B waste rock stockpile, proposed No. 9A waste rock stockpile, 2A West and 2A East PLS collection stations, 2A West and No. 2 raffinate booster pump stations, HDPE-lined 2A East PLS Overflow Pond, HDPE-lined Seep 5E Discharge Pond, HDPE-lined No. 2A Surge Pond, McCain Spring and Deadman Canyon Springs (Seeps 6 and 31), and associated tanks, pumps, and piping	NA
	DP-455	Active 12/13/04 – 12/13/09	Gettysburg Pit and leach system	Gettysburg Pit, Nos. 6C and 7B leach stockpiles, Gettysburg Pit Collection Pond, HDPE-lined 6C-2 PLS Collection Pond and booster station, HDPE-lined 7B PLS Collection Pond and booster station, and associated tanks, pumps, and piping	NA
	DP-670	Active 12/13/04 – 12/13/09	Savannah Pit and East Main leach system	Savanna Pit, East Main (newly named No. 6B) leach stockpile, HDPE-lined East Main Booster Pond, HDPE-lined Savanna Sediment Collection Pond, Savannah North Sump, and associated pumps and piping	NA
East Mine Unit	DP-896	Active 5/18/07 – 5/18/12	No. 1 Leach Stockpile	No. 1 stockpile, B Sump (former No. 1 PLS Pond), seepage collection system, pipelines, pumping stations, acid unloading area and associated tanks at former Precipitation Plant	NA
Mangas Valley Tailing Unit	DP-27 Settlement Agreement	Renewal Denied (DP-27 Settlement Agreement issued on 10/15/03)	Nos. 1, 1A, 1X, 2, 3, 3X tailing impoundments and associated facilities	Nos. 1, 1A, 1X, 2, 3, 3X tailing impoundments, tailing decant return water ponds, tailing launder, tailing repositories, stormwater catch basins, sewage effluent pond, No. 1X seepage interceptor system	NA

TABLE 4-1
PROPOSED INTERIM SEED MIX AND RATES FOR THE TYRONE MINE
RECLAMATION SITES

Species ^a	Life-Form	Duration ^b	Seasonality	Rate ^{a,c}
<i>Primary</i>				
Blue grama (<i>Bouteloua gracilis</i>)	Grass	Per	Warm	0.25
Side-oats grama (<i>Bouteloua curtipendula</i>)	Grass	Per	Warm	1.25
Black grama (<i>Bouteloua eriopoda</i>)	Grass	Per	Warm	0.10
Green sprangletop (<i>Leptochloa dubia</i>)	Grass	Per	Warm	0.15
Plains lovegrass (<i>Eragrostis intermedia</i>)	Grass	Per	Intermediate	0.05
Bottlebrush squiretail (<i>Sitanion hystrix</i>)	Grass	Per	Cool	1.25
New Mexico needlegrass (<i>Stipa neomexicana</i>)	Grass	Per	Cool	1.75
Streambank wheatgrass (<i>Agropyron dastachyum</i> v. <i>riparium</i>)	Grass	Per	Cool	1.50
Apache plume (<i>Fallugia paradoxa</i>)	Shrub	Per	NA	0.10
Mountain mahogany (<i>Cercocarpus montanus</i>)	Shrub	Per	NA	1.00
Winterfat (<i>Eurotia lanata</i>)	Shrub	Per	NA	0.60
Yellow sweet clover (<i>Melilotus officinalis</i>)	Forb	Ann	NA	0.15
Globe mallow (<i>Sphaeralcea</i> sp.)	Forb	Per	NA	0.10
Blue flax (<i>Linum lewisii</i>)	Forb	Per	NA	0.15
Total PLS (lb/ac)				8.40
<i>Alternate</i>				
Needle-and-thread (<i>Stipa comata</i>)	Grass	Per	Cool	ND
Thickspike wheatgrass (<i>Agropyron dastachyum</i>)	Grass	Per	Cool	ND
Smooth brome (<i>Bromus inermis</i>)	Grass	Per	Cool	ND
Sand dropseed (<i>Sporobolus cryptandrus</i>)	Grass	Per	Intermediate	ND
Tobosa (<i>Hilaria mutica</i>)	Grass	Per	Warm	ND
Bush muhly (<i>Mohlenbergia porteri</i>)	Grass	Per	Warm	ND
Squawberry (<i>Rhus trilobata</i>)	Shrub	Per	NA	ND
Rubber rabbitbush (<i>Chrysothamnus nauseosus</i>)	Shrub	Per	NA	ND
Prairie coneflower (<i>Ratibida columnaris</i>)	Forb	Per	NA	ND
White sweet clover (<i>Melilotus alba</i>)	Forb	Ann	NA	ND

^a Seed mix and rates are subject to change based on future investigations

^b Per – Perennial; Ann = Annual

^c Rate is in pounds of pure live seed per acre; substitutions may change seeding rates

lb/ac = pounds per acre

NA = Not applicable

ND = Not determined

PLS = Pure live seed

**TABLE 4-2
FUNCTIONS AND ATTRIBUTES OF THE PRIMARY PLANT SPECIES
PROPOSED FOR THE TYRONE MINE RECLAMATION SITES**

Species	Character^a	Attributes and Function
Blue grama (<i>Bouteloua gracilis</i>)	N,P,W,G	Sod and bunch grass providing ground cover and forage
Side-oats grama (<i>Bouteloua curtipendula</i>)	N,P,W,G	Bunch grass providing ground cover and forage
Black grama (<i>Bouteloua eriopoda</i>)	N,P,W,G	Bunch grass providing ground cover and forage
Green sprangletop (<i>Leptochloa dubia</i>)	N,P,W,G	Erect bunch grass; aggressive short-lived nurse plant with forage value
Plains lovegrass (<i>Eragrostis intermedia</i>)	N,P,C,G	Bunch grass providing ground cover and early spring forage
Bottlebrush squirreltail (<i>Sitanion hystrix</i>)	N,P,C,G	Persistent (moderately palatable) bunch grass providing ground cover
New Mexico needlegrass (<i>Stipa neomexicana</i>)	N,P,C,G	Persistent bunch grass providing ground cover and forage
Streambank wheatgrass (<i>Agropyron dastachyum v. riparium</i>)	N,P,C,G	Sod-forming grass providing ground cover and forage
Apache plume (<i>Fallugia paradoxa</i>)	N,P,S	Mid-height shrub providing browse, cover, and erosion control
Mountain mahogany (<i>Cercocarpus montanus</i>)	N,P,S	Mid-height to tall shrub providing browse and cover
Winterfat (<i>Eurotia lanata</i>)	N,P,HS	Low shrub providing winter browse
Yellow sweet clover (<i>Melilotus officinalis</i>)	I,A/B,F	Nitrogen-fixing forb providing forage and ground cover
Globe mallow (<i>Sphaeralcea</i> sp.)	N,P,F	Persistent mid-height forb providing browse
Rubber rabbitbush (<i>Chrysothamnus nauseosus</i>)	N,P,S	Mid-height shrub providing cover and erosion control
Blue flax (<i>Linum lewisii</i>)	N,P,F	Persistent forb with a pretty blue flower

^a A/B = Annual or biannual; C = Cool season; F = Forb; G = Grass; I = Introduced; N = Native; P = Perennial; S = Shrub HS = Half shrub; W = Warm season

**TABLE 4-3
POST-MINING LAND USE DESIGNATIONS OF TYRONE MINE BUILDINGS**

Tyrone Tag No.	Description	Dimensions ¹ (LxWxH, feet)	PMLU ³ .	Description
<i>Mine Maintenance Facilities Area</i>				
MM-01	General Office	195 x 114 x 23	Industrial	Multiple office space, large open bays
MM-02	Mine Operations Office	254 x 60 x 33	Industrial	Multiple office space and change rooms
MM-03	Security	41 x 26 x 17	Industrial	Truck scale
MM-04	Safety Building	80 x 24 x 20	Industrial	Multiple office spaces and classrooms
MM-05	Human Resources/Training	102 x 41 x 20	Industrial	Multiple office spaces and classrooms
MM-06	Jerome Building	204 x 63 x 50	Wildlife Habitat	To be demolished
MM-07 ⁶ .	Plant Warehouse	250 x 100 x ___	Wildlife Habitat	To be demolished
MM-08	Truck Shop/Machine Shop/Welding Shop	344 x 236 x 60	Industrial	Overhead cranes (five 35-ton and one 20-ton)
MM-09	Electric Shop	120 x 51 x 50	Wildlife Habitat	To be demolished
MM-10	Pipe Shop	145 x 41 x 40	Wildlife Habitat	To be demolished
MM-11	Carpenter Shop	119 x 69 x 27	Wildlife Habitat	To be demolished
MM-12	Lumber Storage	102 x 61 x 33	Wildlife Habitat	To be demolished
MM-13	Shovel Repair	121 x 70 x 66	Wildlife Habitat	To be demolished
MM-14	Environmental Lab	112 x 27 x 17	Wildlife Habitat	To be demolished
MM-15	Chapel	50 x 25 x ___ ⁷	Industrial	Potential historic building; (Poor condition rating ² .)
MM-16	Electrical Building & Chlorine Shack	35 x 35 x 10	Industrial	Potable water supply
MM-18	Analytical Lab	120 x 50 x 14	Industrial	
MM-20	Diesel Tank Farm	120 x 120 x ___	Industrial	

**TABLE 4-3
POST-MINING LAND USE DESIGNATIONS OF TYRONE MINE BUILDINGS**

Tyrone Tag No.	Description	Dimensions¹ (LxWxH, feet)	PMLU³	Description
MM-21	Electrical Power Substation	18 0 x 120 x __	Industrial	
MM-24	Fire Truck Barn	25 x 25 x 12	Industrial	
MM-25	Ambulance Barn	35 x 25 x 12	Industrial	
<i>SX/ EW Plant Area</i>				
--	Tankhouse	150 x 465 x 30	Wildlife Habitat	To be demolished ³
--	SX/EW Plant Area Shop	31 x 71 x 30	Wildlife Habitat	To be demolished ³
--	Leach Crew Office	15 x 15 x 15	Wildlife Habitat	To be demolished ³
--	SX/EW Warehouse	48 x 150 x 20	Wildlife Habitat	To be demolished ³
--	Substation	100 x 90 x 10	Industrial	Remain for post-closure use
--	Raffinate Storage Tanks (2)	120 dia x 34 65 dia x 16	Industrial	Remain for post-closure use
--	Gonzales Cells	25 x 52 x 10	Wildlife Habitat	To be demolished ³
--	Jamison Cells	35 x 44 x 10	Wildlife Habitat	To be demolished ³
--	Organic Tanks (4)	2 x 32 x 16	Wildlife Habitat	To be demolished ³
--	Mixer/Settler Tanks (8)	200 x 366 x 10	Wildlife Habitat	To be demolished ³
--	Tank Farm (5)	92 x 370 x 10	Wildlife Habitat	To be demolished ³
--	Water Tank	1 x 30 x 16	Wildlife Habitat	To be demolished ³
--	PLS Feed Pond	130 x 130 ⁷	Industrial	Remain for post-closure use
--	Acid Tanks (2)	2 x 20 x 16	Wildlife Habitat	To be demolished ³
--	MCC Building	14 x 30 x 12	Wildlife Habitat	To be demolished ³
--	Toolroom and Storage	60 x 70 x 12	Wildlife Habitat	To be demolished ³

**TABLE 4-3
POST-MINING LAND USE DESIGNATIONS OF TYRONE MINE BUILDINGS**

Tyrone Tag No.	Description	Dimensions¹ (LxWxH, feet)	PMLU³	Description
--	Chlorinator Room	19 x 66 x 12	Wildlife Habitat	To be demolished ³ .
--	2A West Raff Tank	30 x 46 x 16	Wildlife Habitat	To be demolished ³ .
--	Rectifiers	20 x 24 x 12	Wildlife Habitat	To be demolished ³ .
--	Workroom	66 x 75 x 12	Wildlife Habitat	To be demolished ³ .
--	Pump Mixer Control Room	41 x 41 x 12	Wildlife Habitat	To be demolished ³ .
--	Cobalt Sulfate Tank	1 x 18 x 16	Wildlife Habitat	To be demolished ³ .
--	Reagent Tanks	25 x 36 x 12	Wildlife Habitat	To be demolished ³ .
--	Toolroom	8 x 32 x 12	Wildlife Habitat	To be demolished ³ .
--	Diluent Storage Tank	1 x 18 x 16	Wildlife Habitat	To be demolished ³ .
--	Pacesetter Filters (2)	48 x 80 x 12	Wildlife Habitat	To be demolished ³ .
--	Wash Pad	45 x 68 x ___	Wildlife Habitat	To be demolished ³ .
<i>Lubrication Shop Area</i>				
--	Prill Tanks (2 each)	20 ft dia. each ⁷	Waiver Area	To be demolished
--	Dispatch Building	41 x 15 x ___ ⁷	Waiver Area	Demolished
--	Lubrication Shop	110 x 60 x ___ ⁷	Waiver Area	Future borrow pit area
--	Southwest Energy Building	42 x 42 x ___ ⁷	Not Specified	Owned by others
--	Electric Power Substation	52 x 36 x ___ ⁷	Waiver Area	Future borrow pit area
--	Powder Magazines	10 x 10 x ___ ⁷	Waiver Area	Future borrow pit area
--	Storage Sheds	110 x 60 x ___ ⁷	Waiver Area	To be demolished
<i>Acid Unloading Facility & Former Precipitation Area</i>				

**TABLE 4-3
POST-MINING LAND USE DESIGNATIONS OF TYRONE MINE BUILDINGS**

Tyrone Tag No.	Description	Dimensions¹ (LxWxH, feet)	PMLU³	Description
--	Acid Unloading Facility	20 x 10 x __ ⁷	Wildlife	Demolish and salvage ¹ .
--	Former Precipitation Plant Building	400 x 100 x __ ⁷	Wildlife	Demolish and salvage ¹ .
<i>Mill and Concentrator Area</i>				
MC-01	Tailing Thickeners (8)	325 ft dia.	Industrial	Reserved for water treatment
MC-02	Reclaim Water Storage Tanks (3)	1 at 60 ft dia & 2 at 40 ft dia	Industrial	Reserved for water supply
MC-04	Reclaim Water Pump House	138 x 60 x 10	Industrial	Demolish ² . (Pumps (9X), 7-ton overhead crane (trolley only))
MC-05	Terminal Tanks (3each)	150 ft dia. ⁷	Industrial	Pumps
MC-06	Flotation Units (3each)	NA	Wildlife Habitat	Demolished ⁴ .
MC-07	Secondary Crusher	NA	Wildlife Habitat	Demolished ⁴ .
MC-08	Mill Pumphouse	NA	Wildlife Habitat	Demolished ⁴ .
MC-09	SX/EW Changeroom	NA	Wildlife Habitat	Demolished ⁴ .
MC-10	Intermediate Ore Storage	NA	Wildlife Habitat	Demolished ⁴ .
MC-11	Primary Crusher	NA	Wildlife Habitat	Demolished ⁴ .
MC-12	Process Water Tanks	NA	Wildlife Habitat	Demolished ⁴ .
MC-13	Concentrator-Filter Plant & Dryer	NA	Wildlife Habitat	Demolished ⁴ .
MC-14	Lime Storage	NA	Industrial	Demolished ⁴ .
MC-15	Warehouse and Core Storage ⁶ .	235 x 101 x 33	Wildlife Habitat	To be demolished ³ .
MC-16	Warehouse/Concentrate Unloading	NA	Wildlife Habitat	Demolished ⁴ .
MC-17	Radiators/Power Plant (Powerhouse ⁶ .)	420 x 120 x 30	Industrial	15 diesel engine generators

**TABLE 4-3
POST-MINING LAND USE DESIGNATIONS OF TYRONE MINE BUILDINGS**

Tyrone Tag No.	Description	Dimensions¹ (LxWxH, feet)	PMLU³	Description
MC-19	Concentrator Building	NA	Wildlife Habitat	Demolished ⁴
MC-20	Reagent Building	NA	Wildlife Habitat	Demolished ⁴
MC-21	Fuel Station	60 x 50	Wildlife Habitat	To be demolished ³
MC-22	Tire Shop	79 x 44 x 23	Wildlife Habitat	To be demolished ³
MC-24	Spigot Underflow Pump house	60 x 50 x ___ ⁷	Industrial	Pumps, 5-ton overhead crane
MC-25	Tailing Pump house	110 x 50 x ___ ⁷	Industrial	Raw water pumps, 5-ton overhead crane
MC-27	Inactive Diesel Storage Tanks (2)	1 x 20 x 15	Wildlife Habitat	To be demolished ^{2,3}

Notes:

LxWxH = Length by Width by Height in feet

Dia = Diameter

ft = feet

¹ Identified in the 2001 CCP (M3, 2003).

² Modified per MMD letter (MMD Response to January 15, 2004 Building Inspection Report) to Phelps Dodge Tyrone, Inc. dated February 10, 2004.

³ Permit Revision 01-1 to Permit GR010RE, Tyrone Mine, Appendix D. April 12, 2004

⁴ "Tyrone Mine Financial Assurance Reduction" letter (December 29, 2006).

⁵ Based on Regrading Plans included in Appendix A of this CCP.

⁶ Identified in "Tyrone Mine Industrial PMLU Building Use Information and Justification. March 19, 2004.

⁷ Golder Associates Inc. estimate from site drawings.

TABLE 4-4
PROPOSED PLANT DIVERSITY GUIDELINES FOR THE TYRONE MINE

Class	Seasonality	Number	Minimum Occurrence (% cover)
Perennial grass	Warm	3	1
Perennial grass	Cool	1	0.5
Perennial shrub	NA	2	1
Forbs	NA	2	0.1

NA = Not applicable

TABLE 5-1

**ASSOCIATION BETWEEN REQUIREMENTS SPECIFIED IN SUPPLEMENTAL DP-1341,
REVISION 01-1 TO GR010RE, AND DP-27 SETTLEMENT AGREEMENT**

DP-1341 Condition^a	GR010RE, Revision 01-1 Section^b	DP-27 Settlement Agreement Paragraph^c	Description of Requirement
29	Sections 8 and 9.I.7	Not Applicable (NA)	Schedule and work plan for closure of all existing mining shafts and adits; work plan for closure of shafts and adits
34	Section 8	NA	Submittal of abatement plan or plans
48	NA	NA	Closure and post-closure surface water sampling plan.
70	NA	NA	Contingency plan to address the reasonably foreseeable failure of any component of the closure plan
73	NA	NA	Emergency Response Plan
74	NA	NA	Work Plans Submittal Schedule, Implementation/Completion of Conditional Studies
75	Section 8 and 9.L.1(a)	Paragraphs 29, 31, and 32	Comprehensive Cover Performance Evaluation
76	Section 8, 9.L.1(a), (b) and (d)	Paragraph 29 and 30	Cover, Erosion and Revegetation Test Plot Study
77	Section L.6	NA	Tailing Cover System Effectiveness Study
78	Section 9.L.2	NA	Supplemental Stability Study
79	Section 9. L.5	NA	Revised Borrow Source Material Investigation
80	Section 9.L.6	NA	Supplemental Materials Characterization Study

TABLE 5-1

**ASSOCIATION BETWEEN REQUIREMENTS SPECIFIED IN SUPPLEMENTAL DP-1341,
REVISION 01-1 TO GR010RE, AND DP-27 SETTLEMENT AGREEMENT**

DP-1341 Condition^a	GR010RE, Revision 01-1 Section^b	DP-27 Settlement Agreement Paragraph^c	Description of Requirement
81	Section 9.L.6 or I.6	NA	Revised Seepage Investigation Study
82	Section 9.L.6	NA	Supplement of Existing Ground Water Study
83	Section 9.L.6	NA	Supplemental to Existing Pit Lake Formation Model
84	Section 9.L.6	NA	Supplemental Tailing Spill Reclamation Evaluation
85	Section 9.L.6	NA	Tailing Wind and Water Deposition Investigation
86	Section 9.L.4	NA	Preliminary Sludge Handling Plan and Cost Estimate
87	Section 9.L.6	NA	Surface Impoundment Study
88	Section 9.L.6	NA	Process Solution Elimination Study
89	Section 8	NA	Tyrone Mine Closure Feasibility Study
NA	Section 9.I.1	NA	Building Inspection & Erosion Control Plan for Industrial PMLU
NA	Section 9.L.3	NA	Affected Areas Study
NA	Section 9.N.2	NA	Vegetation Monitoring Plan
NA	Section 9.N.2	NA	Wildlife Monitoring Plan
NA	NA	Paragraphs 18 and 19	Elimination of Discharges to Tailing Impoundments Study

**TABLE 5-2
STATUS OF CONDITIONAL STUDIES AND PLANS**

Permit(s)	Condition /Section.	Description	Status
DP-1341 MMD	29 8, 9.I.7	Plan for Identification and Closure of Mining Shafts & Adits	Mining Shafts & Adits Identification Schedule submitted on October 6, 2003. Approval of Mining Shafts and Adits Identification Schedule received on February 18, 2004. Updated Map of Tyrone Mining Shafts & Adits submitted on August 18, 2004.
DP-1341 MMD	34 8	Abatement Plan(s)	Abatement Plan & Schedule submitted on July 7, 2003. Addendum to the Stage 1 Abatement Plan Proposal and Work Plan for Additional Site Characterization submitted on December 6, 2006.
DP-1341	48	Closure & Post-Closure Surface Water Sampling Plan	Original Closure and Post Closure Surface Water Sampling Plan Submitted on September 5, 2003. Revised Closure and Post Closure Surface Water Sampling Plan Submitted on October 2, 2003
DP-1341	70	Contingency Plan	Original Emergency Response and Contingency Plan for PDTI-Tyrone Mine submitted on December 4, 2003. Revised Emergency Response and Contingency Plan for PDTI-Tyrone Mine submitted on May 14, 2004. Response to Comments on the Contingency & Emergency Response Plans submitted on June 18, 2004.
DP-1341	73	Emergency Response Plan	Original Emergency Response and Contingency Plan for PDTI-Tyrone Mine submitted on December 4, 2003. Revised Emergency Response and Contingency Plan for PDTI-Tyrone Mine submitted on May 14, 2004. Response to Comments on the Contingency & Emergency Response Plans submitted on June 18, 2004.
DP-1341	74	Schedule for Conditional Studies	Condition 74 – Schedule for Additional Studies submitted on May 23, 2003. Response to Comments on the Condition 74 Schedule submitted on October 30, 2003. Approval of Additional Study Schedule received on February 20, 2004.
DP-1341 MMD DP-27 SA	75 9.L.1(a) 29,31,32	Comprehensive Cover Performance Evaluation	Work Plan for the Comprehensive Cover Performance Evaluation Study Submitted on December 5, 2003 Corrected schedule submitted on December 8, 2003 Bio-Accumulation addendum submitted on October 15, 2004 Comprehensive Cover Performance Evaluation –

**TABLE 5-2
STATUS OF CONDITIONAL STUDIES AND PLANS**

Permit(s)	Condition /Section.	Description	Status
			Stockpiles and Impoundments Report submitted on January 31, 2005
DP-1341 MMD DP-27 SA	76 9.L.1(a,b,d) 29,30	Cover, Erosion and Revegetation Test Plot Study	Cover, Erosion, and Revegetation Test Plot Study Work Plan – Tyrone Mines Stockpiles and Tailing Impoundments submitted on December 15, 2003 As-Built-Cover, Erosion, and Revegetation Test Plot Study – Tailing Test Plots Report submitted on September 29, 2006 As Built Report, Cover Erosion, and Revegetation Test Plot Study, Tyrone Mine Stockpiles submitted on September 29, 2006 Tailing Test Plots Annual Report – Report No. 1 submitted on January 31, 2007 Stockpile Test Plots Annual Report – Report No. 1 submitted on January 31, 2007
DP-1341 MMD	77 9.L.6	Tailing Cover System Effectiveness Study	The requirements of this condition will be fulfilled through deliverables submitted under Condition 76.
DP-1341 MMD	78 9.L.2	Supplemental Stability Study	Supplemental Stability Study Work Plan submitted on December 15, 2003 Slope Stability Analysis Report for 1C and 7A Stockpiles submitted on May 17, 2006. Slope Stability Analysis Report for Stockpiles 1A and 1B submitted on July 28, 2006. Stockpile Stability Reports for 2A/2B and 3A Stockpiles submitted on April 9, 2007.
DP-1341 MMD	79 9.L.5	Revised Borrow Source Material Investigation	Borrow Source Material Investigation Work Plan submitted on December 15, 2003. Supplemental Borrow Source Material Investigation Work Plan submitted on March 30, 2004. Preliminary Borrow Source Materials Investigation, Leach Ore and Waste Rock Stockpiles submitted on October 31, 2005. Addendum to Preliminary Borrow Source Materials Investigation, Leach Ore and Waste Rock Stockpiles submitted on January 30, 2006.
DP-1341 MMD	80 9.L.6	Supplemental Materials Characterization Study	Supplemental Materials Characterization Work Plan submitted on October 3, 2003. Interim Report for the Supplemental Materials Characterization of Leach Ore Stockpiles and Waste Rock submitted on October 29, 2004. Report for the Supplemental Materials Characterization of Leach Ore Stockpiles and Waste Rock submitted on December 27, 2005.
DP-1341 MMD	81 9.L.6	Revised Seepage Investigation Study	Revised Seepage Investigation Work Plan submitted on April 30, 2004.

**TABLE 5-2
STATUS OF CONDITIONAL STUDIES AND PLANS**

Permit(s)	Condition /Section.	Description	Status
			Original Revised Seepage Investigation Report submitted on July 28, 2005. Revised Seepage Investigation Report submitted on October 31, 2006.
DP-1341 MMD	82 9.L.6	Supplement Existing Ground Water Study	Supplemental Groundwater and Hydrologic Conditions Study Work Plan submitted on November 25, 2003. Status Report Supplementing Existing Groundwater Study submitted on October 31, 2005. Final Supplemental Groundwater Study Report submitted on August 2, 2007.
DP-1341 MMD	83 9.L.6	Supplemental Pit Lake Formation Model Study	Work Plan for Additional Groundwater Modeling Analysis to Supplement the Existing Tyrone Mine Pit Lake Formation Models submitted on July 25, 2005. Final report to be submitted on or before November 9, 2007.
DP-1341 MMD	84 9.L.6	Supplemental Tailing Spill Reclamation Evaluation	Supplemental Assessment of the No. 3 Tailing Pond Reclaim Area Work Plan submitted on February 27, 2004. Update to the 2001 Assessment of No. 3 Tailing Pond Reclaim Area Report submitted on April 29, 2005.
DP-1341 MMD	85 9.L.6	Tailing Wind and Water Deposition Investigation	Investigation of Tailing Transport and Deposition Impacts Work Plan submitted on April 5, 2004. Tailing Transport and Deposition Impacts Investigation Report submitted on March 31, 2006.
DP-1341 MMD	86 9.L.4	Preliminary Sludge Handling Plan and Cost Estimate	Preliminary Sludge Handling Study Work Plan and Cost Estimate submitted on February 27, 2004. Sludge Management Report submitted on October 22, 2004.
DP-1341 MMD	87 9.L.6	Surface Impoundment Study	Surface Impoundment Study Work Plan submitted on September 25, 2003. Revised Surface Impoundments Study Work Plan submitted on November 13, 2006.
DP-1341 MMD	88 9.L.6	Process Solution Elimination Study	Process Solution Elimination Study Work Plan and Implementation Schedule submitted on July 25, 2003. Revised Mine Process Solution Elimination Study Work Plan submitted on October 3, 2003. Original Process Solution Elimination Study Work Plan submitted on June 25, 2004. Revised Process Solution Elimination Study submitted on March 3, 2006.
DP-1341 MMD	89 8	Tyrone Mine Closure Feasibility Study	Original Feasibility Study Work Plan and Implementation Schedule submitted on July 25,

**TABLE 5-2
STATUS OF CONDITIONAL STUDIES AND PLANS**

Permit(s)	Condition /Section.	Description	Status
			<p>2003.</p> <p>Revised Feasibility Study Work Plan submitted on February 10, 2004.</p> <p>Quarterly Progress Report submitted on January 12, 2007.</p> <p>UNSAT-H Technical Memorandum submitted on May 30, 2007</p> <p>DP-1341 Condition 89 Feasibility Study Report will be submitted following receipt of regulatory review of UNSAT-H Technical Memo.</p>
MMD	9.I.1(a,b,d)	IPMLU Building Inspection Certification, Erosion Control Plan, Maps	<p>Industrial PMLU inspection report submitted in March 2004.</p> <p>Industrial PMLU building use information and justification submitted in March 2004.</p> <p>Industrial PMLU erosion control plan submitted October 2004.</p>
MMD	9.L.3	Affected Areas Study	Affected Areas Study Work Plan was submitted in April 2005.
MMD	9.N.2	Vegetation Monitoring Plan	Will be submitted 90 days before vegetation monitoring is performed (sixth year after planting occurs).
MMD	9.N.3	Wildlife Monitoring Plan	Wildlife Monitoring Plan for Post Closure submitted on December 28, 2005.
DP-27 SA	18,19	Tailing Discharge Elimination Study	<p>Discharge Elimination Work Plan was submitted in January 2004.</p> <p>Analysis for Discharge Elimination of Municipal Sewage Sludge, Tailing Dam 3, and Analysis for Discharge Elimination of Sanitary Effluent to Tailing Dam 2 reports were submitted in December 2004.</p> <p>Analysis for Discharge Elimination of Effluent Collected from the 1X Tailing Dam Interceptor Well System, Analysis for Discharge Elimination of Mine Dewatering Water and Main Pit Interceptor Well Water, and Analysis for Discharge Elimination of Seepage Collected from the Little Rock Mine reports were submitted in December 2005.</p>

**TABLE 6-1
SUMMARY OF BUILDINGS/FACILITIES TO BE DEMOLISHED**

Tyrone Tag No.	Description	Dimensions¹ (LxWxH, feet)	Quantity (cubic feet)
<i>Mine Maintenance Facilities Area</i>			
MM-06	Jerome Building	204 x 63 x 50	642,600
MM-07	Plant Warehouse	250 x 100 x ___	25,000
MM-09	Electric Shop	120 x 51 x 50	306,000
MM-10	Pipe Shop	145 x 41 x 40	237,800
MM-11	Carpenter Shop	119 x 69 x 27	221,697
MM-12	Lumber Storage	102 x 61 x 33	205,326
MM-13	Shovel Repair	121 x 70 x 66	559,020
MM-14	Environmental Lab	112 x 27 x 17	51,408
<i>SX/EW Plant Area</i>			
--	Tankhouse	150 x 465 x 30	2,092,500
--	SX/EW Plant Area Shop	31 x 71 x 30	66,030
--	Leach Crew Office	15 x 15 x 15	3,375
--	SX/EW Warehouse	48 x 150 x 20	144,000
--	Gonzales Cells	25 x 52 x 10	13,000
--	Jamison Cells	35 x 44 x 10	15,400
--	Organic Tanks (4)	2 x 32D x 16H	25,736
--	Mixer/Settler Tanks (8)	200 x 366 x 10	732,000
--	Tank Farm (5)	92 x 370 x 10	340,400
--	Water Tank	1 x 30 x 16	10,598
--	Acid Tanks (2)	2 x 20D x 16H	10,053
--	MCC Building	14 x 30 x 12	5,040
--	Chlorinator Room	19 x 66 x 12	15,048
--	2A West Raff Tank	30 x 46 x 16	22,080
--	Pump Mixer Control Room	41 x 41 x 12	20,172
--	Cobalt Sulfate Tank	1 x 18H x 16D	3,619
--	Reagent Tanks (2)	25 x 36 x 12	10,800
--	Diluent Storage Tank	1 x 18H x 16D	3,619
--	Wash Pad	45 x 68 x --	3,060
--	Toolroom & Storage	60 x 70 x 12	50,400
--	Rectifiers	20 x 24 x 12	5,760
--	Workroom	66 x 75 x 12	59,400
--	Toolroom	8 x 32 x 12	3,072
--	Pacesetter filter	48 x 80 x 12	46,080
<i>Lubrication Shop Area</i>			
--	Prill Tanks (2)	2 x (20D x 16H) ¹	10,053
--	Lubrication Shop	60 x 110 x 16 ¹	105,600
--	Powder Magazines	10 x 10 x 12 ¹	1,200
--	Storage Sheds	60 x 110 x 12 ¹	79,200
<i>Acid Unloading Facility & Former Precipitation Area</i>			

**TABLE 6-1
SUMMARY OF BUILDINGS/FACILITIES TO BE DEMOLISHED**

Tyrone Tag No.	Description	Dimensions¹ (LxWxH, feet)	Quantity (cubic feet)
--	Acid Unloading Facility	20 x 10 x 16 ¹	3,200
--	Former Precipitation Plant Building	400 x 100 x 16 ¹	640,000
<i>Mill and Concentrator Area</i>			
MC-09	SX/EW Changeroom	82 x 41 x 17	57,154
MC-15	Warehouse and Core Storage	235 x 101 x 33	783,255
MC-21	Fuel Station	60 x 50 x --	3,000
MC-22	Tire Shop	79 x 44 x 23	79,948
MC-27	Inactive Diesel Tanks (2 each)	1 x 20 x 15	4,710

Notes:

¹ Length and width of facility determined from facility map, height of facility assumed.

**TABLE 6-2
SUMMARY OF KEY DESIGN CRITERIA**

<p>Tailing Impoundment Regrading – applicable to No 1X Tailing Impoundment</p> <ul style="list-style-type: none"> • Outslopes to be graded to a maximum inter-bench slope of 3H:1V • Maximum uninterrupted slope length of 100 feet for outslopes • Terrace benches will have minimum bench width of 20 feet and maximum of less than 50 feet • Bench longitudinal slopes at between 1 and 5 percent • Bench cross slopes and channels at maximum of 5 percent • Top surfaces graded at 0.5 to 5 percent • Slope channels will be located where possible in natural junctions or drainage chutes, but all channels will contain riprap and energy dissipation structures as appropriate • Top surfaces and outslopes to be covered with 24 inches of Gila Conglomerate (or other suitable material) • Top surfaces and outslopes to be revegetated in accordance with Appendix C of the MMD Permit • A moderate maintenance program will be acceptable until cover vegetation establishes
<p>Stockpiles Regrading Outside SWCZ– applicable to Nos. 1, 1A, 3A, 4C, 6C, and Copper Mountain Leach; 1C, 2B, 7A, and 7C Waste; proposed 9A Overburden; all but the interior slopes of the 1B, 2A, 2B, 2C, 4A, 4B, and 7B Leach; all but the interior slopes of the 3B Waste and 5A Waste/Overburden stockpiles.</p> <ul style="list-style-type: none"> • Outslopes to be graded to a maximum inter-bench slope of 2.5H:1V • Maximum uninterrupted slope length of 175 feet for outslopes • Terrace benches will have minimum bench width of 15 feet; not applicable for Nos. 1, 1C, and 7A Far West stockpiles • Bench longitudinal slopes at between 1 and 5 percent; not applicable for Nos. 1, 1C, and 7A Far West stockpiles • Bench cross slopes and channels at a maximum of 5 percent; not applicable for Nos. 1, 1C, and 7A Far West stockpiles • Top surfaces graded at 0.5 to 5 percent • Regrading to be done in such a manner that orients surface water conveyances to the exterior perimeter of the stockpiles • Slope channels will be located where possible in natural junctions or drainage chutes, but all channels will contain riprap and energy dissipation structures as appropriate • Top surfaces and outslopes to be covered with 24 inches of Gila Conglomerate (or other suitable material); top surface and outslope of the Nos. 1, 1C, and 7A stockpiles are currently being reclaimed and will have between 36 and 48 inches of cover • Top surfaces and outslopes to be revegetated in accordance with Appendix C of the MMD Permit • A moderate maintenance program will be acceptable until cover vegetation establishes
<p>Stockpiles Regrading Inside SWCZ– applicable to 6B Leach; 8C Waste; interior slopes of the 1B, 2A, 2B, 2C, 4A, 4B, and 7B Leach; interior slopes of the 3B Waste and 5A Waste/Overburden stockpiles.</p> <ul style="list-style-type: none"> • Outslopes to remain at angle of repose • No terrace benches to be constructed • Top surfaces to remain at their current grade • Surface water conveyances to be directed to the nearest pit sump • A moderate maintenance program will be acceptable until cover vegetation establishes
<p>Exempt Pits – Main, East Main, Valencia, Savanna, Gettysburg, and Copper Mountain</p> <ul style="list-style-type: none"> • Surface water to be eliminated to the maximum extent practicable with the existing pit extraction systems

**TABLE 6-2
SUMMARY OF KEY DESIGN CRITERIA**

<ul style="list-style-type: none"> • A 6-foot high fence and earthen berm will be installed around the perimeter of the open pits to restrict access to unauthorized personnel, wildlife, or livestock • Signs will be posted on fencing at 500-ft intervals and all access points, warning of potential hazards present
<p>Non-Exempt (Reclaimed) Pits – San Salvador Hill and South Rim Pits</p> <ul style="list-style-type: none"> • Regrading/backfilling will be performed to ensure positive drainage from areas to be covered and revegetated and to ensure no ponding occurs on covered surfaces • Pit slopes to be graded to a maximum inter-bench slope of 2.5H:1V • Maximum uninterrupted slope length of 175 feet for pit slopes • Terrace benches will have minimum bench width of 15 feet • Bench longitudinal slopes at between 1 and 5 percent • Bench cross slopes and channels at a maximum of 5 percent • Top surfaces graded between 0.5 and 5 percent • Top surface regrading to be done in such a manner that orients surface water conveyances to the exterior perimeter of the stockpiles • Slope channels will be located where possible in natural junctions or drainage chutes, but all channels will contain riprap and energy dissipation structures as appropriate • Top surfaces and pit slopes to be covered with 24 inches of Gila Conglomerate (or other suitable material) • Top surfaces and pit slopes to be revegetated in accordance with Appendix C of the MMD Permit • A moderate maintenance program will be acceptable until cover vegetation establishes
<p>Pipelines (applies to pipelines that will not be used in closure/post closure water management & water treatment)</p> <ul style="list-style-type: none"> • Residual sediments and fluids will be removed and disposed of on-site • Pipelines to be removed and/or buried if they are a potential source of contamination, otherwise they can be left in place and buried • Impacted soils along corridor will be removed unless they are on a stockpile or tailing impoundment, within the SWCZ, or within the regrade footprint of these facilities • Pipelines that are left in place will be covered with 24 inches of cover material • Where pipelines are removed, corridor will be ripped and revegetated in accordance with Appendix C of the MMD Permit • A moderate maintenance program will be acceptable until cover vegetation establishes
<p>Haul Roads (all haul roads except those located within SWCZ or PMLU access roads)</p> <ul style="list-style-type: none"> • Culverts to be removed where practicable • Where located on acid-generating material, surface to be covered with 24 inches of Gila Conglomerate (or other suitable material) • Where located on non-acid-generating material, surface to be ripped and revegetated in accordance with Appendix C of the MMD Permit • Cover surfaces to be revegetated in accordance with Appendix C of the MMD Permit • A moderate maintenance program will be acceptable until cover vegetation establishes
<p>Surface Impoundments (all surface impoundments that will not serve a post-closure function and those located outside the SWCZ)</p> <ul style="list-style-type: none"> • Removal of contaminated material (if present) to a depth of 24 inches • Grading to achieve drainage • Placement of 24-inches of suitable cover material in areas containing contaminated material • Synthetic liners (if present) left in place and ripped, or removed

TABLE 6-2
SUMMARY OF KEY DESIGN CRITERIA

- Areas revegetated in accordance with Appendix C of the MMD Permit
- stockpile of tailing material during regrading, which will be then covered with 24 inches of cover material and revegetated in accordance with Appendix C of the MMD Permit

**TABLE 7-1
POST-CLOSURE SURFACE IMPOUNDMENTS**

Impoundment Designation¹	Surface Area¹ (acres)	Post-Closure Use	Liner¹	Status
<i>DP-166 No. 2 Leach System, SX/EX Plant, Open Pits</i>				
Seep Collection DC2-1 Replacement ³	0.02	Seepage Collection	Synthetic	To be Installed
Seep 2 Collection	0.002	Seepage Collection	None	Existing
Seep 3 Collection ²	0.02	Seepage Collection	Clay	Existing
Seep 4 Collection ²	0.02	Seepage Collection	Clay	Existing
Seep 5E Replacement Collection ³	0.02	Seepage Collection	Clay	Existing
Seep 8 Collection Replacement ³	0.005	Seepage Collection	Clay	To be Installed
Seep 9 Collection	--	Seepage Collection	None	Existing
Main Pit Sump	--	Pit Dewatering	None	Existing
Copper Mountain Pit Sump ²	0.44	Pit Dewatering	None	Existing
No. 2 PLS Pond	0.46	Water Treatment	Synthetic & Shotcrete	Existing
North Racket Sump ²	0.64	Pit Dewatering	None	Existing
SX/EW PLS Feed Pond	0.25	Water Treatment	Synthetic	Existing
5E Pond 2	0.36	Seepage Collection	Synthetic	Existing
<i>DP-286 No. 3 Leach System</i>				
No. 3 PLS Pond	1.22	Water Treatment	Synthetic	Existing
Crusher Pond	0.37	Stormwater	None	Existing
Land Farm and Stage Pond (two)	0.62	Stormwater	Synthetic & Concrete lined	Existing
Niagara Stormwater	0.16	Stormwater	None	Existing
Other Thickeners (six)	0.46	Water Treatment	Synthetic & Concrete lined	Existing
Plant Oxidation Pond (a)	0.28	Sewage/Stormwater	Synthetic	Existing
Plant Oxidation Pond (b)	0.3	Sewage/Stormwater	Synthetic	Existing
SPCC Pond	0.96	Stormwater	Synthetic	Existing
New Seepage Collection AST	--	Seepage Collection	Fiberglass	To be Installed

**TABLE 7-1
POST-CLOSURE SURFACE IMPOUNDMENTS**

Impoundment Designation¹	Surface Area¹ (acres)	Post-Closure Use	Liner¹	Status
New Overflow Pond	--	Overflow for Seepage Collection	Synthetic	To be Installed
<i>DP-363 No. 1A Leach System</i>				
No. 1A PLS Tank	--	Seepage Collection	Stainless Steel	Existing
No. 1A PLS Overflow Pond	0.5	Overflow for Seepage Collection	Synthetic	Existing
No. 1A Stormwater Pond	0.11	Stormwater	Clay	Existing
<i>DP-383 No. 1B Leach System</i>				
No. 1B PLS Tank	--	Seepage Collection	Stainless Steel	Existing
No. 1B Overflow Pond	0.6	Overflow for Seepage Collection	Synthetic	Existing
<i>DP-396 No. 1C Waste Rock Stockpile</i>				
Oak Grove Pond	0.18	Stormwater	Synthetic	Existing
<i>DP-435 No. 2A and 2B Leach Systems, and 2B and 9A Waste Rock Stockpiles</i>				
No. 2A (a) aka Seep 5E Pond Discharge Replacement	0.1	Stormwater	None	Existing
No. 2A (b) Surge Pond	0.46	Water Treatment	Synthetic	Existing
No. 2A East PLS Overflow	0.12	Water Treatment	Synthetic	Existing
<i>DP-455 Gettysburg Pit and Leach System</i>				
Gettysburg Collection Pit (a)	0.17	Pit Dewatering	Unlined	Existing
7B PLS Pond ²	0.06	Water Treatment	Synthetic	Existing
6C-2 PLS Collection Pond	--	Water Treatment	Synthetic	Existing
<i>DP-670 Savannah Pit and East Main Leach System</i>				
East Main Booster Pond	0.05	Pit Dewatering	Synthetic	Existing
Savanna Pit Sediment Collection Pond	--	Sediment	Synthetic	Existing
Savanna Pit Sump	0.07	Stormwater	Synthetic	Existing
<i>DP-896 No. 1 Leach Stockpile</i>				

**TABLE 7-1
POST-CLOSURE SURFACE IMPOUNDMENTS**

Impoundment Designation¹	Surface Area¹ (acres)	Post-Closure Use	Liner¹	Status
No. 1 Overflow Pond	--	Overflow for Seepage Collection	Synthetic	Existing
No. 1 Stockpile Seepage AST	--	Seepage Collection	Fiberglass	Existing
Precipitation Plant Launderers	0.1	Stormwater	Synthetic & Concrete lined	Existing

Notes:

AST – Above-ground storage tank

PLS – pregnant leach solution

TDRW - Tailing Decant Return Water

¹. DBS&A. *Tyrone Mine Surface Impoundment Study Work Plan, DP-1341 Condition 87*. November 13, 2006.

². 2001 CCP (M3, 2001)

³. Structure will be covered and will need to be replaced based on reclamation designs presented in Appendix A

**TABLE 9-1
RECLAMATION SCHEDULE FOR TYRONE**

Unit	Anticipated or Actual Start Date for Reclamation to Begin^a	Anticipated Duration (Years)^b or Completion Date
No. 2 Tailing Impoundment	2006	November 2007
No. 1 Tailing Impoundment	2006	April 2008
1A Tailing Impoundment	2006	April 2008
1X Tailing Impoundment	2006	December 2008
Tailing Repositories	2004	April 2008
No. 1A Leach Stockpile	180 days following Cessation of Operation	2
Tailing Impoundment Borrow Pits	2005	December 2008
No. 1 Leach Stockpile	2006	April 2008
No. 1B Leach Stockpile	180 days following Cessation of Operation	2
No. 2A Leach Stockpile	180 days following Cessation of Operation	2
No. 2B Leach Stockpile	180 days following Cessation of Operation	1
No. 2C Leach Stockpile	180 days following Cessation of Operation	2
No. 3A Leach Stockpile	180 days following Cessation of Operation	2.5
No. 4B Leach Stockpile	180 days following Cessation of Operation	2
No. 4C Leach Stockpile	180 days following Cessation of Operation	2
No. 6B Leach Stockpile	180 days following Cessation of Operation	N/A
No. 6C Leach Stockpile ^c	180 days following Cessation of Operation	2
Copper Mountain Leach Stockpile	180 days following Cessation of Operation	1 ^f
7B Leach Stockpile	180 days following Cessation of Operation	2
1C Waste Rock Stockpile	outslopes - 2004, top surfaces - 180 days following Cessation of Operations	outslopes April 2008 ^g , top surfaces 1
2B Waste Rock Stockpile	180 days following Cessation of Operation	2
3B Waste Rock Stockpile	180 days following Cessation of Operation	2
7A Waste Rock Stockpile	outslopes - 2005, top surfaces - 180 days following Cessation of Operations	outslopes - April 2008, top surfaces 1
7C Waste Rock Stockpile	180 days following Cessation of Operation	2
5A Overburden Stockpile	180 days following Cessation of use as a borrow source for cover material	2
9A Overburden Stockpile (proposed)	180 days following Cessation of use as a borrow source for cover material	1
Savanna Stockpile ^d	180 days following Cessation of Operation	N/A
8C Sludge Disposal Stockpile ^e	180 days following Cessation of Operation	N/A
San Salvador Hill Pit	180 days following Cessation of Operation	2

**TABLE 9-1
RECLAMATION SCHEDULE FOR TYRONE**

Unit	Anticipated or Actual Start Date for Reclamation to Begin^a	Anticipated Duration (Years)^b or Completion Date
South Rim Pit	180 days following Cessation of Operation	2
Building/Structure Demolition (non-IPMLU)	180 days following Cessation of Operation	2
Reclamation of Roads	180 days following Cessation of Operation	1
Surface Impoundments (non-PMLU)	180 days following Cessation of Operation	1
Process Solution Elimination	180 days following Cessation of Operation	5
Water Treatment Plant Construction	Construction of WTP one year prior to completion of PSE	1

Notes:

WTP = water treatment plant. Construction of the WTP will be initiated one year prior to completion of operation of the PSE system = process solution elimination system.

PMLU = post-mining land use

^a Anticipated start dates are subject to modification; actual start dates are associated with facilities under current reclamation; if cessation occurred for multiple facilities at the same time, the duration for reclamation of the facilities is approximately the sum of the durations for each facility.

^b Estimated duration for facility reclamation does not include regulatory design review and approval processes; estimated completion date for facilities with ongoing reclamation are based on existing reclamation progress and future forecast for facility completion; some borrow areas may be left open to be used in maintenance activities on the primary reclaimed facilities.

^c This facility is located within the surface water containment zone and is not included in reclamation plan

^d Savanna Stockpile will be removed as part of excavation of the borrow source in the area

^e 8C Stockpile is the sludge disposal area for the high-density sludge produced from the WTP. This area is located within the surface water containment zone and is not included in reclamation plan

f. costs are included in the CCP to add additional cover and seeding of this site. This activity is proposed to take place in conjunction with closure of the 2B Waste Stockpile.

g. a small part of the outslope of the 1C (easternmost slope) will not be regraded and reclaimed until the “pull-back” regrading of the 1A Stockpile is complete.