

OFFICE OF THE  
ARIZONA STATE MINE INSPECTOR



ONE-HUNDRED and TENTH  
ANNUAL REPORT  
for  
CALENDAR YEAR 2021

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ANNUAL MESSAGE FROM  
PAUL D. MARSH



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 703 Mines and Contractors during 2021; 559 of the mining operations and 144 of the contractors were inspected which resulted in a 100% 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 2021, one fatal accident at active mine site was reported and investigated by the Arizona State Mine Inspector's Office. The Arizona NFDL (non-fatal days lost time) rate was 1.8 per 200,000 hours of work and the 2021 National NFDL rate was 1.4 per 200,000 hours of work. The Inspections department issued 457 notices of violations; 2 cessation orders were required during 2021. ASMI Inspector's investigated 16 employee, agency referral and citizen complaints, issued 37 mine elevator operating permits and 72 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 2021, 1805 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 10,000 abandoned mines have been inventoried since the program was initiated in the early 1990's and over 9,228 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 2021, the inspection team performed 703 health and safety inspections, which identified 457 violations of the mining code for corrective actions by the mine operators. Two Cessation Orders were issued to mine operators in 2021.

<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	90	147	9058	53
Rock Products, Sand & Gravel, Pits, Quarries, Batch and Hot Plants	442	222	3010	500
Underground Mines	27	28	227	15
<b>Contractor Totals</b>	144	60	N / A	619
<b>Mine Totals</b>	559			568
<b>TOTALS</b>	<b>703</b>	<b>457</b>	<b>12295</b>	<b>1187</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 37
- Underground Diesel Equipment with Permits Issued 72
- Citizen Complaints Investigated 9
- Employee Complaints Investigated 4
- Agency Referral Complaint Investigated 3
- Electrical Equipment Installations 4
- Non Inspection Visits 4
- Cessation Orders Issued 2

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>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
National Accident Incidence Rate	1.45	1.45	1.45	1.3	1.4
Arizona Accident Incidence Rate	1.5	1.6	2.2	1.9	1.8

**LOST TIME ACCIDENTS IN 2021**

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

	Freeport McMoran	Bagdad	1
	Freeport McMoran	Morenci	6
	Freeport McMoran	Miami	1
	Freeport McMoran	Sierrita	1
	Freeport McMoran	Safford	1
	Drake Cement	Drake	1
	SRMG	Phoenix Cement	1

**Struck By or Against**

	Adelphi Construction	Drake Cement	1
	Asarco	Silver Bell	1
	Custom Landscape	Bighorn	1
	Drake Materials	Queen Creek	1
	H&S Field Services	FMI Sierrita	1
	Freeport McMoran	Bagdad	3
	Freeport McMoran	Miami	3
	Freeport McMoran	Morenci	1
	Freeport McMoran	Safford	1
	Pinto Valley Mining	Pinto Valley	1
	Rio Aggregate Services	Black Mountain Farms	1

SRMG	Glendale	1
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**Contact With or By**

Freeport McMoran	Smelter	3
Freeport McMoran	Sierrita	6
Freeport McMoran	Safford	1
Freeport McMoran	Morenci	3
Pinto Valley Mining	Pinto Valley	1

**Caught On or In or Between**

Asarco	Ray	1
Calportland	New River	1
H&S Field Services	Pinto Valley	1
Freeport McMoran	Bagdad	2
Freeport McMoran	Safford	1
Freeport McMoran	Morenci	5
Freeport McMoran	Miami	3
Florence Copper	Florence	1
Granite Construction	Swan	1
SRMG	Glendale	1

**Fall from the Same Level or Below**

Asarco Inc.	Mission	1
Asarco Inc.	Ray	1
Custom Landscape	Belmont	1
Freeport McMoran	Bagdad	3
Freeport McMoran	Safford	2
Freeport McMoran	Sierrita	1
Freeport McMoran	Morenci	4
Pinto Valley Mining	Pinto Valley	2

**Exposure or Occupational Illness**

Freeport McMoran	Bagdad	1
Freeport McMoran	Safford	1
Freeport McMoran	Morenci	1
Lhoist North America	Nelson Quarry	1

**FATAL ACCIDENTS**



One Fatal Accident occurred at Arizona Mine Sites during 2021.

On September 15, 2021 at approximately 9:12 am Mr. Cleveland Sloan, a 33 year old married male from Tonalea, Arizona was found unconscious and unresponsive after he had crawled 40 feet into a 30 inch stainless steel pipe. Mr. Sloan was employed with PVB Fabrications, a contractor at Freeport McMoran Morenci open pit mine site. Mr. Sloan was transported to the Gila Health Resources in Morenci, Arizona where he was pronounced deceased. Mr. Sloan was current in ASMI required mine training.

From 1912 to 2021, Arizona Mines claimed 1,570 lives. 1918 alone cost 93 lives.

1994, 2003, 2014, 2018 and 2019 are the only years when Arizona had no fatalities.

## 2021 Operating Mines in Arizona by County

The following pages contain operating mines, plants and smelters considered active in 2021. These figures represent some 568 operating units with over 12,295 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	Aggregate Plant	Aggregates
	Apache County Engineering	Stanford Pit	Aggregate Plant	Cinders
	Town of Eager	Eager 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
	Arcosa White Mountain Rock Products	Barth Pit	Aggregate Plant	Aggregates
	Arcosa 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
	Empire Homes, Inc.	Babacomari Pit	Aggregate Plant	Aggregate
	Freeport McMoran Copper & Gold	Copper Queen	Reclamation	Copper
	Bisbee Fisher S&G	Sharpshooter	Aggregate Plant	Aggregates
	Fisher S&G	Turkey Creek Pit	Aggregate Plant	Aggregates

FNF Construction	Lum Road	Aggregate Plant	Aggregates
Granite Construction Company	Babocomari Pit	Aggregate Plant	Aggregates
KE&G Construction	Cemex Plant 229	Hot Plant	Asphalt
Hayhook Sand & Gravel	Hayhook	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
Southwest Valley Construction	Douglas	Aggregate Plant	Aggregates
St. Cloud Zeolite	Grace and Cholla Zeolite Mine	Quarry	Zeolite- Chabazite
Strong Hold Redi-Mix	Grim	Aggregate Plant	Aggregates
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

<b>Coconino</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	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
	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 Cinders Sales	Wildcat Hill Pit	Open Pit Mine	Cinders
	Coconino County Public Works	Sheep Hill	Open Pit Mine	Cinders
	Drake Stone	Diamond 7 Red	Quarry	Flagstone
	Drake Stone	Diamond 7 Oak	Quarry	Flagstone
	Dunbar Stone	Redbird Quarry / Billy 1&2	Quarry	Flagstone
	Dunbar Stone	Armstrong Rose / Blue Jay	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	Aggregates
Flagstaff Concrete Products, LLC.	Fisher Pit 1A & A1	Open Pit Mine	Aggregates
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	Mills & West Quarry	Quarry	Flagstone
Howard Mesa Materials	Howard Mesa	Open Pit	Aggregates
Haines Flagstone LLC	Million \$ Buff / Rosa	Quarry	Flagstone
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	Aggregates
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
USDA Forest Service	Oak Grove/ Moonset	Open Pit	Aggregates
Vulcan Materials	Gray Mountain Plant	Hot Plant	Asphalt

**Gila**

<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
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
Freeport McMoran Miami	Harrington Ranch	Aggregate Plant	Aggregates
Freeport McMoran Miami	Patullo Pit	Aggregate Plant	Aggregates
Goat Creek Mining	Goat Creek Star Valley	Aggregate Plant	Decorative Stone

	Hunt Materials	Hunt Young Plant	Aggregate Plant	Aggregates
	Hunt Materials	Young Batch Plant	Batch Plant	Concrete
	Kessen & Kessen Inc.	Lime Quarry	Aggregate	Lime
	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 Batch Plant	Batch Plant	Concrete
	CKC Construction	Airport Hot Plant	Hot Plant	Asphalt
	FNF Construction	Foote Pit	Aggregate Plant	Aggregates
	Freeport McMoran Safford	FMI Safford Operations	Open Pit	Copper
	Tri County Materials	Morris Pit # 1	Aggregate Plant	Aggregates
	Tri County Materials	Safford Batch Plant	Batch Plant	Concrete
	Tri County Materials	Dos Condados Pit	Aggregate Plant	Aggregates
<b>Greenlee</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Freeport McMoran Greenlee County	Morenci Mine Viriden Pit	Open Pit Aggregate Plant	Copper Aggregates
	Mineral Acquisitions	Cotton Gin	Aggregate Plant	Aggregates
	Oakcreek Sand & Gravel	Old Viriden 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
Bonanza Mining Company	Harquahala Mine	Surface	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
	Airpark 30	Happy Valley	Aggregate Plant	Aggregates
	Arizona Materials	Plant #4 - Buckeye Plant	Surface	Sand & Gravel
	Arizona Materials	Plant #4 - Buckeye Batch Plant	Batch Plant	Concrete
	Arizona Materials	Plant # 7 Glendale	Batch Plant	Concrete
	Arizona Materials	Batch plant # 1 - 43rd Ave. & Lower Buckeye	Batch Plant	Concrete
	Arizona Materials	Plant # 1 - 43rd Ave. & Lower Buckeye	Aggregate Plant	Aggregates
	Arizona Metro Mix	North Batch Plant	Batch Plant	Concrete
	Arizona Metro Mix	West Batch Plant	Batch Plant	Concrete
	Arizona Native Aggregates	ARMCO Beloat	Aggregate Plant	Aggregates
	Arizona Native Aggregates	Beloat Batch Plant	Batch Plant	Concrete
	Cal Mat Co dba Vulcan Materials	Plant 5224 19 <sup>th</sup> Ave	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 43	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	Broadway Batch Plant	Batch Plant	Concrete
Calportland	Sun City	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	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	Aggregate Plant	Aggregates
Cemex	Table Mesa Plant	Aggregate Plant	Decorative Stone
Cemex	67 <sup>th</sup> Ave. Plant	Aggregate Plant Plant	Aggregates
Cemex	75 <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	West Plant # 40311	Batch Plant	Concrete
Cemex	Lehi Plant # 76	Aggregate Plant	Sand & Gravel
Cemex	El Mirage @ Indian School	Aggregate Plant	Aggregates
Circle H West LLC.	Circle H West	Aggregate Plant	Sand & Gravel
Core Ready Mix LLC	Plant #2 Sun City	Batch Plant	Concrete
Core Ready Mix LLC	Plant #3 Buckeye	Batch Plant	Concrete
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
Custom Landscape Materials	Turner North	Aggregate Plant	Decorative Stone
Damavand Trading LLC.	51st Avenue	Aggregate Plant	Aggregates
Desert Aggregates	Desert Plant 1	Aggregate Plant	Aggregates
Desert Ready Mix, LLC.	Buckeye Batch Plant	Batch Plant	Concrete
Desert Rock Products	New River Pit	Aggregate Plant	Decorative Stone
Desert Ready Mix, LLC.	ABC Plant	Batch Plant	Concrete
Diamondback Sand & Rock	Diamondback Materials	Aggregate Plant	Aggregates
Diamondback Materials	Diamondback Batch Plant	Ready Mix	Concrete
Drake Materials	Higley	Aggregate Plant	Sand & Gravel
Drake Materials	Glendale	Aggregate Plant	Sand & Gravel
Ewing fka American Sand & Rock	Cat Claw Mine	Aggregate Plant	Decorative Stone
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	Paloma	Aggregate	Aggregates
FNF Construction	Gillespie	Aggregate	Aggregates
FNF Construction	Sentinel 135 Material Source	Aggregate	Aggregates
Martin Marietta dba 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	Batch Plant	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
Lafarge N. America	Sun City	Surface	Sand & Gravel
M.R. Tanner Mining, Inc.	West Side Pit	Aggregate Plant	Aggregates
Madison Granite	Madison Granite Pit	Aggregate Plant	Granite/Decorative Stone
Melluzoo Trust	Melluzoo Cave Creek	Aggregate	Aggregates
Mobile Mix	Granite Reef Dam	Surface	Aggregates
Morton Salt, K+S	Glendale	In-Situ	Salt
Paloma Ready Mix and Materials	Old 80 Main Plant	Aggregates	Aggregates
Pioneer	Buckeye Hills	Aggregate	Decorative Stone
Pioneer Landscape	Berkley Pit/Pit #2	Aggregate Plant	Decorative Stone
Pioneer Sand Company	Pioneer Hassayampa	Aggregate Plant	Aggregates
JII Pioneer Inc	Buckeye Hills Quarry	Aggregate Plant	Aggregates
JII Pioneer Inc	Ewing	Aggregate Plant	Aggregates
Red Mountain Mining	Red Mountain Quarry	Aggregate Plant	Decorative Stone
Reserve Bank Rock Solid, Inc	Reserve Bank LaFarge Sun City	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
Arcosa fka Southwest Rock Products	Peoria Pit	Aggregate Plant	Aggregates
Arcosa fka Southwest Rock Products	Northern	Aggregate Plant	Aggregates
Arcosa fka Southwest Rock Products	Eagle Mountain	Aggregate Plant	Aggregates

Superstition Crushing fka Stodghill & Sons Sun Land Materials Superstition Crushing Vulture Mining Company Vulture Peak Holdings Inc. West Coast Aggregate Western Aggregates LLC.	Table Mesa  Laveen  Deer Valley Plant  New Vulture  Vulture Mine  West Coast Aggregate  Plant 41	Aggregate Plant  Aggregate Plant  Aggregate Plant  Placer  Open Pit  Aggregate Plant  Aggregate Plant	Aggregates  Sand & Gravel  Aggregates  Gold  Gold  Sand & Gravel  Sand & Gravel
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<b>Mohave</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Bones Stones and Sand Bryce Christensen	Bones Stone and Sand South Pit	Aggregate Plant Aggregate Plant	Aggregates Aggregates
	C.S. McCrossan	Cedar Hills	Aggregate Plant	Aggregates
	C.S. McCrossan dba Mineral Park Materials Cal Mat dba Vulcan Cemex USA	Cedar Hills  Bullhead Hot Plant  Bullhead City Pit,	Hot Plant  Hot Plant  Aggregate Plant	Asphalt  Asphalt  Aggregates
	Cemex USA Certainteed Gypsum Chase Crushing aka Vista Chase Crushing aka Vista City of Bullhead	Bullhead City Batch Plant, Black Rock  White Hills  Regal Mist  Powerscreen	Batch Plant Quarry  Aggregate Plant Aggregate Plant Aggregate Plant	Concrete Gypsum  Decorative Stone Decorative Stone Aggregates
	Colorado City Public Works Cornco Excavation	Colorado City Victoria Farms	Aggregate Plant Aggregate Plant	Aggregates Aggregates
	D. L. Campbell	Sand Pit Road	Aggregate Plant	Aggregates
	D. L. Campbell D. L. Campbell	Sand Pit Hot Plant Airport Pit	Hot Plant Aggregate Plant	Asphalt Sand & Gravel
	D.L. Campbell Company Daryll Lynnes Dayton Lundy Rock Desert Construction	Hackberry  Rising Fawn Dayton Lundy Rock Pit # 2  Hualapai Pit - Rossllynn Rd. Pit	Aggregate Plant Surface Aggregate Plant Aggregate Plant	Sand & Gravel  Gold & Silver Decorative Stone 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 FNF Construction	Hualapai Chocolate Blake Ranch Source	Quarry Aggregate Plant	Flagstone Aggregates
FNF Construction	Big Sandy 1 & 2	Aggregate Plant	Aggregates
Freiday Construction	Rattlesnake Wash Pit	Aggregate Plant	Aggregates
Fisher Sand & Gravel Georgia Pacific Gypsum LLC	Silverado Material Source	Aggregate Plant	Aggregates
Gold Road Mining Golden Valley Rock & Materials LLC	Black Rock Gold Road Mine Golden Valley	Quarry Underground Aggregate Plant	Gypsum Gold Aggregates
Golden Vertex Corporation	Moss Mine	Open Pit	Gold
JDI Enterprises	DW Ranch Road Pit	Aggregate Plant	Aggregates
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 Turquoise	Mineral Park	Crush & Screen	Turquoise
Las Vegas Paving	White Hills	Aggregate Plant	Aggregates
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	Aggregates
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
	The Gravel Pit	Sand Pit	Aggregate Plant	Aggregates
	Tri Sun Engineering	London Bridge Road Pit	Screening Plant	Aggregates
<b>Navajo</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	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
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
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.	Mission Unit	Open Pit	Copper
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	Cross Hill	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	Swan Batch Plant	Batch Plant	Concrete
Calportland	Poor Man	Batch Plant	Concrete
Calportland	Empire Mountain	Quarry	Limestone

Calportland Company fka Arizona Portland Cement	Rillito Mill	Cement Plant	Cement/Lime
Calportland Company fka Arizona Portland Cement	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	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
Hudbay dba 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
University of Arizona	San Xavier Mining Laboratory	Mine	Training
Vulcan Materials	Green Valley	Training Lab Aggregate Plant	Aggregates

<b>Pinal</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	Vulcan Materials	Green Valley	Batch Plant	Concrete
	Arcosa Aggregates fka Southwest Rock Products	Queen Creek / Plant 3 aka Oliver	Aggregate Plant	Aggregates
	Arcosa Aggregates	Queen Creek / Plant 1 & 2	Aggregate Plant	Aggregates
	Arcosa Aggregates	Coolidge Plant 1 & 2	Aggregate Plant	Aggregates
	Arizona Materials	Plant #2 Queen Creek	Batch Plant	Concrete
	Arizona Metro Mix	Arizona Metro Mix # 1	Batch Plant	Concrete
	Arizona White Rock	Arizona White Rock	Open Pit	Calcium Carbonate
	ASARCO, Inc.	Ray Operations	Open Pit	Copper
	Calmat dba Vulcan Materials	Coolidge Hot Plant	Hot Plant	Asphalt
	CalPortland Company	Coolidge Batch Plant	Batch Plant	Concrete
	CalPortland Company	Coolidge .	Aggregate Plant	Sand & Gravel
	CalPortland Company	Queen Creek	Batch Plant	Concrete
	CalPortland Company	Diablo	Aggregate Plant	Sand & Gravel
	Calportland Company	Diablo Batch Plant	Batch Plant	Concrete
	CalPortland	San Tan	Batch Plant	Concrete
	CalPortland Company	Queen Creek	Batch Plant	Concrete
	CalPortland Company	White Cross Mine	Open Pit	Gypsum
	Cemex USA	UM Plant 449 Casa Grande	Batch Plant	Concrete
	Cemex USA	UM Plant 449 Casa Grande	Aggregate Plant	Aggregates
	Cemex USA	UM Plant 449 Casa Grande	Hot Plant	Asphalt
	Cemex USA	Plant # 142, Queen Creek	Aggregate Plant	Aggregates
	Cemex USA	Queen Creek Plant 406	Aggregate Plant	Aggregates
	Cemex USA	Queen Creek Plant 65	Batch Plant	Concrete
	Cemex USA	Coolidge Plant	Aggregate Plant	Aggregates
	Cemex USA	Plant # 142, Queen Creek	Batch Plant	Concrete
	Cemex USA	Mammoth	Aggregate	Aggregates
	Cemex USA	UM Plant 46 17685 N. Tanner Road	Aggregate	Aggregates
	Cemex USA	Coolidge Plant	Batch Plant	Concrete
	Core Ready Mix	Queen Creek	Batch Plant	Concrete
	Decorative Rock Sales	Little Hill Mine	Decorative Stone	Decorative Stone
	Drake	Queen Creek Plant	Wash Plant	Aggregates
	Fisher Sand & Gravel, Inc.	Florence Pit	Aggregate Plant	Sand & Gravel
	Fisher Sand & Gravel, Inc.	Florence Pit	Hot Plant	Asphalt

Florence Copper, Inc.	Florence	In-Situ	Copper
FNF Construction	Thornton Material Source	Aggregate Plant	Aggregates
Gila Rock Products, LLC	Reymert - Superior	Aggregate Plant	Decorative Stone
Martin Marietta dba 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
Montgomery	Montgomery Pit	Aggregate Plant	Aggregates
Gold Bond Building	Feldman	Open Pit Mine	Gypsum
Old Wasp Mine OMYA CA, Inc.	Old Wasp Mine Omya Az.	Placer Quarry	Gold & Silver Marble
P & P Materials LLC	P & P Materials	Aggregate Plant	Aggregates
Pioneer Landscape fka Granite Express	Big Nob Pit 3	Aggregate Plant	Decorative Stone
Peoria Lakes LLC	Queen Creek Gary Road	Aggregate Plant	Decorative Stone
PR 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
Robson Ranch	Robson	Aggregate Plant	Aggregates



	Rock Pros fka Granite Express Smithco Enterprises	Pit 1 Mineral Mountain Bobbit Pit	Aggregate Plant Open Pit Mine	Decorative Stone Aggregates
	Superior Materials	Albo Guzman	Aggregate Plant	Aggregates
	Tee Pee Sand & Gravel	Tee Pee	Aggregate Plant	Sand & Gravel
	Treasure Chest Mining	Treasure Chest Pit	Aggregate Plant	Decorative Stone
	Vulcan Materials Vulcan Materials	Queen Creek Queen Creek	Hot Plant Aggregate Plant	Asphalt Aggregates
<b>Santa Cruz</b>	<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 Damians Materials	Rio Rico Batch Plant Aqua Fria #2	Batch Plant Aggregate Plant	Concrete Aggregates
	A.G.E Construction	Rio Rico Plant	Aggregate Plant	Aggregates
	Southern Arizona Sand & Gravel	Josephine Canyon Pit	Aggregate Plant	Aggregates
<b>Yavapai</b>	<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	Decorative Stone
	Bedrock Landscape Materials	Bedrock 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 Cemex	Prescott Valley Prescott Valley	Hot Plant Aggregate Plant	Asphalt Aggregates
	Cemex Cemex Charter Materials	Chino Valley Prescott Valley Plant 100	Batch Plant Batch Plant Aggregate Plant	Concrete 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	Far North Oak	Surface	Flagstone
Earth Resources	Henrickson Mine	Screen Plant	Aggregates
Fisher Sand & Gravel	Crookton / Juniper Ranch	Aggregate Plant	Aggregates
Flintstone Industries Inc.	Dewey Pit	Surface	Decorative Stone
Freeport McMoran Bagdad	Bagdad Mine	Open Pit	Copper
Gold Paradise Peak Inc.	Azurite-Senator Mine	Open Pit	Gold
Got Rocks	Schuck Pit Wickenburg	Aggregate Plant	Aggregates
Granite Mountain Materials aka RAC	Dosie Pit	Aggregate Plant	Decorative Stone
Martin Marietta dba Hanson	Yavapai Airport Pit	Aggregate Plant	Aggregates
Aggregates Hanson	Clarkdale Hot Plant	Hot Plant	Asphalt
Aggregates Hanson	Yavapai Airport Batch Plant	Batch Plant	Concrete
Aggregates Hanson	Clarkdale Plant	Aggregate Plant	Aggregates
Aggregates Hanson	Clarkdale Batch Plant	Batch Plant	Concrete
Harley Gray Stone	Partridge & Red Quarries	Quarry	Flagstone
Henrietta Mine LLC	Henrietta Mine	Open Pit	Gold
High View Sand & Gravel	High View	Aggregate Plant	Aggregates
Just Stone	Brown Schist Quarry	Quarry	Building Stone
Boral Materials & Kirkland Mining Company	Kirkland	Quarry	Pozzolon
Ligon Excavation	Camp Verde	Aggregate Plant	Aggregates
Luckys Rock Farm	Luckys	Aggregate	Decorative Stone
Material Delivery Inc.	Dewey Pit	Aggregate Plant	Decorative Stone
McGuireville	McGuireville Borrow Pit	Borrow Source	Aggregates
MDG Resources	Rhea Placer Claims	Screening Plant	Gold
Mendoza Quarry	Mendoza Quarry	Quarry	Flagstone
Metallicus	Weaver Creek	Screen	Gold
MCDI Mineral Consultant & Development	Alvarado Mine	Screen	Gold / Stucco Sand

Mortimer Farms	Ash Creek	Aggregate Plant	Aggregates
Old Nevada	Mayer Onyx	Quarry	Stone, Dimension
Old Nevada	Mayer Schist	Quarry	Stone, Dimension
Pine Creek Mining	Gold Basin	Placer	Gold
Pioneer Landscaping Materials	Smokestack Quarry	Aggregate Plant	Decorative Stone
Pipeco LLC.		Aggregate Plant	Decorative Stone
Prescott Dirt LLC	Red Rock	Screen Plant	Soil & Sand
Reay Brothers Excavation	Willow Creek	Aggregate Plant	Aggregates
Red Mountain Minerals LLC.	Reay Cornville	Screening Plant	Gold
Rock Cabin Mining	Rich Hill Claim Group	Placer	Gold
Rock Pros USA	Rock Cabin Gold	Aggregate Plant	Aggregates
	Mayer Pit / Lower Bell	Quarry	Flagstone
Rock Ridge Quarries Inc.	Rock Ridge Quarries		
Salt River Materials	Phoenix Cement Gypsum Mine	Open Pit Cement Plant	Gypsum Cement/Lime
Salt River Materials	Phoenix Cement Plant	Placer	Gold
South Pacific Tours	Fort Misery	Aggregate Plant	Aggregates
Star Placer dba Big Bug Sand & Gravel	Star Placer	Sand & Gravel	Aggregates
Superstition Crushing LLC	Black Canyon City	Exploration	Copper
Swallow Mining LLC	Swallow Mine	Screening Plant	Gold
TBM Global LLC. aka Brinkley Mining Inc.	Brinkley Mine / Hackberry Claim		
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	Aggregates

<b>Yuma</b>	<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
	CalMat dba Vulcan DPE Materials	Hwy - 95 Plant	Hot Plant	Asphalt
		Blaisedale Pit Yuma Pit	Aggregate Plant	Aggregates

	DPE Materials DPE Materials, Inc DPE Materials, Inc	Blaisedale Hot Plant County 19 Hot Plant County 19 Plant	Hot Plant Hot Plant Aggregate Plant	Asphalt Asphalt Aggregates
	H & S Developers	Fortuna Pit 1	Aggregate Plant	Aggregates
	Luxcor Gold L.P. Mohawk Rock Saguaro Concrete	Francher Project Mohawk Rock in Roll	Underground Aggregate Aggregate Plant	Gold Aggregates Aggregates
	Tacna Sand & Gravel, LLC. Yuma County Department of Public Works	Roll Plant  Yuma Portable	Aggregate Plant Aggregate Plant	Aggregates  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
	Arcosa fka Southwest Rock Products Ashton Company	Various Locations Portables  Various Mine Sites	Aggregate Plant	Aggregates
	Ashton Company	Various Locations	Custom Crushing Asphalt Plant	Aggregates  Asphalt
	AZ BEST	Walker Butte Granite Pit	Portable Screen Plant	Construction
	Baldwin Construction Buesing Corperation C S & W Contractors C. S. McCrossan	Rock X  Buesing Portable  Various Mine Sites  Portable Mining Equipment	Aggregate Plant Custom Crushing Custom Crushing Portable Aggregate Plant	Decorative  Construction Materials Aggregates  Sand & Gravel
	C. S. McCrossan Cemex Construction Materials	Portable Hot Plant Portable Crushing & Screen	Hot Plant Crush & Screen	Asphalt Aggregates
	Coconino County Public Works	County Wide Portable Screen Plant	Screen Plant	Cinders
	Con Roc Ready Mix Drake Materials	Various Mine Sites  Various Mine Sites	Batch Plant	Concrete
	Dalmolin Excavating	Various Mine sites	Crush & Screen Custom Crushing	Aggregates  Aggregates
	Desert Rock Products	Various Mine sites	Custom Crushing	Aggregates
	Empire Excavation Environmental Response	(CM-2248 ADOT Pit) Portable	Surface Aggregate Plant	Aggregates Aggregates

Fann Contracting	Various Mine Sites	Custom Crushing	Construction
Fann Contracting	Hot Plants 3 & 4	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	Portable Crushing Statewide	Aggregate Plant	Aggregates
FNF Construction	Asphalt Plants Statewide	Hot Plant	Asphalt
Fort McDowell	Various Mine Sites	Aggregate Plant	Decorative Stone
Yavapai Materials	Various Mine Sites	Aggregate Plant	Aggregates
Cila Concrete LLC	Various Mine Sites	Aggregate Plant	Aggregates
Granite Construction Company	Various Mine Sites	Custom Crushing	Rip/Rap
Granite Construction Company	Various Sites	Hot Plant	Asphalt
Rock Pros USA,	Statewide	Portable Aggregate Plant	Aggregates
Martin Marietta dba Hanson Aggregates	Portable	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. Maxus Construction	Various Sites / Portable Portable #1	Hot Plant Crush & Screen	Asphalt 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
McDonald Bros Construction	Portable Plant	Custom Crushing	Aggregates
Meadow Valley Contractors	Portable Plant	Custom Crushing	Aggregates
Mercury Constructors	Various Mine Sites	Surface	Aggregates
MLC Services	Portable Plant	Custom Crushing	Aggregates

Mohave County Road Department	Kolman Portable	Aggregate Plant	Aggregates
NGU Contracting, Inc.	Portable Plant	Aggregate Plant	Aggregates
NGU Contracting, Inc.	Portable Hot Plant	Hot Plant	Asphalt
Payson Concrete & Materials	Portable Plant	Aggregate Plant	Aggregates
Perco Rock Products	Various Mine Sites	Aggregate Plant	Aggregates
Perkins Cinders Inc.	Hall Pit-Statewide	Custom Crushing	Aggregates
Pioneer Landcaping	Various Mine Sites	Aggregate Plant	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
Rock Biter	Various Mine Sites	Custom Crushing	Aggregates
Rummel Construction	Various Mine Sites	Custom Crushing	Aggregates
Swapp fka S & M Construction	FMI Morenci	Custom Crushing	Aggregates
Schuck Development	Various Locations	Aggregate Plant	Aggregates
Smithco Enterprises	Various Mine Sites	Custom Crushing	Silica/Slag
Solterra	Portable Hot 1, 2 & 3	Hot Plant	Ashpalt
Southern Arizona Sand and Gravel	Various Locations	Aggregate Plant	Aggregates
Superstition Crushing	Various Locations Portables	Aggregate Plant	Aggregates
Sundt Construction	Portable Soil Cement Plant	Batch Plant	Soil Cement
Sun Valley Mining Co	Various Mine Site	Aggregate Plant	Aggregates
Texas Canyon Rock & Sand	Various Locations	Custom Crushing	Aggregates
Tonto Rock	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 Construction	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. White Mountain Cinders	Portable  Portable	Portable Aggregate Plant Portable Screen	Aggregates  Cinders
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## 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 2021

Miners	689
Contractors	1,099
Others	17
Total Participants Trained	1,805

Of Total Participants Trained, 124 received First Aid/CPR/BBP certifications.

The COVID-19 continued into 2021 and has had an effect on the total participants as it related to social distancing. This resulted in smaller classroom requirements. Participants trained in 2021 were 163 less than 2020.

A total of 436 participants received an MSHA Part 48 certificate of training and/or a State of Arizona document of training under part 46.

Total Certificates Issued	2,241
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(Some participants received multiple certifications for CFR Part 48 & 46)

In past years and into 2012, ASMI has received a great appreciation and acknowledgement from mine operators, contractors and others for the quality and consistency of training. Providing this service allows some miners the needed training to continue working and others a step into the door of a potential mining job. The Arizona State Mine Inspector’s Education and Training staff is dedicated to quality and professional training. ASMI trainer’s priority is to relay and remind in an honest, understanding and forceful manner to all miners of our greatest responsibility. That greatest responsibility is the goal of beginning and completing a good safe day of work, taking care of number one, care of co-workers and returning home to family and friends.



## **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 10,000+ inventoried and 9,228 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 2021 ASMI inventoried 23 new mines; 4 mines was fenced and signed; 36 Notice of Violations were issued; 0 Corrective Actions were submitted; the remaining 36 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 is 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**

No serious incidents or fatalities reported in calendar year 2021.

## **Mined Land Reclamation**

### **Hardrock Mining Industry totals for 2021**

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 2021, the following sites reported an approximate 328 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 81,051 acres

have been disturbed through 2021, with an approximate estimate of 862.7 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 2021</b>	<b>Total Acres Reclaimed</b>	<b>Total Acres Disturbed</b>
Arizona Minerals Inc.	Hermosa Taylor Deposit	0	3.2	108.5
ASARCO	Mission	0	0	8,357.82
ASARCO	Ray	13.5	-	8,502
ASARCO	Silver Bell	21	-	2,317
ASARCO	Ripsey Wash	-	-	-
ASARCO	Hayden	-	-	3,758.3
Bonanza Mining Company	Harquahala Mine	36.86	0	36.86
BHP Billiton	Miami Unit	0	206	354
Capstone Mining Corporation	Pinto Valley	-	382.8	3,915.8
Carlota Copper	Carlota	39	121	320
Excelsior Mining	Gunnison Project	0	0	5
Excelsior Mining	Johnson Camp	-	0	280.59
Freeport McMoRan	Sierrita Mine	21.3	0	10,717.30
Freeport McMoRan	Bagdad Operation	218.6	-	8,759.7
Freeport McMoRan	Miami	-	-	4,702
Freeport McMoRan	Twin Buttes	0	-	1,425.4
Freeport McMoRan	Morenci	-	75	18,106.71
Freeport McMoRan	Safford	-	-	6,372
Gold Road Mining	Gold Road Mine	0	0	24.2
Golden Vertex	Moss Mine	0	0	252.5
Origin Mining Company	Mineral Park Mine	0	0	1,225.5
Resolution Copper	Superior Mine	0	0	103
Rosemont Copper Company	Copper World	-	-	-
Rosemont Copper Company	Rosemont	-	73.7	91.2

Vulture Peak Holdings	Vulture Mine	-	1	24.5
<b>Totals</b>		<b>328.96</b>	<b>862.7</b>	<b>81,051.02</b>

**Aggregate Mining Industry Totals for 2021**

Since January 2007, the Arizona’s Mined Land Reclamation Act, Arizona Revised Statutes (A.R.S.) § 27-1201 et. seq. and the rules per Arizona Administrative Code (A.A.C. R11-3-101 et. seq.), requires 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 204 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 and R11-3-504, the Aggregate Mine owner/operators with approved plans are required to submit annual status report updates. The annual status updates (received in 2020-2021), reported that an approximate 253.38 acres of mined lands were reclaimed for 2021, and 399.46 acres of new disturbance were reported during this period. As reported by the mine sites in the Aggregate (sand & gravel) mining industry, during the 2021 reporting period.

The Arizona State Mine Inspector estimates the following reported totals with approximately 47,777 acres of private land have been approved for the potential of aggregate industry utilization, and is estimated for future land disturbance. Currently, 21,594 acres have been reportedly disturbed through all reportable years, with an approximate estimate of 2,206 acres of private mined lands 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.