

OFFICE OF THE  
ARIZONA STATE MINE INSPECTOR

JOE HART



ONE-HUNDRED and EIGHTH  
ANNUAL REPORT  
for  
CALENDAR YEAR 2019

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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 695 Health & Safety Mines and Contractors during 2019; 601 of the mining operations and 94 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 2019, 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 2.2 per 200,000 hours of work and the 2019 National NFDL rate was 1.45 per 200,000 hours of work. The Inspections department issued 551 notices of violations; no cessation orders were required during 2019. ASMI Inspector's investigated 11 employee and citizen complaints, issued 38 mine elevator operating permits and 52 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 2012, 3331 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. 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.

Joe Hart

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Arizona State Mine Inspector

3/19/2020

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Date

## MINE SAFETY ENFORCEMENT

During the calendar year of 2019, the inspection team performed 695 health and safety inspections, which identified 551 violations of the mining code for corrective actions by the mine operators. No Cessation Orders were issued to mine operators in 2019.

<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	123	176	9377	58
Rock Products, Sand & Gravel, Pits, Quarries, Batch and Hot Plants	450	297	2674	488
Underground Mines	28	21	190	14
<b>Contractor Totals</b>	94	57	N / A	600
<b>Mine Totals</b>	601			560
<b>TOTALS</b>	<b>695</b>	<b>551</b>	<b>12241</b>	<b>1160</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 52
- Citizen Complaints Investigated 5
- Employee Complaints Investigated 5
- Agency Referral Complaint Investigated 1
- Electrical Equipment Installations 5
- Non Inspection Visits 18
- 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>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
National Accident Incidence Rate	1.6	1.5	1.45	1.45	1.45
Arizona Accident Incidence Rate	1.3	1.5	1.5	1.6	2.2

**LOST TIME ACCIDENTS IN 2019**

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

Asarco Inc.	Mission	1
Asarco Inc.	Ray	1
Asarco Inc.	Smelter	1
Asarco Inc.	Silver Bell	2
Freeport McMoran	Bagdad	3
Freeport McMoran	Morenci	3
Freeport McMoran	Miami	2
Freeport McMoran	Safford	3
Freeport McMoran	Smelter	1
Freeport McMoran	Sierrita	2
Granite Construction	FMI Sierrita	1

**Struck By or Against**

Asarco Inc.	Smelter	1
Asarco Inc.	Mission	1
CalPortland	Buckeye RM	1
Drake Materials	Glendale	1
Drake Cement, LLC.	Drake	1
Freeport McMoran	Bagdad	1
Freeport McMoran	Morenci	1
Freeport McMoran	Safford	1
Rango Inc.	Drake Higley	1

**Contact With or By**

Asarco	Hayden	1
Calportland	Rillito Plant	1
Freeport McMoran	Smelter	3

Freeport McMoran	Morenci	2
Freeport McMoran	Safford	1
Freeport McMoran	Sierrita	1
Freeport McMoran	Bagdad	5
Salt River Materials	Phoenix Cement	1

**Caught On or In or Between**

Asarco Inc.	Mission	1
Asarco Inc.	Ray	1
BJ Cecil Trucking	FMI Miami	1
Calportland	Rillito Mill	1
Drake Cement, LLC.	Drake	2
Freeport McMoran	Bagdad	2
Freeport McMoran	Safford	1
Freeport McMoran	Morenci	1
Freeport McMoran	Sierrita	1
Freeport McMoran	Smelter	1

**Fall from the Same Level or Below**

Asarco Inc.	Silver Bell	1
Asarco Inc.	Ray	2
Drake Materials	Higley	1
Freeport McMoran	Bagdad	1
Freeport McMoran	Smelter	3
Freeport McMoran	Morenci	5
Freeport McMoran	Sierrita	1
Landscape Connection	Flagstaff	1

**Exposure or Occupational Illness**

Freeport McMoran	Bagdad	2
Freeport McMoran	Sierrita	1
Red Mountain Mining	Mesa	1

**FATAL ACCIDENTS**

No Fatal Accidents occurred at Arizona Mine Sites during 2019.

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

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

## 2019 Operating Mines in Arizona by County

The following pages contain operating mines, plants and smelters considered active in 2019. These figures represent some 560 operating units with over 12,241 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 Cemex USA	Plant 229 Sierra Vista Plant 229 Sierra Vista	Batch Plant Aggregate Plant	Concrete Aggregates
	Gagnons Sand & Gravel.	Sierra Vista Pit	Aggregate Plant	Aggregate

Empire Homes, Inc.	Babacomari Pit	Aggregate Plant	Aggregate
Freeport McMoran Copper & Gold Bisbee	Copper Queen	Reclamation	Copper
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		Hot Plant	Asphalt
Klump Ranches LLC	Cemex Plant 229 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
Samohit Rock & Sand, LLC	Samohit Rock & Sand	Aggregate Plant	Aggregates
Southwest Valley Construction	Douglas	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
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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	Roeder Quarry / Redbird Quarry	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	West Quarry	Quarry	Flagstone
Harley Gray Stone	Mills Quarry	Quarry	Flagstone
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 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.	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 Pit	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	FMI Safford Operations	Open Pit	Copper
	Safford Tri County Materials	Morris Pit # 1	Aggregate Plant	Aggregates
	Safford Tri County Materials	Batch Plant	Batch Plant	Concrete
	Safford 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	Morenci Mine	Open Pit	Copper
	Greenlee County	Viriden Pit	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
	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	Cat Claw Mine	Aggregate Plant	Decorative Stone
	Arizona Materials	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.	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	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
	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	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	Deer Valley Batch Plant	Batch Plant	Concrete
CalPortland	Bullard Mine	Aggregate Plant	Aggregates
CalPortland Cemex	Buckeye Glendale Plant	Batch Plant Aggregate Plant	Concrete Aggregates
Cemex Cemex	19th Ave. & Gomez Batch Plant 19th Ave & Gomez Pit	Batch Plant Aggregate Plant	Concrete 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
Custom Landscape Materials	Main East	Aggregate Plant	Decorative Stone
Damavand Trading LLC.	51st Avenue	Aggregate Plant	Aggregates
Desert Aggregates	Desert Plant 1	Aggregate Plant	Aggregates
Desert Rock Products	New River Pit	Aggregate Plant	Decorative Stone
Desert Ready Mix, LLC.	ABC Plant	Batch Plant	Concrete
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	Higley	Aggregate Plant	Sand & Gravel
Drake Materials	Glendale	Aggregate Plant	Sand & Gravel

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 FNF	Paloma	Aggregate	Aggregates
Construction Hanson	Gillespie	Aggregate	Aggregates
Aggregates Hanson	51 st Ave Pit / Plant #35	Aggregate Plant	Aggregates
Aggregates Hanson	Agua Fria Plant / River Ranch, #40	Aggregate Plant	Sand & Gravel
Aggregates Hanson	Plant # 46 Hasayampa	Aggregate Plant	Aggregates
Aggregates Hanson	Agua Fria Plant / River Ranch, #40	Batch Plant	Concrete
Aggregates Hanson	51 st Ave Pit / Hot Plant #35	Hot Plant	Asphalt
Aggregates Hanson	Glendale Batch #45	Batch Plant	Concrete
Aggregates Hanson	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
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 Salt River Material	Graham Buckeye Plant	Underground Aggregate Plant	Wulfenite Crystals Sand & Gravel
Salt River Materials Salt River Materials Group	67th Ave Plant  Olive Ave	Surface  Aggregate Plant	Sand & Gravel  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	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	Cedar Hills	Hot Plant	Asphalt

C.S. 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	Powerscreen	Aggregate Plant	Aggregates
Colorado City Public Works	Colorado City	Aggregate Plant	Aggregates
Cornco Excavation	Victoria Farms	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 - Rossllynn 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 FNF	Hualapai Chocolate Blake Ranch Source	Quarry	Flagstone
Construction FNF	Big Sandy 1 & 2	Aggregate Plant	Aggregates
Construction Freiday	Rattlesnake Wash Pit	Aggregate Plant	Aggregates
Construction 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 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	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
	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>
	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.	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	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	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 Jim Bush	Santa Rita Mine	Quarry	Limestone
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
University of Arizona	San Xavier Mining Laboratory	Mine Training Lab	Training
Vulcan Materials	Green Valley	Aggregate Plant	Aggregates
Vulcan Materials	Green Valley	Batch Plant	Concrete

<b>Pinal</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	79 Minerals LLC	79 Mine	Underground Mine	Gemstones
	Arizona Materials	Plant #2 Queen Creek	Batch Plant	Concrete
	Arizona Materials	Plant #8 Florence	Batch Plant	Concrete
	Arizona Metro Mix	Arizona Metro Mix # 1	Batch Plant	Concrete
	ASARCO, Inc. Calmat dba Vulcan Materials	Ray Operations Coolidge Hot Plant	Open Pit Hot Plant	Copper 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 Company	San Tan	Batch Plant	Concrete
	CalPortland Company	Queen Creek	Batch Plant	Concrete
	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	Sand & Gravel

Cemex USA	Queen Creek Plant 65	Batch Plant	Concrete
Cemex USA	Coolidge Plant	Aggregate Plant	Sand & Gravel
Cemex USA	Plant # 142, Queen Creek	Batch Plant	Concrete
Cemex USA	Mammoth	Aggregate	Aggregates
Cemex Rinker	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
Granite Express	Big Nob Pit 3	Aggregate Plant	Decorative Stone
Granite Express LLC	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
Montgomery	Montgomery Pit	Aggregate Plant	Aggregates

National Gypsum Old Wasp Mine	Feldman	Open Pit Mine	Gypsum
OMYA CA, Inc.	Old Wasp Mine	Placer	Gold & Silver
P & P Materials LLC	Omya Az.	Quarry	Marble
Pinal Gypsum	P & P Materials	Aggregate Plant	Aggregates
Peoria Lakes LLC	White Cross Mine	Open Pit Mine	Gypsum
PR Gypsum, LLC	Queen Creek Gary Road	Aggregate Plant	Decorative Stone
Red Hills Mining LLC	Winkleman / Superior Plant 546	Open Pit	Gypsum
Resolution Copper	Red Hills Quarry	Aggregate Plant	Decorative Stone
Ringo Canyon Granite	Superior Magma Mine	Underground Mine	Copper
Robson Ranch	Ringo Canyon	Aggregate Plant	Aggregates
Smithco Enterprises	Robson	Aggregate Plant	Aggregates
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	Queen Creek / Plant 1 & 2	Aggregate Plant	Aggregates
Superior Materials	Albo Guzman	Aggregate Plant	Aggregates
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

<b>Yavapai</b>	<b>Company</b>	<b>Mine / Plant Name</b>	<b>Type</b>	<b>Product</b>
	A.G.E Construction dba Rio Rico Rock & Sand A.G.E. Construction	Rio Rico Plant	Aggregate Plant	Aggregates
		GRG Santa Cruz # 1	Aggregate Plant	Aggregates
	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 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	Prescott Valley	Batch Plant	Concrete
	Charter Materials	Plant 100	Aggregate Plant	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
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
Granite Express	Mayer	Aggregate Plant	Aggregates
Granite Mountain Materials aka RAC	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 Gets Better	Pyramid Quarry	Quarry	Decorative Stone
Just Stone Kirkland Mining Company	Brown Schist Quarry Kirkland	Quarry Quarry	Building Stone Pozzolon
Ligon Excavation Inc.	Camp Verde	Aggregate Plant	Aggregates
Material Delivery Inc. McGuireville	Dewey Pit	Aggregate Plant	Decorative Stone
	McGuireville Borrow Pit	Borrow Source	Aggregates
MDG Resources	Rhea Placer Claims	Screening Plant	Gold
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 Paterno Stone Co.	Mayer Schist Bluebell Quarry	Quarry Quarry	Stone, Dimension 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 aka Got Rocks	Phoenix Cement Plant	Cement Plant	Cement/Lime
South Pacific Tours	Schuck Pit Wickenburg	Aggregate Plant	Aggregates
Star Placer dba Big Bug Sand & Gravel	Fort Misery	Placer	Gold
Superstition Crushing LLC	Star Placer	Aggregate Plant	Aggregates
Swallow Mining LLC	Black Canyon City	Sand & Gravel	Aggregates
TBM Global LLC. aka Brinkley Mining Inc.	Swallow Mine	Exploration	Copper
United Verde Materials	Brinkley Mine / Hackberry Claim	Screening Plant	Gold
Vanderbilt Minerals	United Verde Pit	Aggregate Plant	Aggregates
Vast Mountain Development	Lyle Mine	Open Pit Mine	Clay
Yavapai County Public Works Dept.	Bender Millsite	Mill	Gold / Silica Sand
	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
Materials, Inc	County 19 Plant	Aggregate Plant	Aggregates
DPE	Fortuna Pit 1	Aggregate Plant	Aggregates
Materials, Inc			
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	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 Material's Delivery Inc. (M.D.I.)	Various Sites / Portable	Hot Plant	Asphalt
McCormick Construction Meadow Valley Contractors	Portable #1	Crush & Screen	Aggregates
McCormick Construction Meadow Valley Contractors	Various Sites/ Portable	Custom Crushing	Sand & Gravel
Mercury Constructors Mohave County Road Department NGU Contracting, Inc.	McCormick Portable Hot Plant	Hot Plant	Asphalt
Mercury Constructors Mohave County Road Department NGU Contracting, Inc.	Statewide Hot Plant	Hot Plant	Asphalt
NGU Contracting, Inc.	Portable Plant	Custom Crushing	Aggregates
Payson Concrete & Materials Perkins Cinders Inc. Prescott Dirt LLC	Various Mine Sites	Surface	Aggregates
Payson Concrete & Materials Perkins Cinders Inc. Prescott Dirt LLC	Kolman Portable	Open Pit Mine	Aggregates
Progressive Contracting Quality Ready Mix	Portable Plant	Aggregate Plant	Aggregates
Progressive Contracting Quality Ready Mix	Portable Hot Plant	Hot Plant	Asphalt
Robson Ranch Construction S & M Construction Schuck Development Smithco Enterprises Solterra Southwest Rock Products	Portable Plant	Portable Aggregate Plant	Aggregates
Robson Ranch Construction S & M Construction Schuck Development Smithco Enterprises Solterra Southwest Rock Products	Hall Pit-Statewide	Custom Crushing	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Various Mine Sites	Portable Screen	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Various Mine Sites	Custom Crushing	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Portable Batch	Batch Plant	Concrete
Superstition Crushing Sundt Construction Sundt Construction	Land Development	Custom Crushing	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	FMI Morenci	Custom Crushing	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Various Locations	Aggregate Plant	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Various Mine Sites	Custom Crushing	Silica/Slag
Superstition Crushing Sundt Construction Sundt Construction	Portable Hot 1 & 2 Portables 1,2,3,4	Hot Plant Aggregate Plant	Ashpalt Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Various Locations	Aggregate Plant	Aggregates
Superstition Crushing Sundt Construction Sundt Construction	Portable Soil Cement Plant	Batch Plant	Soil Cement
Superstition Crushing Sundt Construction 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 United States Bureau of Reclamation US Forest Service	Golden Vertex Moss Mine	Custom Crushing	Aggregates
Wheeler Construction aka WCI Mining LLC.	Portable	Portable Crushing	Aggregates
White Mountain Cinders	Various Pits Coconino, Kaibab NFS	Screening	Cinders
	Portable	Portable Aggregate Plant	Aggregates
	Portable	Portable Screen	Cinders

## Education and Training

The Federal Mine Safety and Health Administration (MSHA) require that all miners in the United States and under MSHA jurisdiction have initial and yearly safety training. The Arizona State Mine Inspector (ASMI) Education and Training department provides the mandatory federal mine safety training to the Arizona mining community including mine operators, employees, contractors, vendors or any other individuals who enter mine properties.

The ASMI training staff conducted training because of funding provided by the federal MSHA State Grants Program, state allocations and nominal class training fees. In 2009 ASMI was given authority to charge training fees by the Forty-ninth legislative, first regular session, and chapter 63 Senate bills 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 2010 ASMI implemented an MSHA approved “Class Fee Program” and through grant funding, state allocations and training fees the ASMI trainers had 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 training sessions and 24 hour New Miner Inexperienced training sessions. The New Miner classes are conducted with “New Miners” only and are specifically formatted sessions with a strong emphasis to new miner issues and content.

The ASMI trainers issued MSHA 5000-23 certificates of training under CFR Part 48 for classes including Annual Refresher (AR) Surface Coal, Metal or Non-Metal, AR Underground – all 8 hour class. New Miner Inexperienced (NMI) Surface Coal, Metal/Non-Metal – (24 hour 3 day class) and First Aid/CPR/BBP certificates. Trainers also issue ASMI certificates (documents of training) under Part 46.

Subject matter covered in these classes include: The Federal Mine Safety and Health Act of 1969 & 1977. Code of Federal Regulation CFR Title 30: Parts – 45, 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 – MSHA’s 2010 Initiative - Prevent Fatalities “Rules to Live By” and updates. Review and discussion of U.S. fatalities, accident and injury reports and fatalgrams - 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 Standards / Global Harmonization Updates – The Miners Right to Know – SDS Safety Data Sheets (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 **2019:**

<b>Miners</b>	<b>771</b>
<b>Contractors</b>	<b>1,940</b>
<b>Others</b>	<b>82</b>
<b>Total Participants Trained</b>	<b>2,793</b>

Of total participants trained - 92 received First Aid/CPR/BBP certifications.  
Total participants trained in 2019 = 38 more than 2018.

A total of 626 participants received an MSHA Part 48 certificate of training and/or a State of Arizona document of training under Part 46. Total certificates or documents issued in 2019 = 3,419.

**Others:** trained include participants from agencies such as:  
Arizona Department of Environmental Quality (ADEQ)  
Maricopa County Air Quality  
Bureau of Land Management (BLM)  
Bureau of Reclamation – Yuma, Arizona District  
Arizona Game & Fish Department  
U. S. Forest Service

Consistently the ASMI training staff 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 # 1, 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 9106 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 2019 ASMI inventoried 57 new mines; secured 9 mine features; 1 of which were permanently backfilled and 8 were fenced and signed; 39 Notice of Violations were issued and 155 Corrective Actions were submitted.

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

One serious accident reported April 1, 2019, when a woman was rescued after she fell into a mine shaft in the Cave Creek area. She went out for a run late Sunday night when she got lost and fell about 20 feet into an abandoned mine. The woman suffered some injuries from the fall but was expected to be ok.

No fatalities reported in calendar year 2019.

## Mined Land Reclamation

### Hardrock Mining Industry totals for 2019

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 2019, the following sites reported an approximate 986 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 836,344 acres have been disturbed through 2019, with an approximate estimate of 961 acres of private mined lands having been reclaimed by most these reporting mine sites.

Mining Company	Mine Site	Disturbed Acres 2019	Total Acres Reclaimed	Total Acres Disturbed
Arizona Minerals Inc.	Hermosa Taylor Deposit	0	2.23	108.5
ASARCO	Mission	0	0	8,357.82
ASARCO	Ray	17.8	-	775,368
ASARCO	Silver Bell	56	-	2,011
ASARCO	Ripsey Wash	0	0	-
ASARCO	Hayden	0	0	3,758.3
BHP Billiton	Miami Unit	0	206	354
Capstone Mining Corporation	Pinto Valley	0	382.8	3,767.5
Carlota Copper	Carlota	0	203	904
Excelsior Mining	Gunnison Project	0	0	5
Excelsior Mining	Johnson Camp	0	3.33	282.98
Freeport McMoRan	Sierrita Mine	84.2	0	10,171.26

Freeport McMoRan	Bagdad Operation	487.7	-	8,447.4
Freeport McMoRan	Miami	0	0	4,702
Freeport McMoRan	Twin Buttes	0	-	1,425.4
Freeport McMoRan	Morenci	311.32	75	17,842.43
Freeport McMoRan	Safford	0	-	5,436
Gold Road Mining	Gold Road Mine	0	-	24.2
Golden Vertex	Moss Mine	0	-	101.54
Origin Mining Company	Mineral Park Mine	0	0	1,225.5
Resolution Copper	Superior Mine	0	-	103
Rosemont Copper Company	Rosemont	24	64.6	73.7
Vulture Peak Holdings	Vulture Mine	0	24.5	233.246
	<b>Totals</b>	<b>986.02</b>	<b>961.46</b>	<b>836,344.96</b>

### **Aggregate Mining Industry Totals for 2019**

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 203 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 2018-2019), reported that an approximate 127 acres of mined lands were reclaimed for 2019, and 96.7 acres of new disturbance were reported during this period. As reported by the mine sites in the Aggregate (sand & gravel) mining industry, during the 2019 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 46,807 acres of private land have been approved for the potential of aggregate industry utilization, and is estimated for future land disturbance. Currently, 20,765 acres have been reportedly disturbed through all reportable years, with an approximate estimate of 2,082 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.