

OFFICE OF THE  
ARIZONA STATE MINE INSPECTOR

JOE HART



ONE-HUNDRED and SEVENTH  
ANNUAL REPORT

-

CALENDAR YEAR 2018

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ANNUAL MESSAGE FROM  
JOE HART  
ARIZONA STATE MINE INSPECTOR



The Mission of this agency is to ensure the health and safety of people working at mines, coordinate the closure of abandoned mines on state and private land posing a threat to public health and safety, and to ensure that lands used for mining are properly reclaimed for public use once mining is completed.

The State Mine Inspector is a statewide elected constitutional officer and the director of the Office of the State Mine Inspector. The Office of the State Mine Inspector was established by the Constitution of the State of Arizona, Article XIX. This agency enforces statutes, rules, and regulations applicable to mine safety, health, and land reclamation under ARS Title 27 Minerals, Oil and Gas and Arizona Administrative Code Title 11 - Mining.

The agency helps ensure miner safety by inspecting work conditions and practices at active mining operations; investigating mine accidents, employee and public complaints about mine safety; and by conducting federally certified miner and instructor safety training. To protect the public against the dangers of abandoned mines, the agency investigates and inventories abandoned mine sites, evaluates their threat to public health and safety, coordinates securing or closure of those that are found to be dangerous, and promotes public safety regarding abandoned mines by "Stay Out Stay Alive" promotions, presentations and publications; complaint investigations and mine owner ARS 27-318 compliance notifications. Finally, the agency administers reclamation plans and assurances by enforcing the Mined Land Reclamation laws, rules and regulations for the restoration of disturbed lands to a safe and stable environmental condition.

## Program Summary

The Arizona State Mine Inspector's (ASMI) Mine Safety Enforcement Program regulated a total of 594 Health & Safety Mines and Contractors during 2018; 505 of the mining operations and 89 of the contractors were inspected which resulted in a 92% inspection rate on the mine sites. The Arizona Revised Statutes 27-124 requires all active mines be inspected annually. The agencies goal is to have Zero Fatalities and Zero Accidents at Arizona Mines. In 2018, no fatal accidents at an active mine site were reported or investigated by the Arizona State Mine Inspector's Office. The Arizona NFDL (non-fatal days lost time) rate was 1.6 per 200,000 hours of work and the 2018 National NFDL rate was 1.45 per 200,000 hours of work. The Inspections department issued 398 notices of violations; no cessation orders were required during 2018. ASMI inspectors investigated 25 employee and citizen complaints, issued 38 mine elevator operating permits and 64 underground diesel equipment operating permits. Mine operations under ASMI's jurisdiction include asphalt hot plants and concrete batch plants on mine properties, aggregate and decorative rock operations, quarries and processing plants; underground and open pit mines, mills, insitu, solvent extraction-electro winning plants, smelters, refineries, and rod plants. ASMI also inspects contractor's working at mine sites.

The Education and Training Program certifies MSHA instructors, develops lesson plans, conducts classes, and organizes safety conferences for mine safety education and training. The emphasis is placed on miner's rights and current health and safety regulations in compliance with the Federal Mine Safety and Health Act of 1977, Title 30 CFR, Part 46, 47, 48, 49, 56, 57, 58 and 62.

In addition, mine company employees, contractors, vendors and others who are regularly exposed to mine hazards at mine properties are required to have various levels of training provided by the Education and Training division. During 2018, 3486 certificates were issued to mine workers and contractors for completion of safety courses.

The Abandoned Mines Safety Program efforts fall into two categories; the inventory of abandoned mine sites and the administration of the securing, remediation, and closure of abandoned mines. Field surveys locate mines within the 72,931,840 acres that comprise the State of Arizona. This survey records the exact location of abandoned mines using a global positioning satellite system. The inventory's objective is to produce an accurate count of abandoned mines, and describe the significant safety hazards and potential environmental hazards occurring with them. About 18,000 abandoned mines have been inventoried since the program was initiated in the early 1990's and over 8708 of these have been evaluated and assessed for the risks they may pose. The database of surveyed abandoned mines is used to provide for the prioritization of significant public and environmental hazards for remediation and reclamation planning. The inventory also allows the agency to accurately investigate public concerns and complaints, about abandoned mines in a timely manner. An abandoned mine might be a risk to public health and safety, but also may be used for criminal activities. The program assists law enforcement investigations of any known or suspected criminal activity. The administration of securing abandoned mines first prioritizes sites listed in the inventory based on the

severity of the threat posed to public and environmental safety. Through this prioritization, structures are designed as necessary for abandoned mine closures on state lands. The cost of field construction work to secure these mines is provided by the Abandoned Mine Safety Fund through mining industry donations, private citizen donations, and a matching appropriation from the legislature. The program performs regular monitoring to assure mine closures remain in good condition. The program coordinates identifying and securing abandoned mines with local, state, and federal agencies as well as other states, entities and volunteer groups. Groups include the Yuma County Sheriff's Search and Rescue Group, the Maricopa County Sheriff's Office Mountain Search and Rescue Group, Arizona Geological Survey, Maricopa County Parks, Arizona State Land Department, Arizona Game and Fish, Arizona State Historic Preservation Office, Arizona Department of Environmental Quality, Department of Labor Mine Safety and Health Administration, Bureau of Land Management, U.S. Forest Service, Environmental Protection Agency, Western Governors Association, Bat Conservation International and the National Association of Abandoned Mined Land Programs, which is comprised of 27 states and three Indian Tribes.

The Mined Land Reclamation Program approves or rejects mine reclamation plans and financial assurance mechanisms submitted by all metalliferous mining units, aggregate mine operations, and exploration operations with surface disturbances greater than five acres. Beginning January 2007, aggregate mining operators were required to submit reclamation plans for the first time, increasing the workload in this area by over 250 plans. Annual report submittals and reviews along with on-site inspections of the regulated mines are a part of the continual monitoring process to establish compliance to the Mined Land Reclamation laws, rules and regulations. These inspections will be coordinated with health and safety inspections to ensure an efficient and effective inspection program, working in cooperation with mining companies, consultants, and other state and federal governmental agencies,

Our team of experienced mine safety professionals strive to continually improve programs and services of the Agency so Arizona will be not only a leader in mining production, but in SAFE PRODUCTION as well.

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Arizona State Mine Inspector

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Date

## MINE SAFETY ENFORCEMENT

During the calendar year of 2018, the inspection team performed 594 health and safety inspections, which identified 398 violations of the mining code for corrective actions by the mine operators. No Cessation Orders issued to mine operators in 2018.

<b>Types of Operations</b>	<b>No. of Inspections</b>	<b>No. of Violations</b>	<b>Average No. of Employees</b>	<b>No. of Mines &amp; (Listed Contractors)</b>
Surface Metal Mines, Mills, SX-EW Plants, Smelters, and Refineries	95	152	9226	58
Rock Products, Sand & Gravel, Pits, Quarries, Batch and Hot Plants	390	190	2628	475
Underground Mines	20	11	285	14
<b>Contractor Totals</b>	89	45	N / A	588
<b>Mine Totals</b>	505			547
<b>TOTALS</b>	<b>594</b>	<b>398</b>	<b>12139</b>	<b>1135</b>

In addition to mine safety and health inspections, ASMI investigated complaints related to safety and health issues in mines and performed inspections of underground diesel equipment, elevators, and new electrical equipment installed in mines where permits are required.

- Annual Elevator Inspections with Permits Issued 38
- Underground Diesel Equipment with Permits Issued 64
- Citizen Complaints Investigated 20
- Employee Complaints Investigated 3
- Agency Referral Complaint Investigated 2
- Electrical Equipment Installations 3
- Non Inspection Visits 22
- Cessation Orders Issued 0

Combined efforts of mine operators with the agency's mine safety enforcement, education and training programs provide significant tools to reduce and control the accident frequency for Arizona's mining industry. Incident rates from U.S. Department of Labor reports for NFDL (non-fatal days lost time) accidents for metal, non-metal, sand and gravel

mines, and mills are shown in the table below. Incident rate is the number of NFDL accidents per 200,000 employee-hours worked.

<b>LTIR / NFDL</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
National Accident Incidence Rate	1.8	1.6	1.5	1.45	1.45
Arizona Accident Incidence Rate	1.3	1.3	1.5	1.5	1.6

### **LOST TIME ACCIDENTS IN 2018**

<b>Type</b>	<b>Company</b>	<b>Mine</b>	<b>LT Accidents</b>
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#### **Overexertion**

Arizona Minerals	Hermosa	1
Asarco Inc.	Hayden	1
Asarco Inc.	Mission	2
Clarkdale Metals	Clarkdale	1
Freeport McMoran	Bagdad	5
Freeport McMoran	Morenci	4
Freeport McMoran	Miami	4
Freeport McMoran	Safford	6
Freeport McMoran	Sierrita	1
Salt River Materials	Phoenix Cement	1

#### **Struck By or Against**

Asarco Inc.	Hayden	3
Asarco Inc.	Mission	1
BJ Cecil Trucking	Bagdad	1
Fann Contracting	Red Lake`	1
Freeport McMoran	Bagdad	3
Freeport McMoran	Morenci	1
Freeport McMoran	Sierrita	3

### Contact With or By

Calportland	Beardsley Plant	1
Drake Materials	Higley	1
Freeport McMoran	Miami	1
Freeport McMoran	Bagdad	1

### Caught On or In or Between

Calportland	Rillito Mill	1
Drake Cement	Drake	1
Drake Materials	Queen Creek	1
Freeport McMoran	Bagdad	1
Freeport McMoran	Miami	1
Freeport McMoran	Morenci	2
Freeport McMoran	Sierrita	1

### Fall from the Same Level or Below

Asarco Inc.	Hayden	2
Asarco Inc.	Mission	1
Decorative Rock Sales	Little Hills	1
Energy Fuels Resources	Canyon	1
Freeport McMoran	Bagdad	3
Freeport McMoran	Miami	1
Freeport McMoran	Safford	2
Freeport McMoran	Sierrita	5

### Exposure or Occupational Illness

Asarco Inc.	Mission	2
Asarco Inc.	Hayden	2
BJ Cecil Trucking	Morenci	1
Freeport McMoran	Bagdad	1

### FATAL ACCIDENTS

No Fatal Accidents occurred at Arizona Mine Sites during 2018.

From 1912 to 2017, Arizona Mines claimed 1,567 lives. 1918 alone cost 93 lives.



1994, 2003, 2014, 2018 are the only years when Arizona had no fatalities.

## 2018 Operating Mines in Arizona by County

The following pages contain operating mines, plants and smelters considered active in 2018. These figures represent some 547 operating units with over 12,139 workers.

### Registered Mining Companies by County and Type

<b>Apache</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Alpine Excavation & Construction	Alpine Dump	Aggregate Plant	Aggregates
	Apache County Engineering	Concho Gravel Pit	Aggregate Plant	Aggregates
	Apache County Engineering	Davis Pit / Limestone Pit	Open Pit Mine	Aggregates
	Apache County Engineering	Stanford Pit	Aggregate Plant	Cinders
	C&C Cinders Town of Eager	C&C Cinder Pit	Aggregate Plant	Cinders
	Hall n Aggregate Trucking & Materials	Hall Pit	Aggregate Plant	Aggregates
	Sug Rogers Construction LLC	Dump Pit #2	Aggregate Plant	Aggregates
	Rusty Wright Enterprises	Alpine Dump Pit	Aggregate Plant	Aggregates
	Spring Mountain Materials	Spring Mountain	Aggregate Plant	Cinders
	White Mountain Rock Products	Barth Pit	Aggregate Plant	Aggregates
	White Mountain Rock Products	Richville Pit	Aggregate Plant	Aggregates
<b>Cochise</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Arizona Marble Company	Arizona Marble	Quarry	Marble
	Cemex USA	Plant 229 Sierra Vista	Batch Plant	Concrete
	Cemex USA	Plant 229 Sierra Vista	Aggregate Plant	Aggregates

Chiricahua Building Supply	Chiricahua Building Supply	Aggregate Plant	Aggregates
Chiricahua Building Supply	Chiricahua Building Supply	Batch Plant	Concrete
Gagnons Sand & Gravel.	Sierra Vista Pit	Aggregate Plant	Aggregate
Cross Spear Limestone LLC.	Cross Spear Marble	Quarry	Marble
Empire Homes, Inc.	Maya Pit	Surface	Sand & Gravel
Freeport McMoran Copper & Gold Bisbee	Copper Queen	Reclamation	Copper
Golder Fame (USA) Inc.	Gold Ridge (Gold Prince)	Exploration	Gold
Granite Construction Company	Babocomari Pit	Aggregate Plant	Sand & Gravel
KE&G Construction Inc.	KE&G	Hot Plant	Asphalt
Klump Ranches LLC	Luzena Quarry	Aggregate Plant	Aggregates
Klump Ranches LLC	Bowie	Aggregate Plant	Aggregates
Lhoist North America	Douglas Plant	Quarry	Lime
Maddux & Sons, Inc.	Leslie Canyon Plant	Aggregate Plant	Aggregates
Maddux & Sons, Inc.	Snure Pit	Aggregate Plant	Aggregates
Maddux & Sons, Inc.	Leslie Canyon Batch Plant	Aggregate Plant	Aggregates
Maddux & Sons, Inc.	Bingham Pit	Aggregate Plant	Aggregates
Excelsior Mining JCM	Johnson Camp	SX-EW Plant	Copper
Samoht Rock & Sand, LLC	Samoht Rock & Sand	Aggregate Plant	Aggregates
St. Cloud Zeolite	Grace and Cholla Zeolite Mine	Surface	Zeolite- chabazite
Strong Hold Redi-Mix	Grim	Aggregate Plant	Aggregates
Strong Hold Redi-Mix	Grim	Batch Plant	Concrete
Texas Canyon Rock & Sand	Texas Canyon	Aggregate Plant	Aggregates
Tombstone Gold and Silver	Emerald Pit	Aggregate Plant	Aggregates
UOP Molecular Sieve	Bowie Operation - EZ & Hat	Open Pit Mine	Chabazite Clay
Willcox Rock & Sand	Riggs Pit	Aggregate Plant	Aggregates
Willcox Rock & Sand	Riggs Pit	Batch Plant	Concrete
Willcox Rock & Sand	Outerspace Pit	Aggregate Plant	Aggregates

**Coconino Company Mine / Plant Name Type Product**

A-Rock	Grey Mountain Pit	Aggregate Plant	Sand & Gravel
Alberto Ayala Company	Ayala Blue Bird	Quarry	Flagstone
Allen Grantham	Grantham Pit	Cinders	Cinders
Arizona Tufflite, Inc.	White Vulcan & More Sand Mines	Open Pit Mine	Pumice
Canipe Trucking	Golden Buckskin-Drake	Quarry	Flagstone
Canipe Trucking	Santa Cruz	Quarry	Flagstone
Cemex	Plant # 337 / Gray Mountain	Aggregate Plant	Aggregates
Cemex	UM Plant # 336 Sunset Crater	Aggregate Plant	Aggregates
Cemex	Plant # 337 / Gray Mountain	Batch Plant	Concrete
Coconino	Wildcat Hill Pit	Open Pit Mine	Cinders
Cinders Sales			
Coconino	Sheep Hill	Open Pit Mine	Cinders
County Public Works			
Drake Stone	Diamond 7 Red	Quarry	Flagstone
Drake Stone	Diamond 7 Oak	Quarry	Flagstone
Dunbar Stone	Roeder Quarry / Redbird Quarry	Quarry	Flagstone
Dunbar Stone	Armstrong Rose	Quarry	Flagstone
Dunbar Stone	Yellow Buck Quarry-Ash Fork	Quarry	Flagstone
Dunbar Stone	Blue Moon/Mattahorn	Quarry	Flagstone
Dunbar Stone	Corva Canyon	Quarry	Flagstone
Dunbar	Hill Top	Quarry	Flagstone
Energy Fuels Resources (USA) Inc.	Canyon Mine	Underground	Uranium
Espee Cinder Pit	Perrin Pit	Quarry	Cinders
Fann dba Q-Max Co.	Red Lake Quarry	Aggregate Plant	Sand & Gravel
Flagstaff Concrete Products, LLC.	Fisher Pit 1A & A1	Open Pit Mine	Sand & Gravel
FNF	FNF Williams 43	Aggregate Plant	Aggregates
Hammond Wholesale Flagstone	Hammond Stone Mountain Quarry	Quarry	Flagstone
Hammond Wholesale Flagstone	Perrez Quarry	Quarry	Flagstone
Harley Gray Stone	Appletree Quarries-Drake	Quarry	Flagstone
Harley Gray Stone	Oak Quarry	Quarry	Flagstone
Harley Gray Stone	Mills Quarry	Quarry	Flagstone
Haines	Million \$ Buff / Rosa	Quarry	Flagstone
Flagstone LLC			
LP's Excavating	LP's Cinders	Quarry	Cinders
Miller Mining	Miller Pit	Open Pit	Cinders
Northern Arizona Materials	Brothers Mine	Open Pit	Cinders

	Pryor Clinger Properties, LLC	Kincanon One Pit	Open Pit Mine	Sand & Gravel
	Monterola Sheep Co.	Monterola Quarry	Aggregate	Aggregates
	Red Pit Inc.	Red Pit	Aggregate	Cinders
	Star Stone Quarries	Crookton / Stone Mountain	Quarry	Flagstone
	Superlite Block	Darling/Winona	Aggregate	Cinders
	The Landscape Connection	Sheep Hill Mine	Aggregate	Cinders
	Vulcan Materials	Gray Mountain Plant	Hot Plant	Asphalt
<b>Gila</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	ASARCO, Inc	ASARCO Mine Hayden	Surface	Copper
	ASARCO, Inc.	Hayden Concentrator	Mill	Copper
	ASARCO, Inc.	Hayden Smelter	Smelter	Copper
	BHP Copper, Inc.	Miami Operations	SX-EW Plant	Copper
	KGHM Carlota Copper Co.	Carlota Copper Company	Open Pit	Copper
	Cemex	Globe Plant 601	Aggregate Plant	Aggregates
	Cemex	Globe Plant # 601 / Nugget Pit	Aggregate Plant	Aggregates
	Cemex	Globe Batch Plant 601	Batch Plant	Concrete
	Freeport McMoran Miami	Rod Plant	Rod Plant	Copper
	Freeport McMoran Miami	Smelter	Smelter	Copper
	Freeport McMoran Miami	Mine, SX/Tankhouse	SX-EW Plant	Copper
	Goat Creek Mining	Goat Creek Star Valley	Aggregate Plant	Decorative Stone
	Hunt Materials	Hunt Pit	Aggregate Plant	Aggregates
	Hunt Materials	Young Batch Plant	Batch Plant	Concrete
	Kessen & Kessen Inc.	Lime Quarry	Crushing & Screening	Rip/Rap
	Payson Concrete & Materials	Red Select Quarry	Aggregate Plant	Aggregates
	Payson Concrete & Materials	Payson Plant	Aggregate Plant	Aggregates
	Payson Concrete & Materials	Tonto Basin Pit	Aggregate Plant	Aggregates
	Payson Concrete & Materials	Tonto Basin Batch Plant	Batch Plant	Concrete
	Payson Concrete & Materials	Payson Batch Plant	Batch Plant	Concrete
	Payson Concrete & Materials	Payson Hot Plant	Hot Plant	Asphalt

	Pinto Valley Mining Corporation	Pinto Valley	Open Pit	Copper
	Payson Concrete & Materials	R & H Mine	Aggregate Plant	Decorative Stone
	Star Valley Granite	Star Valley Granite	Aggregate Plant	Decorative Stone
	Tonto Rock Products LLC.	Gressley Pit	Aggregate Plant	Aggregates
<b>Graham</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Brimhall Sand Rock & Building Materials	Bryce Rocky Field	Aggregate Plant	Aggregates
	CKC Construction	Airport Pit	Aggregate Plant	Sand & Gravel
	CKC Construction	Airport Batch Plant	Batch Plant	Concrete
	CKC Construction	Airport Hot Plant	Hot Plant	Asphalt
	FNF Construction	Foote Pit	Aggregate Plant	Aggregates
	Freeport McMoran			
	Safford Tri County Materials	FMI Safford Operations	Open Pit	Copper
	Tri County Materials	Morris Pit # 1	Aggregate Plant	Aggregates
	Tri County Materials	Safford Batch Plant	Batch Plant	Concrete
<b>Greenlee</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Freeport McMoran	Morenci Mine	Open Pit	Copper
	Greenlee County	Virden Pit	Aggregate Plant	Aggregates
	Oakcreek Sand & Gravel	Old Virden Highway Pit	Aggregate Plant	Aggregates
<b>La Paz</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Bonanza Explorations Inc./ Kerr Mines Inc.	Copperstone Mine	Underground	Gold
	FNF Construction	Vicksburg 36 Materials	Aggregate Plant	Aggregates
	La Paz County Public Works	Vicksburg Pit	Aggregate Plant	Aggregates

	La Paz County Public Works	Cibola Pit	Aggregate Plant	Aggregates
	Mineral Aggregate Recycling Service	Ehrenberg Wash Pit	Aggregate Plant	Aggregates
	Murphy Landscaping dba Rio Del Monte	Rio Del Monte Mine	Aggregate Plant	Decorative Stone
	Pioneer Landscaping Materials	Quartzsite Pit	Aggregate Plant	Decorative Stone
<b>Maricopa</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	ABC Sand & Rock	Camelback Road Pit	Aggregate Plant	Aggregates
	ABC Sand & Rock Co., Inc.	ABC Plant #2	Aggregate Plant	Aggregates
	Ewing fka American Sand & Rock Arizona Materials	Cat Claw Mine	Aggregate Plant	Decorative Stone
	Arizona Materials LLC.	Plant #4 - Buckeye Plant	Surface	Sand & Gravel
	Arizona Materials LLC.	Plant #4 - Buckeye Batch Plant	Batch Plant	Concrete
	Arizona Materials LLC.	Plant # 7 Glendale	Batch Plant	Concrete
	Arizona Materials LLC.	Plant #6 Hatfield	Batch Plant	Concrete
	Arizona Materials, LLC.	Batch plant # 1 - 43rd Ave. & Lower Buckeye	Batch Plant	Concrete
	Arizona Materials, LLC.	Plant # 1 - 43rd Ave. & Lower Buckeye	Aggregate Plant	Aggregates
	Arizona Metro Mix	Tolleson	Batch Plant	Concrete
	Aztec Mining	Anchor Bay Pit	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	Plant 5224 Vulcan Materials	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	Gomez	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	Val Vista- Citrus Grove	Aggregate Plant	Aggregates

Cal Mat Co dba Vulcan Materials	Val Vista- Citrus Grove	Hot Plant	Asphalt
Cal Mat Co dba Vulcan Materials	Avondale Plant	Aggregate Plant	Aggregates
Cal Mat Co dba Vulcan Materials	West Plant	Aggregate Plant	Aggregates
Cal Mat Co dba Vulcan Materials	West Plant	Hot Plant	Asphalt
Cal Mat Co dba Vulcan Materials	West Broadway	Aggregate Plant	Aggregates
Cal Mat Co dba Vulcan Materials	West Broadway	Hot Plant	Asphalt
Cal Mat Co dba Vulcan Materials	Sun City	Aggregate Plant	Aggregates
Cal Mat Co dba Vulcan Materials	Sun City	Hot Plant	Asphalt
Calportland	43rd Ave / Batch Plant	Batch Plant	Concrete
CalPortland	Beardsley Batch Plant	Batch Plant	Concrete
Calportland	Sun City	Batch Plant	Concrete
CalPortland	Val Vista Ready Mix	Batch Plant	Concrete
CalPortland	New River	Aggregate Plant	Aggregates
CalPortland	New River	Batch Plant	Concrete
Calportland	Higley	Batch Plant	Concrete
CalPortland	Glendale	Batch Plant	Concrete
CalPortland	Sun City	Batch Plant	Concrete
Calportland	Deer Valley Batch Plant	Batch Plant	Concrete
CalPortland	Bullard Mine	Aggregate Plant	Aggregates
CalPortland	Bullard Batch Plant	Batch Plant	Concrete
CalPortland	Buckeye	Batch Plant	Concrete
Cemex	Glendale Plant	Aggregate Plant	Aggregates
Cemex	19th Ave. & Gomez Batch Plant	Batch Plant	Concrete
Cemex	19th Ave & Gomez Pit	Aggregate Plant	Aggregates
Cemex	West Valley Plant #1371	Aggregate Plant	Sand & Gravel
Cemex	El Mirage Plant	Batch Plant	Concrete
Cemex	107th Ave. Plant 146	Aggregate Plant	Sand & Gravel
Cemex	El Mirage Plant	Aggregate Plant	Aggregates
Cemex	Table Mesa Plant	Aggregate Plant	Decorative Stone
Cemex	67 <sup>th</sup> Ave. Plant	Aggregate Plant Plant	Aggregates

Cemex	Sun City Plant, #4118	Aggregate Plant	Sand & Gravel
Cemex	Sun City Batch Plant	Batch Plant	Concrete
Cemex	Glendale Pit #112	Aggregate Plant	Sand & Gravel
Cemex	West Plant # 40311	Aggregate Plant	Sand & Gravel
Cemex	Jomax Plant	Aggregate Plant	Aggregates
Cemex	Lehi Plant # 76	Aggregate Plant	Sand & Gravel
Cemex	El Mirage	Aggregate Plant	Aggregates
Circle H West LLC.	Circle H West	Aggregate Plant	Sand & Gravel
Core Ready Mix LLC	Plant #2 Sun City		
Custom Landscape Materials	Bighorn Pit	Aggregate Plant	Decorative Stone
Custom Landscape Materials	Belmont Pit	Aggregate Plant	Decorative Stone
Custom Landscape Materials	Miller North	Aggregate Plant	Aggregates
Damavand Trading LLC.	51st Avenue	Aggregate Plant	Aggregates
Desert Rock Products	New River Pit	Aggregate Plant	Decorative Stone
Desert Ready Mix, LLC.	Drake Glendale	Batch Plant	Concrete
Diamondback Sand & Rock	Diamondback Materials	Aggregate Plant	Aggregates
Diamondback Materials	Diamondback Batch Plant	Ready Mix	Concrete
Drake Materials	Avondale Batch Plant	Batch Plant	Concrete
Drake Materials	Higley	Aggregate Plant	Sand & Gravel
Drake Materials	Glendale	Aggregate Plant	Sand & Gravel
Drake Materials	Sun City Plant	Batch Plant	Concrete
Fisher Sand & Gravel Co.	New River	Aggregate Plant	Aggregates
Fisher Sand & Gravel, Inc	New River	Hot Plant	Asphalt
Fisher Sand & Gravel, Inc	Westside Hot Plant	Hot Plant	Asphalt
Fisher Sand & Gravel, Inc	15 <sup>th</sup> Ave Pit	Aggregate Plant	Aggregates
FNF Construction	Stuhr Materials	Aggregate	Aggregates
FNF Construction	Gillespie	Aggregate	Aggregates



Granite Express Hanson Aggregates	Berkley Pit/Pit #2	Aggregate Plant	Decorative Stone
Hanson Aggregates	51 st Ave Pit / Plant #35	Aggregate Plant	Aggregates
Hanson Aggregates	Agua Fria Plant / River Ranch, #40	Aggregate Plant	Sand & Gravel
Hanson Aggregates	Plant # 46 Hasayampa	Aggregate Plant	Aggregates
Hanson Aggregates	Agua Fria Plant / River Ranch, #40	Batch Plant	Concrete
Hanson Aggregates	51 st Ave Pit / Hot Plant #35	Hot Plant	Asphalt
Hanson Aggregates	Glendale Batch #45	Batch Plant	Concrete
Hanson Aggregates	67th Ave Plant	Surface	Concrete
Hanson Aggregates	San Domingo Pit / Wickenburg	Aggregate Plant	Aggregates
Hanson Aggregates	San Domingo Batch Plant / Wickenburg	Batch Plant	Concrete
Kilauea Crushers Inc.	Estrella North & South	Aggregate Plant	Aggregates
Kilauea Crushers	Picacho Mine	Aggregate Plant	Granite/Decorative Stone
Kilauea Crushers, Inc.	Buckeye Hills Plant	Surface	Aggregates
Lafarge N. America	Sun City	Surface	Sand & Gravel
M.R. Tanner Mining, Inc.	West Side Pit Mine	Crush & Screen	Aggregates
Madison Granite	Madison Granite Pit	Aggregate Plant	Granite/Decorative Stone
Mobile Mix Morton Salt, K+S	Granite Reef Dam Glendale	Surface In-Situ	Sand & Gravel Salt
Paloma Ready Mix and Materials	Old 80 Main Plant	Aggregates	Aggregates
Pioneer Sand Company	Pioneer Hassayampa	Aggregate Plant	Sand & Gravel
Red Mountain Mining	Red Mountain Quarry	Aggregate Plant	Decorative Stone
Reserve Bank Rock Solid, Inc	Reserve Bank LaFarge Sun City Plant	Underground Batch Plant	Copper Concrete
Rock Solid, Inc.	Plant 6	Batch Plant	Concrete
Rowley Mine	Graham	Underground	Wulfenite Crystals
Salt River Material	Buckeye Plant	Aggregate Plant	Sand & Gravel
Salt River Materials	67th Ave Plant	Surface	Sand & Gravel
Salt River Materials Group	Olive Ave	Aggregate Plant	Sand & Gravel

Salt River Materials Group	Glendale Plant	Aggregate Plant	Sand & Gravel
Sand River Holdings	Sand River	Aggregate Plant	Aggregates
Southland Well Drilling	Desert Crystal	Screening Plant	Aggregates
Southwest Rock Products	Peoria Pit	Aggregate Plant	Aggregates
Southwest Rock Products	Cave Creek / Melluzoo	Aggregate Plant	Aggregates
Southwest Rock Products	Eagle Mountain	Aggregate Plant	Aggregates
Stodghill & Sons	Apache Gold Boulder Mine	Aggregate Plant	Aggregates
Sun Land Materials	Laveen	Aggregate Plant	Sand & Gravel
Superstition Crushing	Deer Valley Plant	Aggregate Plant	Aggregates
Vulture Mining Company	New Vulture	Aggregate Placer	Gold
Vulture Peak Holdings Inc.	Vulture Mine	Open Pit	Gold
West Coast Aggregate	West Coast Aggregate	Aggregate Plant	Sand & Gravel
Western Aggregates LLC.	Plant 41	Aggregate Plant	Sand & Gravel

<b>Mohave</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Bryce Christensen C.S.	Black Rock Pit	Aggregate Plant	Aggregates
	McCrossan C.S.	Cedar Hills	Aggregate Plant	Aggregates
	McCrossan dba Mineral Park Materials C.S.	Cedar Hills	Hot Plant	Asphalt
	McCrossan	Canyon	Aggregate Plant	Decorative Stone
	Cal Mat dba Vulcan	Bullhead Hot Plant	Hot Plant	Asphalt
	Cemex USA	Bullhead City Pit,	Aggregate Plant	Aggregates
	Cemex USA	Bullhead City Batch Plant,	Batch Plant	Concrete
	Certainfeed Gypsum	Black Rock	Quarry	Gypsum
	Chase Crushing aka Vista	White Hills	Aggregate Plant	Decorative Stone

Chase Crushing aka Vista	Regal Mist	Aggregate Plant	Decorative Stone
City of Bullhead	Portable Powerscreen	Aggregate Plant	Aggregates
Colorado City Public Works	Colorado City	Aggregate Plant	Aggregates
D. L. Campbell	Sand Pit Road	Aggregate Plant	Aggregates
D. L. Campbell	Sand Pit Hot Plant	Hot Plant	Asphalt
D. L. Campbell	Airport Pit	Aggregate Plant	Sand & Gravel
D.L. Campbell Company	Hackberry	Aggregate Plant	Sand & Gravel
Daryll Lynnes	Rising Fawn	Surface	Gold & Silver
Dayton Lundy Rock	Dayton Lundy Rock Pit # 2	Aggregate Plant	Decorative Stone
Desert Construction	Hualapai Pit - Roslynn Rd. Pit	Aggregate Plant	Aggregates
Desert Construction	Hualapai Hot Plant	Hot Plant	Asphalt
Desert Construction	Wash & Screen Plant	Aggregate Plant	Aggregates
Desert Construction	Batch Plant	Batch Plant	Concrete
Desert Construction	Truxton Wash Pit	Aggregate Plant	Aggregates
Dunbar Stone Energy Fuels Resources	Hualapai Chocolate Arizona # 1	Quarry Underground Mine	Flagstone Uranium
FNF Construction	Blake Ranch Source	Aggregate Plant	Aggregates
Freiday Construction	Rattlesnake Wash Pit	Aggregate Plant	Aggregates
Georgia Pacific			
Gypsum LLC	Black Rock	Quarry	Gypsum
Gold Road Mining	Gold Road Mine	Underground	Gold
Golden Valley Rock & Materials LLC	Golden Valley	Aggregate Plant	Aggregates
Golden Vertex Corporation	Moss Mine	Open Pit	Gold
JDI Enterprises	DW Ranch Road Pit	Aggregate Plant	Sand & Gravel
JDM Sand & Rock	Little Cedar	Aggregate Plant	Sand & Gravel
JP Project LLC fka GY Minerals	GY Mine/Pinkham	Mill Site	Gold
Kalamazoo Materials	Chloride Pit	Aggregate Plant	Decorative Stone
Kalamazoo Materials	White Hills Mine	Aggregate Plant	Decorative Stone

Kalamazoo Materials	New Valentine Pit	Aggregate Plant	Decorative Stone
Kingman Briggs	McConnico / Kingman	Aggregate Plant	Gold
Kingman Turquoise	Mineral Park	Crush & Screen	Turquoise
Lhoist North America dba Chemical Lime	Nelson Plant	Quarry	Lime
McCormick Construction	Pass Canyon	Hot Plant	Asphalt
McCormick Construction	McCormick Pit / Rio Lomas III	Aggregate Plant	Sand & Gravel
Origin Mining Company	Mineral Park	Open Pit Mine	Copper
OZ Rock	OZ Rock	Aggregate Plant	Aggregates
Rio Aggregate Services	Black Mountain Farm Pit	Aggregate Plant	Aggregates
S & S Concrete and Materials	Pass Canyon Batch Plant	Batch Plant	Concrete
S & S Concrete Materials	Pass Canyon	Aggregate Plant	Sand & Gravel
Silmar of Arizona LLC.	Excelisor	Mill	Gold & Silver
Statewide Excavation	London Bridge Road Pit	Screening Plant	Aggregates
The Gravel Pit	Gravel Pit	Aggregate Plant	Aggregates

**Navajo**

<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
Arrowzona Stone Works & Mining	NIZ Quarry	Surface	Sandstone
Brimhall Sand Rock & Building Materials	Winslow Pit	Aggregate Plant	Aggregates
Brimhall Sand, Rock & Building Materials	Geronimo Sand Pit	Aggregate Plant	Aggregates
Brimhall Sand, Rock & Building Materials	Hardluck	Aggregate Plant	Aggregates
Brimhall Sand, Rock & Building Materials	Joe's Pit	Aggregate Plant	Aggregates

Brimhall Sand, Rock & Building Materials	Cooley Knoll Cinder Pit	Aggregate Plant	Cinders
Brimhall Sand, Rock & Building Materials	Cottonwood Wash / Rim Rock	Aggregate Plant	Aggregates
Brimhall Sand, Rock & Building Materials	Decker Plant	Aggregate Plant	Aggregates
Brimhall Sand, Rock & Building Materials	Decker Hot Plant	Hot Plant	Asphalt
Cholla Ready Mix	Perkins Valley Pit	Aggregate Plant	Aggregates
Cholla Ready Mix, Inc.	Woodruff Butte	Aggregate Plant	Aggregates
Hatch Construction & Paving Inc	Flake Pit	Aggregate Plant	Aggregates
Hatch Construction & Paving, Inc.	Four Mile Pit	Aggregate Plant	Aggregates
Hatch Construction & Paving, Inc.	Four Mile Batch Plant	Batch Plant	Concrete
Hatch Construction & Paving, Inc.	Four Mile Hot Plant	Hot Plant	Asphalt
Hatch Construction & Paving, Inc.	Thunder Material Source	Aggregate Plant	Aggregates
McCauley's Dyna Rock & Sand	Minnetonka	Aggregate Plant	Aggregates
McCauley's Dyna Rock & Sand	Chevelon	Aggregate Plant	Aggregates
Navajo County	First Knoll Cinder Pit	Cinders	Cinders
Perkins Cinder Company	Owens Pit	Aggregate Plant	Cinders
Perkins Cinder Company	Owens Batch Plant	Batch Plant	Concrete
Perkins Cinder Company	Turly Pit	Aggregate Plant	Aggregates
Perkins Cinders	Taylor Pit	Aggregate Plant	Cinders

Quality Ready Mix aka Cemex	Brimhall Cottonwood Operation	Batch Plant	Concrete
Reidhead Sand & Rock	Reidhead Sand & Rock	Aggregate Plant	Aggregates
Reidhead Sand & Rock	Reidhead Batch Plant	Batch Plant	Concrete
Southwestern Stone Company	Gold Quarry	Quarry	Flagstone
Surface Contracting, Inc.	Brimhall Hardluck Operation	Hot Plant	Asphalt
Thirsty Stone Resources	HTH1 Quarry	Quarry	Sandstone
Western Materials	Western Materials Site #1	Surface	Cinders
Winslow Ready Mix	Minnetonka	Batch Plant	Concrete

**Pima**

<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
Asarco Silver Bell Mining	Silver Bell Mine	Open Pit	Copper
ASARCO, Inc. Bray Construction	Mission Unit Hayhook Ranch Pit	Open Pit Aggregate	Copper Aggregates
Calmat dba Vulcan	Black Angus	Aggregate Plant	Aggregates
Calmat dba Vulcan	Black Angus	Hot Plant	Asphalt
Calmat dba Vulcan	Marana	Aggregate Plant	Aggregates
Calmat dba Vulcan	Marana	Hot Plant	Asphalt
Calmat dba Vulcan	Ina	Aggregate Plant	Aggregates
Calmat dba Vulcan	Orange Grove	Hot Plant	Asphalt
Calportland dba Twin Peaks Rock & Stone	Twin Peaks	Aggregate Plant	Aggregates
Calportland	Ina	Batch Plant	Concrete
Calportland	Granite/Tangerine Plant	Batch Plant	Concrete
Calportland	Orange Grove Plant	Aggregate Plant	Sand & Gravel
Calportland	Orange Grove Plant	Batch Plant	Concrete
Calportland	Orange Grove Plant	Hot Plant	Asphalt
Calportland	Swan Batch Plant	Batch Plant	Concrete
Calportland	Poor Man	Batch Plant	Concrete
Calportland	Rillito Mill	Cement Plant	Cement/Lime
Company fka Arizona Portland Cement			

Calportland Company fka Arizona Portland Cement Cemex USA	Rillito Quarry	Quarry	Limestone
Cemex USA	Apex Plant # 22	Aggregate Plant	Sand & Gravel
Cemex USA	Pima Plant # 17	Aggregate Plant	Sand & Gravel
Cemex USA	Pima Mine Plant # 121	Batch Plant	Concrete
Cemex USA	Apex Plant # 12	Batch Plant	Concrete
Churchman Sand & Gravel	River Road	Aggregate Plant	Sand & Gravel
Downey, LA & Sons	Downey Sand & Gravel Pit	Aggregate Plant	Sand & Gravel
Freeport McMoran Sierrita Granite Construction	Sierrita Open Pit	Open Pit Mine	Copper
Granite Construction	Swan Road Pit	Aggregate Plant	Aggregates
Granite Construction	Tangerine Pit	Aggregate Plant	Aggregates
Granite Construction	Swan Road Pit	Hot Plant	Asphalt
Granite Construction	Tangerine Pit	Hot Plant	Asphalt
Granite Construction	Kerley Pit	Aggregate Plant	Aggregates
Imerys Marble	Santa Rita Mine	Quarry	Limestone
Jim Bush Sand & Gravel	Ten Mile Wash	Aggregate Plant	Aggregates
Kalamazoo Materials, Inc.	Silverbell	Aggregate Plant	Decorative Stone
Oremus Materials Inc.	Black Angus	Batch Plant	Concrete
Oremus Material Inc.	Avra Valley	Batch Plant	Concrete
Phoenix Brick Yard	Pantano, North & South Clay Pits	Open Pit	Clay
Pioneer Landscaping Materials	Waterman Pit	Aggregate Plant	Decorative Stone
Rosemont Copper Company	Rosemont Copper Project	Open Pit	Copper
Sandstorm Materials	Sandstorm Materials	Aggregate	Sand & Gravel
Sierra Mining & Crushing	Hughes Sand & Gravel Pit	Aggregate Plant	Sand & Gravel
SKM Mining & Materials, Inc.	Pantano Plant	Aggregate Plant	Aggregates
Southwest Mining & Development	Linda Vista 1	Screening Plant	Aggregates





FNF Construction	Thornton Material Source	Aggregate Plant	Aggregates
Gila Rock Products, LLC	Reymert - Superior Granite	Aggregate Plant	Decorative Stone
Express Granite Express LLC	Big Nob Pit 3	Aggregate Plant	Decorative Stone
Hanson Aggregates	Pit 1	Aggregate Plant	Aggregates
Hanson Aggregates	Queen Creek Plant 42	Aggregate Plant	Aggregates
Hanson Aggregates	Coolidge Plant # 65	Aggregate Plant	Aggregates
Hanson Aggregates	Coolidge Plant	Batch Plant	Concrete
Imerys Perlite USA, Inc	Harborlite Mine/Mill	Open Pit Mine	Perlite
Jadaal	Queen Creek	Aggregate Plant	Aggregates
Kalamazoo Materials	Durham Hills Quarry	Aggregate Plant	Aggregates
Kalamazoo Materials	Bonito	Aggregate Plant	Decorative Stone
Kalamazoo Materials	New Superior Pit	Aggregate Plant	Aggregates
Kalamazoo Materials	Old Superior Pit	Aggregate Plant	Aggregates
Kiewit Infrastructure West Co.	Florence Plant #3	Aggregate Plant	Aggregates
Kiewit Infrastructure West Co.	Casa Grande Plant #7	Aggregate Plant	Aggregates
M.R. Tanner Mining Inc.	Queen Creek Pit Mine	Aggregate Plant	Aggregates
M.R. Tanner Mining, Inc.	Rankin Pit Mine	Crush & Screen	Aggregates
National Gypsum	Feldman	Open Pit Mine	Gypsum
Old Wasp Mine	Old Wasp Mine	Placer	Gold & Silver
OMYA CA, Inc.	Omya Az.	Quarry	Marble
P & P Materials LLC	P & P Materials	Aggregate Plant	Aggregates
Pinal Gypsum	White Cross Mine	Open Pit Mine	Gypsum
Peoria Lakes LLC	Queen Creek Gary Road	Aggregate Plant	Decorative Stone
Pinal Gypsum, LLC	Winkleman / Superior Plant 546	Open Pit	Gypsum
Red Hills Mining LLC	Red Hills Quarry	Aggregate Plant	Decorative Stone
Resolution Copper	Superior Magma Mine	Underground Mine	Copper
Ringo Canyon Granite	Ringo Canyon	Aggregate Plant	Aggregates

Silver King Mining, LLC	Silver King Mine	Underground Mine	Silver
Smithco Enterprises Southwest Rock Products	Bobbit Pit	Open Pit Mine	Aggregates
Southwest Rock Products	Queen Creek / Plant 3 aka Oliver	Aggregate Plant	Aggregates
Southwest Rock Products	Queen Creek / Plant 1 & 2	Aggregate Plant	Aggregates
Southwest Rock Products	Coolidge Plant 1 & 2	Aggregate Plant	Aggregates
Superior Materials	Albo Guzman	Aggregate Plant	Aggregates
T D Martin Group LLC	Pit # 525	Wash Plant	Sand, Industrial
Tee Pee Sand & Gravel	Tee Pee	Aggregate Plant	Sand & Gravel
The Ashton Company	Old Montgomery Pit - Casa Grande	Surface	Aggregates
Treasure Chest Mining	Treasure Chest Pit	Aggregate Plant	Decorative Stone
Vulcan Materials	Queen Creek	Hot Plant	Asphalt
Vulcan Materials	Queen Creek	Aggregate Plant	Aggregates

**Santa Cruz**

<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
Arizona Minerals South 32	Hermosa Taylor Deposit	Underground	Lead / Zinc / Silver
CalPortland	Rio Rico Batch Plant	Batch Plant	Concrete
CalPortland	Rio Rico Plant	Aggregate Plant	Aggregates
Collins Excavating dba Rio Rico Rock & Sand	Rio Rico Plant	Aggregate Plant	Aggregates
A.G.E. Construction	GRG Santa Cruz # 1	Aggregate Plant	Aggregates

**Yavapai**

<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
APS Asphalt Paving and Supply	Prescott Valley Pit	Aggregate Plant	Aggregates
APS Asphalt Paving and Supply	Prescott Valley Batch Plant	Batch Plant	Concrete
APS Asphalt Paving and Supply	Prescott Valley Hot Plant	Hot Plant	Asphalt

Arrowhead Mining & Materials	Chino Valley Pit	Aggregate Plant	Sand & Gravel
Gold Paradise Azurite Development	Azurite-Senator Mine	Mill	Gold
Bedrock Landscape Materials	Bedrock Portable Plant #1	Aggregate Plant	Aggregates
Cactus Mining Carson Construction	Aguila Mill 10X Quarry	Mill Aggregate Plant	Gold Aggregates
Cemex	Plant 556 Camp Verde	Aggregate Plant	Aggregates
Cemex Cal Mat dba Vulcan Materials	Plant 556 Camp Verde UM Plant 556 / Camp Verde	Batch Plant Hot Plant	Concrete Asphalt
Cal Mat dba Vulcan Materials	Prescott Valley	Hot Plant	Asphalt
Cemex	Prescott Valley	Aggregate Plant	Aggregates
Cemex	Chino Valley	Batch Plant	Concrete
Cemex Charter Materials	Prescott Valley Plant 100	Batch Plant Aggregate Plant	Concrete Aggregates
Clarkdale Metals Corp	Clarkdale Slag Project	Test Plant	Gold & Copper
Drake Cement, LLC.	Drake Cement Plant	Cement Plant	Cement/Lime
Drake Materials	Drake Iron Ore	Open Pit Mine	Iron Ore
Drake Stone	M.C. Canyon Quarries	Quarry	Flagstone
Drake Stone	Rock House Quarries	Quarry	Flagstone
Drake Stone Earth Resources	Far North Oak Henrickson Mine	Surface Screen Plant	Flagstone Flagstone Aggregates
Equinox Exploration Corp.	Copper Queen & Binghampton	Exploration	Copper
Flintstone Industries Inc.	Dewey Pit	Surface	Decorative Stone
Freeport McMoran	Bagdad Mine	Open Pit Mine	Copper
Bagdad G & S Gravel Incorporated	Star Placer	Aggregate Plant	Sand & Gravel
Granite Express	Mayer	Aggregate Plant	Aggregates
Granite Mountain Materials	Dosie Pit	Aggregate Plant	Decorative Stone
Hanson Aggregates	Yavapai Airport Pit	Aggregate Plant	Aggregates

Hanson Aggregates	Clarkdale Hot Plant	Hot Plant	Asphalt
Hanson Aggregates	Yavapai Airport Batch Plant	Batch Plant	Concrete
Hanson Aggregates	Clarkdale Plant	Aggregate Plant	Aggregates
Hanson Aggregates	Clarkdale Batch Plant	Batch Plant	Concrete
Harley Gray Stone	Partridge & Red Quarries	Quarry	Flagstone
High View Sand & Gravel	High View	Aggregate Plant	Aggregates
Just Stone	Vortex Quarry	Quarry	Building Stone
Just Stone Material Delivery Inc.	Brown Schist Quarry Dewey Pit	Quarry Aggregate Plant	Building Stone Decorative Stone
McGuireville	McGuireville Borrow Pit	Borrow Source Screening Plant	Aggregates Gold
MDG Resources	Rhea Placer Claims	Quarry	Flagstone
Mendoza Quarry	Mendoza Quarry	Quarry	Flagstone
Metallicus Mineral Consultant & Development Inc MCDI	Weaver Creek Alvarado Mine	Screen Screen	Gold Gold / Stucco Sand
Mortimer Farms	Ash Creek	Aggregate Plant	Aggregates
Old Nevada	Mayer Onyx	Quarry	Stone, Dimension
Old Nevada	Mayer Schist	Quarry	Stone, Dimension
Paterno Stone Co.	Bluebell Quarry	Quarry	Flagstone
Pine Creek Mining, Inc Pipeco LLC.	Gold Basin	Placer	Gold
Prescott Dirt LLC	Red Rock	Aggregate Plant	Aggregates
Reay Brothers Excavation	Willow Creek	Screen Plant	Soil & Sand
Red Mountain Minerals LLC.	Reay Cornville	Aggregate Plant	Aggregates
Rock Cabin Mining	Rich Hill Claim Group	Screening Plant	Gold
Rock Ridge Quarries Inc.	Rock Cabin Gold	Placer	Gold
Salt River Materials	Rock Ridge Quarries	Quarry	Flagstone
Salt River Materials	Phoenix Cement Gypsum Mine	Open Pit	Gypsum
Schuck Sand & Rock	Phoenix Cement Plant	Cement Plant	Cement/Lime
South Pacific Tours	Schuck Pit Wickenburg	Aggregate Plant	Aggregates
	Fort Misery	Placer	Gold

Superstition Crushing LLC	Black Canyon City	Sand & Gravel	Rip/Rap
Swallow Mining LLC	Swallow Mine	Exploration	Copper
TBM Global LLC. aka Brinkley Mining Inc.	Brinkley Mine / Hackberry Claim	Screening Plant	Gold
United Verde Materials	United Verde Pit	Aggregate Plant	Aggregates
Vanderbilt Minerals	Lyle Mine	Open Pit Mine	Clay
Vast Mountain Development	Bender Millsite	Mill	Gold / Silica Sand
Yavapai County Public Works Dept.	Yavapai County	Aggregate Plant	Sand & Gravel

**Yuma**

<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
BLT Companies	BLT Materials Pit	Aggregate Plant	Aggregates
BLT Companies	BLT Batch Plant	Batch Plant	Concrete
BLT Companies	BLT Hot Plant	Hot Plant	Asphalt
Cemex	County 19	Aggregate Plant	Aggregates
Cemex	Hwy - 95 Plant	Aggregate Plant	Aggregates
Cal Mat dba Vulcan	Hwy - 95 Plant	Hot Plant	Asphalt
DPE Materials	Blaisedale Pit Yuma Pit	Aggregate Plant	Aggregates
DPE Materials	Blaisedale Hot Plant	Hot Plant	Asphalt
DPE	County 19 Hot Plant	Hot Plant	Asphalt
DPE Materials, Inc	County 19 Plant	Aggregate Plant	Aggregates
DPE Materials, Inc	Fortuna Pit 1	Aggregate Plant	Aggregates
H & S Developers, Inc.			
Luxcor Gold L.P.	Francher Project	Underground	Gold
Mohawk Rock, LLC	Mohawk Rock, LLC	Decorative Stone	Rip/Rap
Mohawk Rock LLC	Mohawk	Aggregate	Aggregates
Saguaro Concrete	Rock in Roll	Aggregate Plant	Aggregates
Tacna Sand & Gravel, LLC.	Roll Plant	Aggregate Plant	Aggregates
Yuma County Department of Public Works	Yuma Portable	Aggregate Plant	Aggregates

<b>Portable</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Aims Construction	Various Mine Sites	Custom Crushing	Aggregates
	Ashton Company	Various Mine Sites	Custom Crushing	Aggregates
	Ashton Company	Various Locations	Asphalt Plant	Asphalt
	AZ BEST	Walker Butte Granite Pit	Portable Screen Plant	Construction
	Baldwin Construction	Rock X	Aggregate Plant	Decorative
	Bray Construction	PC # 1 / # 2	Aggregate Plant	Sand & Gravel
	Buesing Corperation	Buesing Portable	Custom Crushing	Construction Materials
	C S & W Contractors	Various Mine Sites	Custom Crushing	Aggregates
	C. S. McCrossan	Portable Mining Equipment	Portable Aggregate Plant	Sand & Gravel
	C. S. McCrossan	Portable Hot Plant	Hot Plant	Asphalt
	Cemex Construction Materials	Portable Crushing & Screen	Crush & Screen	Aggregates
	Coconino County Public Works	County Wide Portable Screen Plant	Screen Plant	Cinders
	Drake Materials	Various Mine Sites	Crush & Screen	Aggregates
	Dalmolin Excavating	Various Mine sites	Custom Crushing	Aggregates
	Empire Excavation	(CM-2248 ADOT Pit)	Surface	Aggregates
	Environmental Response	Portable	Aggregate Plant	Aggregates
	Fann Contracting	Various Mine Sites	Custom Crushing	Construction
	Fann Contracting	Hot Plant 1 & 2	Hot Plant	Construction
	Fisher Industries, Southwest Industries	Various Mine Sites	Custom Crushing	Aggregates
	Fisher Industries, Southwest Industries	Various Mine Sites	Hot Plant	Asphalt
	FNF Construction	20-00254 for all Portable Crushing Statewide	Aggregate Plant	Aggregates
	FNF Construction	20-02238 H for all Asphalt Plants	Hot Plant	Asphalt
	Fort McDowell Yavapai Materials	Various Mine Site	Aggregate Plant	Decorative Stone

Granite Construction Company	Various Mine Sites	Custom Crushing	Rip/Rap
Granite Construction Company	Various Sites	Hot Plant	Asphalt
Granite Express, LLC	Statewide	Portable Aggregate Plant	Aggregates
Grey Mountain Construction	Statewide	Portable Hot Plant	Asphalt
Hanson Aggregates	Portable PC 54	Aggregate Plant	Aggregates
Hatch Construction & Paving Inc.	Various Mine Sites	Aggregate Plant	Aggregates
Interstate Rock Products, Inc	Indigo Ridge Project	Custom Crushing	Aggregates
Inspek Crushing US.	Plant One	Custom Crushing	Aggregates
Kessen & Kessen, Inc.	Various Sites / Portable	Custom Crushing	Revert Crushing
Kiewit Western Co.	Various Sites / Portable	Aggregate Plant	Aggregates
Kiewit Western Co.	Various Sites / Portable	Hot Plant	Asphalt
Maxus Construction	Portable #1	Crush & Screen	Aggregates
Material's Delivery Inc. (M.D.I.)	Various Sites/ Portable	Custom Crushing	Sand & Gravel
McCormick Construction	McCormick Portable Hot Plant	Hot Plant	Asphalt
Meadow Valley Contractors	Statewide Hot Plant	Hot Plant	Asphalt
Meadow Valley Contractors	Portable Plant	Custom Crushing	Aggregates
Mercury Constructors	Various Mine Sites	Surface	Aggregates
Mohave County Road Department	Kolman Portable	Open Pit Mine	Aggregates
Payson Concrete & Materials	Portable Plant	Portable Aggregate Plant	Aggregates
Perkins Cinders Inc.	Hall Pit	Custom Crushing	Aggregates
Prescott Dirt LLC	Various Mine Sites	Portable Screen	Aggregates
Progressive Contracting	Various Mine Sites	Custom Crushing	Aggregates

Quality Ready Mix	Portable Batch	Batch Plant	Concrete
Robson Ranch Construction S & M	Land Development	Custom Crushing	Aggregates
Construction Schuck Development	FMI Morenci	Custom Crushing	Aggregates
Smithco Enterprises	Various Locations	Aggregate Plant	Aggregates
Southwest Rock Products	Various Mine Sites	Custom Crushing	Silica/Slag
Superstition Crushing	Various Mine Sites	Aggregate Plant	Aggregates
Sundt Construction	Various Locations	Aggregate Plant	Aggregates
Sundt Construction	Portable Soil Cement Plant	Batch Plant	Soil Cement
Sundt Construction	Soil Cement Plant	Aggregate Plant	Soil Cement
Sun Valley Superstition Crushing	Various Mine Site	Aggregate Plant	Aggregates
Texas Canyon Rock & Sand	Various Location	Custom Crushing	Aggregates
Tonto Supply	Various Locations	Custom Crushing	Aggregates
Top Dog Materials	Various Locations	Custom Crushing	Aggregates
Town of Eagar	Various Mine Sites	Aggregate Plant	Aggregates
Tri County Materials	Various Mine Sites	Portable Aggregate Plant	Aggregates
TRI-R Constuction	Golden Vertex Moss Mine	Custom Crushing	Aggregates
United States Bureau of Reclamation	Portable	Crushing	Aggregates
US Forest Service	Various Pits Coconino, Kaibab NFS	Screening	Cinders
Wheeler Construction aka WCI Mining LLC.	Portable	Portable Aggregate Plant	Aggregates
White Mountain Cinders	Portable	Portable Screen	Cinders



## Education and Training

The Education and Training Department of the Arizona State Mine Inspector's Office (ASMI) provides the mandatory federal mine safety training to the Arizona mining community. The Mine Safety and Health Administration (MSHA) guidelines require that all miners under MSHA jurisdiction have initial and annual safety training classes. This training is provided to mine employees, contractors, vendors or individuals who enter onto mine properties.

The Arizona State Mine Inspector's training staff conducted the training with funding provided by the federal MSHA State Grants Program, state appropriations and class fees. In 2009, the Arizona State Mine Inspector was given authority to charge a fee by the Forty-ninth Legislative, First Regular Session, Chapter 63 Senate bill 1256. Title 27, Chapter 1, Article 2, Arizona Revised Statutes is amended by adding section 27-123, to read:

- A. The State Mine Inspector may adopt and collect education and training fees for the purpose of training miners in the state.
- B. The State Mine Inspector shall credit monies received for education and training purposes to the federal education and training fund, designated as the Arizona State Mine Inspector's account, to be used according to the Federal state grant rules, as appropriated.

In January of 2010 ASMI implemented a MSHA approved "Class Fee Program". These grants, allocations and fees gave ASMI trainers the ability to staff and to travel throughout Arizona with updated materials and equipment to provide quality training. With a revised and approved Part 48 Training Plan, ASMI conducts separate 8 hour Annual Refresher and 24 hour New Miner Inexperienced training sessions. The New Miner classes are conducted with "New Miners" only and specifically formatted sessions with a strong emphasis to new miner issues and content.

The ASMI trainer's issue certificates for CFR Parts 46 and 48: Annual Refresher (AR) Surface Coal, Metal or Non-Metal, AR Underground – all 8 hour class. New Miner Inexperienced (NMI) Surface Coal, Metal or Non-Metal - 24 hour class (3 days) and FA/CPR/BBP - 6 to 8 hour class.

Subject matter covered in these classes include: The Federal Mine Safety and Health Act – 1977. Code of Federal Regulation CFR Title 30: Parts - 46, 47, 48, 50, 56, 57, 62 and 70. The Mining Code of the State of Arizona which contains the Arizona Revised Statutes, Rules & Regulations. Other topics covered include: Mandatory Health & Safety Standards – Prevent Fatalities "Rules To Live By" – 2010 and 2011 MSHA Fatal-grams Review and Discussion - Statutory Rights and Responsibilities of Miners – "Miners Voice In the Workplace" - Authority & Responsibility of Supervisors & Miners Representatives - Drug & Alcohol Free Workplace Issues & Programs - Transportation and Communication Controls - Noise and Respiratory Health Standards - Mine Hazard Recognition - Prevention of Accidents - Ground Control Issues – Fall of Ground – Explosives - Electrical Hazards – Lock Out Tag Out - Hazard Communication – The Miners Right to Know - MSDS

(Chemical Hazards) - Emergency and Escape Procedures – Fire Prevention - Underground Hazards and Issues – Mine Gases – Surface Coal Mine Issues – U.S. and Arizona Mining History - Basic First Aid, CPR, BBP, AED, Shock, Control of Bleeding, & Body Injuries - Abandoned Mines Safety Awareness – “Stay Out Stay Alive”.

Students completing safety training in 2018

Miners	743
Contractors	1,835
Others	177
Total participants trained	2775

Of total participants trained, 113 received First Aid/CPR/BBP certifications.

Total certificates issued **3,486**

(Some participants received multiple certifications for CFR Part 48 & 46)

The Arizona State Mine Inspector’s Education and Training staff is dedicated to quality and professional training.

## **Abandoned Mines Inventory and Remediation**

The abandoned mine program responsibilities are to inventory abandoned mine sites throughout the 72, 931,840 acres that comprise the state of Arizona and to coordinate the closure of these mines. There have been 18,000 inventoried and 8,708 evaluated to date. This inventory and evaluation is critical, since abandoned mines may pose a serious threat to public’s health and safety. While many sites are shallow prospects, others have dangerous shafts and tunnels. During calendar year 2018 ASMI inventoried 3 new mines; secured 13 mine features; 2 of which were permanently backfilled and 11 were fenced and signed; 160 Notice of Violations were issued; 55 Corrective Actions were submitted; remaining 105 Notice of Violations with no response from private land owners or mining claimants.

Complaints are investigated as soon as possible following their receipt. If the mine is in an area previously inventoried the file is consulted to determine the conditions. A field crew is then detached to investigate the site, making a photographic record of the site and detailing the conditions found. The State Land Department, Bureau of Land Management and County Assessor’s Office is contacted for determination of the owner or claimant. A Notice of Violation are issued informing the owner of his legal responsibilities under the law. The owner must respond with corrective actions or plans within 60 days of notification. In the rare case of the owner not responding, the matter may be turned over to the county

prosecutor for further follow-up. Ownership or responsibility for abandoned mines is difficult or impossible to determine in some instances. When no responsible party can be found, the state must take responsibility for the mine closure.

### **Abandoned Mine Accidents**

John Waddell, a 62 year-old man fell 100ft into the El Tigre abandoned mine located 15 miles south of Eagle Eye Road, Aquila, Arizona. Mr. Waddell was injured and trapped in the mine from Monday, October 15, 2018 until rescued at approximately 7:00 PM on October 17, 2018. The rescue took 6 hours to extract Mr. Waddell from the mine. Mr. Waddell was transported to the hospital without life threatening injuries.

**Land Status:** BLM

No abandoned mine fatalities reported in calendar year 2018.

### **Mined Land Reclamation**

#### **Hardrock Mining Industry totals for 2018**

Since April 1997, the Arizona’s Mined Land Reclamation Act (A.R.S. § 27-901 et. seq.) and the rules per Arizona Administrative Code (A.A.C. R11-2-101 et. seq.), requires all metalliferous mines with surface disturbances on private land to submit reclamation plans and financial assurance mechanisms to the State Mine Inspector for review and approval. The mine owners/operators with approved plans are required, by rule, to submit annual status report updates. In 2018, the following sites reported an approximate 837.28 acres of new disturbances during this reporting period. Per the reportable mine sites for the metalliferous (hard rock) mining industry, the State Mine Inspector estimates approximately 75,558 acres have been disturbed through 2018, with an approximate estimate of 627 acres of private mined lands having been reclaimed by most these reporting mine sites.

<b>Mining Company</b>	<b>Mine Site</b>	<b>Disturbed Acres 2018</b>	<b>Total Acres Reclaimed</b>	<b>Total Acres Disturbed</b>
Gold Road Mining Corp	Gold Road	0	0	24.2
Excelsior Mining	Gunnison	-	-	-
Excelsior Mining	Johnson Camp	-	-	-
ASARCO	Hayden	-	-	3754
ASARCO	Mission	0	0	8357.82
ASARCO	Ray	13.6	-	9170.6

ASARCO	Ripsey Wash	-	-	0
Silver Bell Mining, LLC	Silver Bell	55	0	2011
BHP Billiton	Miami Unit	-	-	560
Pinto Valley Mining Corp	Pinto Valley	-	382.8	3767.5
Resolution Copper (old magma)	Superior	0	0	103
Carlota Copper Co.	Carlota	0	203	904
Origin Mining Company	Mineral Park	0	0	1225.5
Arizona Minerals Inc.	Hermosa	-	-	513.5
	Taylor			
	Deposit			
	Exploration			
Freeport-McMoRan Mining	Bagdad	170	0	7959.7
Freeport-McMoRan Mining	Miami	5	0	4702
Freeport-McMoRan Mining	Morenci	322.68	0	17025.68
Freeport-McMoRan Mining	Sierrita	4	0	10087.06
Freeport-McMoRan Mining	Twin Buttes	0	0	1452.2
Freeport-McMoRan Mining	Safford	243	0	3621
Golden Vertex	Moss Mine	0	0	101.54
Rosemont Copper Company		0	40.6	9.1
Vulture Peak Holdings	Vulture Mine	24	1	208.746
	<b>Totals</b>	<b>837.28</b>	<b>627.4</b>	<b>75,558.15</b>

### **Aggregate Mining Industry Totals for 2018**

Since January 2007, the Arizona's Mined Land Reclamation Act, Arizona Revised Statutes (A.R.S.) § 27-1201 et. seq. required all aggregate mines (sand & gravel), with five or more acres of disturbance on private land, to submit reclamation plans and financial assurance mechanisms to the State Mine Inspector for review and approval. Currently 201 aggregate mining sites have an approved reclamation plan through the Reclamation Division of the State Mine Inspector Agency.

In accordance with A.R.S. § 27-1277, (enacted in 2010), the Aggregate Mine owner/operators with approved plans are required to submit annual status report updates. The annual status updates (received in 2017-2018), reported that an approximate 34.37 acres of mined lands were reclaimed for 2018, and 192 acres of new disturbance were

reported during this period. As reported by the mine sites in the Aggregate (sand & gravel) mining industry, during the 2018 reporting period, the aggregate industry is continuing to rebound along with Arizona's construction industry.

The Arizona State Mine Inspector estimates the following reported totals with approximately 50,034 acres of private land have been approved for the potential of aggregate industry utilization, and is estimated for future land disturbance. Currently, 19,277 acres have been reportedly disturbed through all reportable years, with an approximate estimate of 1,616 acres of private mined lands having been reclaimed.

Note: Disclaimer about Information Accuracy: Although every effort is made to provide complete and accurate information, due to lack of resources and mine data backlog, the Arizona State Mine Inspector's Office makes no warranties, express or implied, or representations as to the accuracy of content of this report.

