

OFFICE OF THE
ARIZONA STATE MINE INSPECTOR

JOE HART



ONE-HUNDRED and SIXTH
ANNUAL REPORT
for the
CALENDAR YEAR 2017

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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 661 Health & Safety Mines and Contractors during 2017; 589 of the mining operations and 72 of the contractors were inspected which resulted in a 93% 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 2017, a fatal accident at an active mine was reported and investigated by the Arizona State Mine Inspector's Office. The Arizona NFDL (non-fatal days lost time) rate was 1.5 per 200,000 hours of work and the 2017 National NFDL rate was 1.45 per 200,000 hours of work. The Inspections department issued 421 notices of violations; no cessation orders were required during 2017. ASMI Inspector's investigated 28 employee and citizen complaints, issued 38 mine elevator operating permits and 29 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, 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 and over 4555 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.

Arizona State Mine Inspector

Date

MINE SAFETY ENFORCEMENT

During the calendar year of 2017, the inspection team performed 661 health and safety inspections, which identified 421 violations of the mining code for corrective actions by the mine operators. No Cessation Orders were issued to mine operators in 2017.

Types of Operations	No. of Inspections	No. of Violations	Average No. of Employees	No. of Mines & (Listed Contractors)
Surface Metal Mines, Mills, SX-EW Plants, Smelters, and Refineries	99	147	8345	58
Rock Products, Sand & Gravel, Pits, Quarries, Batch and Hot Plants	473	247	2517	490
Underground Mines	16	0	107	13
Contractor Totals	72	27	N / A	526
Mine Totals	589			561
TOTALS	661	421	10,969	1087

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 29
- Citizen Complaints Investigated 22
- Employee Complaints Investigated 6
- Electrical Equipment Installations 2
- Non Inspection Visits 54
- 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.

LTIR / NFDL	2013	2014	2015	2016	2017
National Accident Incidence Rate	1.7	1.8	1.6	1.5	1.45
Arizona Accident Incidence Rate	1.7	1.3	1.3	1.5	1.5

LOST TIME ACCIDENTS IN 2017

Type	Company	Mine	LT Accidents
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Overexertion

Asarco Inc.	Ray	1
Freeport McMoran	Bagdad	3
Freeport McMoran	Morenci	2
Freeport McMoran	Miami	2
Freeport McMoran	Safford	2
Freeport McMoran	Sierrita	2
Pinto Valley Mining	Pinto Valley	4
Yuma County	Yuma Portable	1

Struck By or Against

Asarco Inc.	Hayden Smelter	2
Asarco Inc.	Mission	1
Arizona Minerals	Hermosa Taylor	1
Fann Contracting	Red Lake`	1
Freeport McMoran	Bagdad	3
Freeport McMoran	Miami	1
Freeport McMoran	Morenci	3
Freeport McMoran	Sierrita	4
Layne Christenson	Pearce	1
National Exploration	Hermosa Taylor	1
Pinto Valley Mining	Pinto Valley	4

Contact With or By

Fisher Sand & Gravel	15 th Ave Plant	1
Freeport McMoran	Sierrita	2
Freeport McMoran	Bagdad	1
Pinto Valley Mining	Pinto Valley	1
Vulcan Calmat	Sun City Asphalt	1

Caught On or In or Between

Asarco Inc.	Mission	1
Boart Longyear	Hermosa Taylor	1
Freeport McMoran	Sierrita	1

Fall from the Same Level or Below

Asarco Silver Bell	Silver Bell	2
Decorative Rock Sales	Little Hills	1
Fann Contracting	Red Lake`	1
Freeport McMoran	Bagdad	3
Freeport McMoran	Morenci	3
Freeport McMoran	Miami	1
Freeport McMoran	Safford	2
Freeport McMoran	Sierrita	2
Pinto Valley Mining	Pinto Valley	3

Exposure or Occupational Illness

Freeport McMoran	Bagdad	1
Freeport McMoran	Sierrita	1

FATAL ACCIDENTS

At approximately 8:30 pm. on July 27, 2017, a 41 year old married male with three children was fatally injured while employed at the Asarco Mission Open Pit Mine. The employee was a Heavy Truck Driver on the cable crew at the Mission site located 18 miles south of Tucson.

The employee was parked on the 3450 Waste Dump when a Komatsu 320 Ton Haul Truck leaving the Dump did not see the smaller equipment and ran over the top of the Ford 550 Utility Truck, the Asarco employee was pronounced deceased on the scene.

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

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

2017 Operating Mines in Arizona by County

The following pages contain operating mines, plants and smelters considered active in 2017. These figures represent some 561 operating units with over 10,969 workers.

Registered Mining Companies by County and Type

Apache	Company	Mine / Plant Name	Type	Product
	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	Screen	Cinders
	C&C Cinders	C&C Cinder Pit	Screen	Cinders
	Town of Eager			
	Hall n Aggregate Trucking & Materials	Hall Pit	Aggregate Plant	Sand & Gravel
	Sug Rogers Construction LLC	Dump Pit #2	Aggregate Plant	Aggregates
	Rusty Wright Enterprises	Alpine Dump Pit	Aggregate Plant	Aggregates
	Spring Mountain Materials	Spring Mountain	Screen	Cinders
	White Mountain Rock Products	Barth Pit	Aggregate Plant	Aggregates
	White Mountain Rock Products	Richville Pit	Aggregate Plant	Aggregates
Cochise	Company	Mine / Plant Name	Type	Product
	American Marble Company	Arizona Marble	Quarry	Marble
	Cemex USA	Plant 229 Sierra Vista	Batch Plant	Concrete
	Cemex USA	Plant 229 Sierra Vista	Aggregate Plant	Aggregates
	Chiricahua Building Supply	Chiricahua Building Supply	Surface	Aggregates
	Chiricahua Building Supply	Chiricahua Building Supply	Batch Plant	Concrete
	Gagnons Sand & Gravel.	Sierra Vista Pit	Aggregate Plant	Aggregate
	Cross Spear Limestone LLC.	Cross Spear Marble	Quarry	Marble

Empire Homes, Inc.	Maya Pit	Surface	Sand & Gravel
Freeport McMoran Copper & Gold Bisbee	Copper Queen	Reclamation	Copper
Golder Fame (USA) Inc.	Gold Ridge (Gold Prince)	Exploration	Gold
Granite Construction Company	Babocomari Pit	Aggregate Plant	Sand & Gravel
Granite Construction Company	Babocamari Asphalt Plant	Asphalt Plant	Asphalt
KE&G Construction Inc.	KE&G	Hot Plant	Asphalt
Klump Ranches LLC	Luzena Quarry	Aggregate Plant	Aggregates
Klump Ranches LLC	Bowie	Aggregate Plant	Aggregates
Lhoist North America	Douglas Plant	Quarry	Lime
Maddux & Sons, Inc.	Leslie Canyon Plant	Aggregate Plant	Aggregates
Maddux & Sons, Inc.	Snure Pit	Aggregate Plant	Aggregates
Maddux & Sons, Inc.	Leslie Canyon Batch Plant	Aggregate Plant	Aggregates
Maddux & Sons, Inc.	Bingham Pit	Aggregate Plant	Aggregates
Excelsior Mining JCM	Johnson Camp	SX-EW Plant	Copper
Samoht Rock & Sand, LLC	Samoht Rock & Sand	Aggregate Plant	Aggregates
St. Cloud Zeolite	Grace and Cholla Zeolite Mine	Surface	Zeolite- chabazite
Strong Hold Redi-Mix	Grim	Wash Plant	Sand & Gravel
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	Sand & Gravel
Willcox Rock & Sand	Riggs Pit	Batch Plant	Concrete
Willcox Rock & Sand	Outerspace Pit	Aggregate Plant	Sand & Gravel

Coconino	Company	Mine / Plant Name	Type	Product
	A-Rock	Grey Mountain Pit	Aggregate Plant	Sand & Gravel
	Alberto Ayala Company	Ayala Blue Bird	Quarry	Flagstone
	Allen Grantham	Grantham Pit	Cinders	Cinders
	Arizona Tufflite, Inc.	White Vulcan & More Sand Mines	Open Pit Mine	Pumice
	Canipe Trucking	Golden Buckskin-Drake	Quarry	Flagstone
	Canipe Trucking	Santa Cruz	Quarry	Flagstone
	Cemex	Plant # 337 / Gray Mountain	Aggregate Plant	Aggregates
	Cemex	UM Plant # 336 Sunset Crater	Aggregate Plant	Sand & Gravel
	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	Quarry	Flagstone
Dunbar Stone	Yellow Buck Quarry-Ash Fork	Quarry	Flagstone
Dunbar Stone	Blue Moon/Mattahorn	Quarry	Flagstone
Dunbar Stone	Corva Canyon	Quarry	Flagstone
Dunbar	Hill Top	Quarry	Flagstone
Energy Fuels Resources (USA) Inc.	Canyon Mine	Underground	Uranium
Espee Cinder Pit	Perrin Pit	Quarry	Cinders
Fann dba Q-Max Co.	Red Lake Quarry	Aggregate Plant	Sand & Gravel
Flagstaff Concrete Products, LLC.	Fisher Pit 1A & A1	Open Pit Mine	Sand & Gravel
Hammond Wholesale Flagstone FNF	Perez	Quarry	Flagstone
	FNF Williams 43	Aggregate Plant	Aggregates
Hammond Wholesale Flagstone	Hammond Stone Mountain Quarry	Quarry	Flagstone
Hammond Wholesale Flagstone	Perrez Quarry	Quarry	Flagstone
Harley Gray Stone	Appletree Quarries-Drake	Quarry	Flagstone
Harley Gray Stone	Oak Quarry	Quarry	Flagstone
Harley Gray Stone	Mills Quarry	Quarry	Flagstone
Haines 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	Open Pit	Aggregates
Red Pit Inc.	Red Pit	Open Pit	Cinders
Star Stone Quarries	Crookton / Stone Mountain	Quarry	Flagstone
Superlite Block	Darling/Winona	Open Pit	Cinders
The Landscape Connection	Sheep Hill Mine	Open Pit	Cinders
Vulcan Materials	Gray Mountain Plant	Hot Plant	Asphalt

Gila	Company	Mine / Plant Name	Type	Product
	ASARCO, Inc	ASARCO Mine Hayden	Surface	Copper
	ASARCO, Inc.	Hayden Concentrator	Mill	Copper
	ASARCO, Inc.	Hayden Smelter	Smelter	Copper
	BHP Copper, Inc.	Miami Operations	SX-EW Plant	Copper
	KGHM Carlota Copper Co.	Carlota Copper Company	Surface	Copper
	Cemex	Globe Plant 601	Aggregate Plant	Aggregates
	Cemex	Globe Plant # 601 / Nugget Pit	Aggregate Plant	Sand & Gravel
	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
	Gila Concrete LLC.	Slate Creek Pit	Aggregate Plant	Decorative Stone
	Goat Creek Mining	Goat Creek Star Valley	Aggregate Plant	Decorative Stone
	Hunt Materials	Hunt Pit	Aggregate Plant	Aggregates

Hunt Materials Kessen & Kessen Inc.	Young Batch Plant Lime Quarry	Batch Plant Crushing & Screening Aggregate Plant	Concrete Rip/Rap
Payson Concrete & Materials	Red Select Quarry	Aggregate Plant	Aggregates
Payson Concrete & Materials	Payson Plant	Aggregate Plant	Aggregates
Payson Concrete & Materials	Tonto Basin Pit	Aggregate Plant	Aggregates
Payson Concrete & Materials	Tonto Basin Batch Plant	Batch Plant	Concrete
Payson Concrete & Materials	Payson Batch Plant	Batch Plant	Concrete
Payson Concrete & Materials	Payson Hot Plant	Hot Plant	Asphalt
Pinto Valley Mining Corporation	Pinto Valley	Surface	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	Screening Plant	Aggregates

Graham	Company	Mine / Plant Name	Type	Product
	Brimhall Sand Rock & Building Materials	Bryce Rocky Field	Aggregate Plant	Aggregates
	CKC Construction	Airport Pit	Aggregate Plant	Sand & Gravel
	CKC Construction	Airport Batch Plant	Batch Plant	Concrete
	CKC Construction	Airport Hot Plant	Hot Plant	Asphalt
	FNF Construction	Foote Pit	Aggregate Plant	Aggregates
	Freeport McMoran Safford	FMI Safford Operations	Open Pit Aggregate Plant	Copper
	Tri County Materials	Morris Pit # 1 Safford	Aggregate Plant	Aggregates
	Tri County Materials	Batch Plant	Batch Plant	Concrete

Greenlee	Company	Mine / Plant Name	Type	Product
	Freeport McMoran Greenlee County	Morenci Mine Virден Pit	Open Pit Aggregate Plant	Copper Aggregates
	Oakcreek Sand & Gravel	Old Virден Highway Pit	Aggregate Plant	Aggregates

La Paz	Company	Mine / Plant Name	Type	Product
	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

Maricopa	Company	Mine / Plant Name	Type	Product
	ABC Sand & Rock	Camelback Road Pit	Aggregate Plant	Sand & Gravel
	ABC Sand & Rock Co., Inc.	ABC Plant #2	Surface	Sand & Gravel
	American Materials Group LLC	Glendale Plant	Batch Plant	Concrete
	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	Cement Plant	Concrete
	Arizona Materials LLC.	Plant #6 Hatfield	Batch Plant	Concrete
	Arizona Materials, LLC.	Batch plant # 1 - 43rd Ave. & Lower Buckeye	Batch Plant	Concrete
	Arizona Materials, LLC.	Plant # 1 - 43rd Ave. & Lower Buckeye	Aggregate Plant	Aggregates
	Arizona Metro Mix	Plant 2- Glendale	Batch Plant	Concrete
	Arizona Metro Mix	Tolleson	Batch Plant	Concrete
	Aztec Mining	Anchor Bay Pit	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	Plant 5225 Vulcan Materials	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	Gomez	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	Val Vista- Citrus Grove	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	Val Vista- Citrus Grove	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	Avondale Plant	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	West Plant	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	West Plant	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	West Broadway	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	West Broadway	Hot Plant	Asphalt
	Cal Mat Co dba Vulcan Materials	Sun City	Aggregate Plant	Aggregates
	Cal Mat Co dba Vulcan Materials	Sun City	Hot Plant	Asphalt

CalPortland	43rd Ave / Batch Plant	Batch Plant	Concrete
CalPortland	Beardsley Batch Plant	Batch Plant	Concrete
CalPortland	Sun City	Batch Plant	Concrete
CalPortland	Val Vista Ready Mix	Batch Plant	Concrete
CalPortland	New River	Aggregate Plant	Aggregates
CalPortland	New River	Batch Plant	Concrete
CalPortland	Higley	Batch Plant	Concrete
CalPortland	Glendale	Batch Plant	Concrete
CalPortland	Sun City	Batch Plant	Concrete
CalPortland	Deer Valley Batch Plant	Batch Plant	Concrete
CalPortland	Bullard Mine	Aggregate Plant	Aggregates
CalPortland	Bullard Batch Plant	Batch Plant	Concrete
CalPortland	Buckeye	Batch Plant	Concrete
Cemex	Glendale Plant	Aggregate Plant	Aggregates
Cemex	Glendale Plant	Batch Plant	Concrete
Cemex	19th Ave. & Gomez Batch Plant	Batch Plant	Concrete
Cemex	19th Ave & Gomez Pit	Aggregate Plant	Aggregates
Cemex	West Valley Plant #1371	Aggregate Plant	Sand & Gravel
Cemex	El Mirage Plant	Batch Plant	Concrete
Cemex	59th Avenue	Aggregate Plant	Sand & Gravel
Cemex	107th Ave. Plant 146	Aggregate Plant	Sand & Gravel
Cemex	El Mirage Plant	Aggregate Plant	Aggregates
Cemex	107th Ave. Asphalt Plant	Hot Plant	Asphalt
Cemex	Bard Ranch	Aggregate Plant	Sand & Gravel
Cemex	Table Mesa Plant	Aggregate Plant	Decorative Stone
Cemex	67 th Ave. Plant	Aggregate 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 Custom Landscape Materials	Plant #2 Sun City Bighorn Pit	Aggregate Plant	Decorative Stone

Custom Landscape Materials	Belmont Pit	Aggregate Plant	Decorative Stone
Custom Landscape Materials	Miller North	Open Pit Mine	Aggregates
Damavand Trading LLC.	51st Avenue	Aggregate Plant	Aggregates
Desert Rock Products	New River Pit	Aggregate Plant	Decorative Stone
Diamondback Sand & Rock	Diamondback Materials	Aggregate Plant	Aggregates
Diamondback Materials	Diamondback Batch Plant	Ready Mix Batch Plant	Concrete
Drake Materials	Avondale Batch Plant	Wash Plant	Concrete
Drake Materials	Gila Bend	Aggregate Plant	Sand & Gravel
Drake Materials	Higley	Aggregate Plant	Sand & Gravel
Drake Materials	Glendale	Aggregate Plant	Sand & Gravel
Drake Materials	Sun City Plant	Batch Plant	Concrete
Fisher Sand & Gravel Co.	28th Street Plant	Aggregate Plant	Aggregates
Fisher Sand & Gravel, Inc	15th Ave Pit	Surface	Sand & Gravel
FNF Construction	Stuhr Materials	Aggregates	Aggregates
Granite Express	Berkley Pit/Pit #2	Aggregate Plant	Decorative Stone
Hanson Aggregates	51 st Ave Pit / Plant #35	Aggregate Plant	Aggregates
Hanson Aggregates	Agua Fria Plant / River Ranch, #40	Aggregate Plant	Sand & Gravel
Hanson Aggregates	Plant # 46 Hasayampa	Aggregate Plant	Aggregates
Hanson Aggregates	51 st Ave Pit / Batch Plant #35	Batch Plant	Concrete
Hanson Aggregates	Agua Fria Plant / River Ranch, #40	Batch Plant	Concrete
Hanson Aggregates	51 st Ave Pit / Hot Plant #35	Hot Plant	Asphalt
Hanson Aggregates	Glendale Batch #45	Batch Plant	Concrete
Hanson Aggregates	67th Ave Plant	Surface	Concrete
Hanson Aggregates	San Domingo Pit / Wickenburg	Aggregate Plant	Aggregates
Hanson Aggregates	San Domingo Batch Plant / Wickenburg	Batch Plant	Concrete
Hanson Aggregates	Sun City Batch Plant #33	Batch Plant	Concrete
Kilauea Crushers Inc.	Estrella North & South	Aggregate Plant	Aggregates
Kilauea Crushers	Picacho Mine	Aggregate Plant	Granite/Decorative Stone
Kilauea Crushers, Inc.	Buckeye Hills Plant	Surface	Aggregates
Lafarge N. America	Sun City	Surface	Sand & Gravel
M.R. Tanner Mining, Inc.	West Side Pit Mine	Crush & Screen	Aggregates
Madison Granite	Madison Granite Pit	Aggregate Plant	Granite/Decorative Stone
Mobile Mix	Granite Reef Dam	Surface	Sand & Gravel
Morton Salt, K+S	Glendale	In-Situ	Salt
Paloma Ready Mix and Materials	Old 80 Main Plant	Surface	Sand & Gravel

Pioneer Landscaping Materials	ABC Pit	Aggregate Plant	Sand & Gravel
Pioneer Sand Company	Pioneer Hassayampa	Aggregate Plant	Sand & Gravel
Red Mountain Mining	Red Mountain Quarry	Aggregate Plant	Decorative Stone
Reserve Bank	Reserve Bank	Underground	Copper
Rock Solid, Inc	LaFarge Sun City Plant	Batch Plant	Concrete
Rock Solid, Inc.	Plant 6	Batch Plant	Concrete
Rowley Mine	Graham	Underground	Wulfenite Crystals
Salt River Material	Buckeye Plant	Aggregate Plant	Sand & Gravel
Salt River Materials	67th Ave Plant	Surface	Sand & Gravel
Salt River Materials Group	Olive Ave	Aggregate Plant	Sand & Gravel
Salt River Materials Group	Glendale Plant	Aggregate Plant	Sand & Gravel
Sand River Holdings	Sand River	Aggregate Plant	Aggregates
Southland Well Drilling	Desert Crystal	Screening Plant	Aggregates
Southwest Rock Products	Peoria Pit	Aggregate Plant	Aggregates
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
Trio Aggregate Haulers LLC.	Western Aggregates	Surface	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

Mohave	Company	Mine / Plant Name	Type	Product
	2 Arrows Construction	Mountain Vista Aggregate	Surface	Aggregates
	C.S. McCrossan	Cedar Hills	Aggregate Plant	Aggregates
	C.S. 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
	Chase Crushing aka Vista	White Hills	Aggregate Plant	Decorative Stone

Chase Crushing aka Vista	Regal Mist	Aggregate Plant	Decorative Stone
City of Bullhead	Portable Powerscreen	Aggregate Plant	Aggregates
Continental Golf & Construction	Beaver Dam Plant	Aggregate Plant	Sand & Gravel
Colorado City	Colorado City	Aggregate Plant	Aggregates
D. L. Campbell	Sand Pit Road	Aggregate Plant	Aggregates
D. L. Campbell	Sand Pit Hot Plant	Hot Plant	Asphalt
D. L. Campbell	Airport Pit	Aggregate Plant	Sand & Gravel
D.L. Campbell Company	Hackberry	Aggregate Plant	Sand & Gravel
Daryll Lynnes	Rising Fawn	Surface	Gold & Silver
Dayton Lundy Rock	Dayton Lundy Rock Pit # 1	Aggregate Plant	Decorative Stone
Dayton Lundy Rock	Dayton Lundy Rock Pit # 2	Aggregate Plant	Decorative Stone
Desert Construction	Hualapai Pit - Rosslynn 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	Hualapai Chocolate	Quarry	Flagstone
Energy Fuels Resources	Arizona # 1	Underground Mine	Uranium
FNF Construction	Blake Ranch Source	Aggregate Plant	Aggregates
Eureka Mining	Havasu Rose	Aggregate Plant	Decorative Stone
Freiday Construction	Rattlesnake Wash Pit	Aggregate Plant	Aggregates
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	Crush & Screen	Gold
Kalamazoo Materials	Chloride Pit	Aggregate Plant	Decorative Stone
Kalamazoo Materials	White Hills Mine	Aggregate Plant	Decorative Stone
Kalamazoo Materials	New Valentine Pit	Aggregate Plant	Decorative Stone
Kingman Briggs	Kingman	Aggregate Plant	Gold

Kingman Turquoise	Mineral Park	Crush & Screen Quarry	Turquoise
Lhoist North America dba Chemical Lime	Nelson Plant		Lime
McCall Construction	McCall Pit	Aggregate Plant	Aggregates
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
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. Statewide Excavation	Excelisor London Bridge Road Pit	Mill Screening Plant	Gold & Silver Aggregates
The Gravel Pit	Gravel Pit	Aggregate Plant	Aggregates
White Water Mining LLC	Gold Remedy	Surface	Gold

Navajo	Company	Mine / Plant Name	Type	Product
	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	Surface	Sand, Industrial
	Brimhall Sand, Rock & Building Materials	Hardluck	Aggregate Plant	Aggregates
	Brimhall Sand, Rock & Building Materials	Joe's Pit	Surface	Aggregates
	Brimhall Sand, Rock & Building Materials	Cooley Knoll Cinder Pit	Surface	Cinders
	Brimhall Sand, Rock & Building Materials	Cottonwood Wash / Rim Rock	Aggregate Plant	Sand & Gravel
	Brimhall Sand, Rock & Building Materials	Decker Plant	Aggregate Plant	Sand & Gravel
	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	Open Pit Mine	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 Perkins Cinder Company	First Knoll Cinder Pit Owens Pit	Cinders Open Pit Mine	Cinders Cinders
Perkins Cinder Company	Turly Pit	Open Pit Mine	Aggregates
Perkins Cinders	Taylor Pit	Surface	Cinders
Quality Ready Mix aka Cemex	Brimhall Cottonwood Operation	Batch Plant	Concrete
Reidhead Sand & Rock	Reidhead Sand & Rock	Aggregate Plant	Aggregates
Reidhead Sand & Rock Southwestern Stone Company	Reidhead Batch Plant Gold Quarry	Batch Plant Quarry	Concrete 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	Company	Mine / Plant Name	Type	Product
	Asarco Silver Bell Mining	Silver Bell Mine	Open Pit Mine	Copper
	ASARCO, Inc.	Mission Unit	Open Pit Mine	Copper
	Bray Construction	Hayhook Ranch Pit	Surface	Aggregates
	Calportland dba Twin Peaks Rock & Stone	Twin Peaks Rock & Stone	Aggregate Plant	Sand & Gravel
	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 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 Company	Swan Road Pit	Aggregate Plant	Aggregates
Granite Construction Company	Tangerine Pit	Aggregate Plant	Aggregates
Granite Construction Company	Swan Road Pit	Hot Plant	Asphalt
Granite Construction Company	Tangerine Pit	Hot Plant	Asphalt
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 Mine	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	Open Pit Mine	Aggregates
Southwest Mining & Development	Linda Vista 1	Screening Plant	Aggregates
University of Arizona	San Xavier Mining Laboratory	Miner Training Lab	Training
Vulcan Materials	Black Angus	Hot Plant	Asphalt
Vulcan Materials	Poorman Road	Batch Plant	Concrete
Vulcan Materials	Green Valley	Aggregate Plant	Aggregates
Vulcan Materials	Green Valley	Batch Plant	Concret
Vulcan Materials	Ina Pit	Aggregate Plant	Aggregates
Vulcan Materials	Ina Batch	Batch Plant	Concrete
Vulcan Materials	Marana	Hot Plant	Asphalt

Pinal	Company	Mine / Plant Name	Type	Product
	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.	Ray Operations	Open Pit Mine	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	Diablo	Aggregate Plant	Sand & Gravel
CalPortland	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	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
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	Surface	
Hanson Aggregates	Queen Creek Plant 42	Aggregate Plant	Sand & Gravel
Hanson Aggregates	Coolidge Plant # 65	Aggregate Plant	Sand & Gravel
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	Hot Plant	Asphalt
M.R. Tanner Mining Inc.	Queen Creek Pit Mine	Aggregate Plant	
M.R. Tanner Mining, Inc.	Rankin Pit Mine	Crush & Screen	Aggregates
National Gypsum	Feldman	Open Pit Mine	Gypsum

Old Wasp Mine OMYA CA, Inc. P & P Materials LLC	Old Wasp Mine Omya Az. P & P Materials	Placer Quarry Aggregate Plant	Gold & Silver Marble Aggregates
Pinal Gypsum	White Cross Mine	Open Pit Mine	Gypsum
Peoria Lakes LLC	San Tan Pit	Aggregate Plant	Aggregates
PR Gypsum, LLC Red Hills Mining LLC	Winkleman / Superior Plant 546 Red Hills Quarry	Surface Aggregate Plant	Aggregates Decorative Stone
Resolution Copper	Superior Magma Mine	Underground Mine	Copper
Ringo Canyon Granite	Ringo Canyon	Aggregate Plant	Aggregates
Cemex Rinker Materials, Inc.	UM Plant 1975	Batch Plant	Concrete
Cemex Rinker Materials, Inc.	UM Plant 46 17685 N. Tanner Road	Aggregate Plant	Sand & Gravel
Silver King Mining, LLC	Silver King Mine	Underground Mine	Silver
Smithco Enterprises	Bobbit Pit	Open Pit Mine	Aggregates
Southwest Rock Products	Queen Creek / Plant 3 aka Oliver	Aggregate Plant	Aggregates
Southwest Rock Products	Queen Creek / Plant 1 & 2	Aggregate Plant	Aggregates
Southwest Rock Products	Coolidge Plant 1 & 2	Aggregate Plant	Sand & Gravel
Superior Materials	Albo Guzman	Aggregate Plant	Aggregates
T D Martin Group LLC Tee Pee Sand & Gravel	Pit # 525 Tee Pee	Wash Plant Aggregate Plant	Sand, Industrial Sand & Gravel
The Ashton Company	Old Montgomery Pit - Casa Grande	Surface	Aggregates
Treasure Chest Mining	Treasure Chest Pit	Aggregate Plant	Decorative Stone
Vulcan Materials Vulcan Materials	Queen Creek Queen Creek	Hot Plant Aggregate Plant	Asphalt Aggregates

**Santa
Cruz**

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

Yavapai	Company	Mine / Plant Name	Type	Product
	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
	Azurite Development	Azurite-Senator Mine	Mill	Gold
	Bedrock Landscape Materials	Bedrock Portable Plant #1	Aggregate Plant	Aggregates
	Carson Construction	10X Quarry	Aggregate Plant	Aggregates
	Cemex	Plant 556 Camp Verde	Aggregate Plant	Aggregates
	Cemex	Plant 556 Camp Verde	Batch Plant	Concrete
	Cal Mat dba Vulcan Materials	UM Plant 556 / Camp Verde	Hot Plant	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
	Equinox Exploration Corp.	Copper Queen & Binghampton	Exploration	Copper
	Flintstone Industries Inc.	Dewey Pit	Surface	Decorative Stone
	Freeport McMoran Bagdad	Bagdad Mine	Open Pit Mine	Copper
	G & S Gravel Incorporated	Star Placer	Aggregate Plant	Sand & Gravel
	Granite Mountain Materials	Dosie Pit	Aggregate Plant	Decorative Stone
	Hanson Aggregates	Yavapai Airport Pit	Aggregate Plant	Sand & Gravel
	Hanson Aggregates	Clarkdale Hot Plant	Hot Plant	Asphalt
	Hanson Aggregates	Yavapai Airport Batch Plant	Batch Plant	Concrete
	Hanson Aggregates	Clarkdale Plant	Aggregate Plant	Aggregates
	Hanson Aggregates	Clarkdale Batch Plant	Batch Plant	Concrete
	Harley Gray Stone	Partridge & Red Quarries	Quarry	Flagstone
	High View Sand & Gravel	High View	Aggregate Plant	Aggregates
	Just Stone	Vortex Quarry	Quarry	Building Stone

Just Stone Material Delivery Inc.	Brown Schist Quarry Dewey Pit	Quarry Aggregate Plant	Building Stone Decorative Stone
MDG Resources	Rhea Placer Claims	Screening Plant	Gold
Mendoza Quarry Metallicus Mineral Consultant & Development Inc MCDI Paterno Stone Co. Pine Creek Mining, Inc Prescott Dirt LLC Reay Brothers Excavation	Mendoza Quarry Weaver Creek Alvarado Mine Bluebell Quarry Gold Basin Willow Creek Reay Rich Hill Claim Group	Surface Surface Surface Quarry Placer Screen Plant Aggregate Plant Screening Plant	Flagstone Gold Gold Flagstone Gold Soil & Sand Sand & Gravel Gold
Red Mountain Minerals LLC. Rock Cabin Mining Rock Ridge Quarries Inc. Salt River Materials	Rock Cabin Gold Rock Ridge Quarries Phoenix Cement Gypsum Mine	Placer Quarry Open Pit Mine	Gold Flagstone Gypsum
Salt River Materials	Phoenix Cement Plant	Cement Plant	Cement/Lime
Schuck Sand & Rock	Schuck Pit Wickenburg	Aggregate Plant	Aggregates
South Pacific Tours Stoneworld Superstition Crushing LLC	Fort Misery Mayer Onyx Quarry Black Canyon City	Placer Quarry Sand & Gravel	Gold Stone, Dimension Rip/Rap
Swallow Mining LLC TBM Global LLC. aka Brinkley Mining Inc. United Verde Materials	Swallow Mine Brinkley Mine / Hackberry Claim United Verde Pit	Exploration Surface Aggregate Plant	Copper Gold Aggregates
Vanderbilt Minerals	Lyle Mine	Open Pit Mine	Clay
Vast Mountain Development Western Exploration & Road Const. Yavapai County Public Works Dept.	Bender Millsite Congress Mine Yavapai County	Mill Screening Plant Aggregate Plant	Gold / Silica Clay Gold Sand & Gravel

Yuma	Company	Mine / Plant Name	Type	Product
	BLT Companies	BLT Materials Pit	Aggregate Plant	Sand & Gravel
	BLT Companies BLT Companies Cemex	BLT Batch Plant BLT Hot Plant County 19	Batch Plant Hot Plant Aggregate Plant	Concrete Asphalt Aggregates
	Cemex	Hwy - 95 Plant	Aggregate Plant	Sand & Gravel
	Cal Mat dba Vulcan DPE Materials	Hwy - 95 Plant Blaisedale Pit Yuma Pit	Hot Plant Aggregate Plant	Asphalt Sand & Gravel

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 Sand & Gravel
H & S Developers, Inc.	Fortuna Pit 1	Aggregate Plant	Sand & Gravel
Luxcor Gold L.P. Mohawk Rock, LLC	Francher Project Mohawk Rock, LLC	Underground Decorative Stone	Gold Rip/Rap
Mohawk Rock LLC Saguaro Concrete	Mohawk Rock in Roll	Aggregate Aggregate Plant	Aggregates Sand & Gravel
Tacna Sand & Gravel, LLC.	Roll Plant	Aggregate Plant	Sand & Gravel
Yuma County Department of Public Works	Yuma Portable	Aggregate Plant	Sand & Gravel

Portable	Company	Mine / Plant Name	Type	Product
	Aims Construction	Various Mine Sites	Custom Crushing Contractor	Aggregates
	Arizona General Engineering / A.G.E. Contracting Inc. Ashton Company	CPC Rio Rico Various Mine Sites	 Custom Crushing Plant	Aggregates 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 Portable Aggregate Plant	Aggregates Sand & Gravel
	C. S. McCrossan	Portable Mining Equipment	Hot Plant Crush & Screen	Asphalt Aggregates
	C. S. McCrossan Cemex Construction Materials	Portable Hot Plant Portable Crushing & Screen	Open Pit Mine	Cinders
	Coconino County Public Works Drake Materials	County Wide Portable Screen Plant Various Mine Sites	Crush & Screen	Aggregates
	Dalmolin Excavating	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 Fisher Industries, Southwest Industries Fisher Industries, Southwest Industries Fisher Sand & Gravel dba Arizona Drilling & Blasting FNF Construction	Hot Plant 1 & 2 Various Mine Sites Various Mine Sites Various Mine Sites 20-00254 for all Portable Crushing Statewide 20-02238 H for all Asphalt Plants	Hot Plant Custom Crushing Hot Plant Custom Crushing Aggregate Plant Hot Plant	Construction Aggregates Asphalt Blasting Aggregates Asphalt
FNF Construction Inc.			
Fort McDowell Yavapai Materials Granite Construction Company Granite Construction Company Granite Express, LLC	Various Mine Site Various Mine Sites Various Sites Statewide	Aggregate Plant Custom Crushing Hot Plant Portable Aggregate Plant	Decorative Stone Rip/Rap Asphalt Aggregates
Grey Mountain Construction Hanson Aggregates	Statewide Portable PC 54	Portable Hot Plant Aggregate Plant	Asphalt Aggregates
Hatch Construction & Paving Inc. Interstate Rock Products, Inc Jack Daniel's Construction	Various Mine Sites Indigo Ridge Project Portable Screen	Aggregate Plant Aggregate Plant Custom Crushing Screening Plant	Aggregates Aggregates Sand & Gravel
Kessen & Kessen, Inc.	Copper Hills Mine	Custom Crushing	Revert Crushing
Kiewit Western Co.	Various Sites / Portable	Aggregate Plant	Aggregates
Kiewit Western Co. M.R. Tanner Mining, Inc.	Various Sites / Portable Portable #1	Hot Plant Crush & Screen	Asphalt Aggregates
Material's Delivery Inc. (M.D.I.) McCormick Construction Meadow Valley Contractors Meadow Valley Contractors Mercury Constructors Mohave County Road Department Payson Concrete & Materials	Various Sites/ Portable McCormick Portable Hot Plant Statewide Hot Plant Portable Plant Various Mine Sites Kolman Portable Portable Plant	Custom Crushing Hot Plant Hot Plant Custom Crushing Surface Open Pit Mine Portable Aggregate Plant	Sand & Gravel Asphalt Asphalt Aggregates Aggregates Aggregates Aggregates
Perkins Cinders Inc.	Hall Pit	Custom Crushing	Sand & Gravel
Robson Ranch Construction Co. Land Development	Custom Crushing	Aggregates	

S & M Construction	FMI Morenci	Custom Crushing	Construction
Schuck Development	Various Locations	Aggregate Plant	Sand & Gravel
Smithco Enterprises	Various Mine Sites	Custom Crushing	Silica/Slag
Southwest Rock Products	Various Mine Sites	Aggregate Plant	Sand & Gravel
Superstition Crushing	Various Locations	Aggregate Plant	Aggregates
Sundt Construction Inc.	Portable Soil Cement Plant	Batch Plant	Soil Cement
Sundt Construction Inc.	Soil Cement Plant	Aggregate Plant	Soil Cement
Sun Valley Superstition Crushing	all portable equipment	Aggregate Plant	Aggregates
Texas Canyon Rock & Sand	Various Location	Custom Crushing	Aggregates
Tonto Supply	Custom Crusher	Custom Crushing	Aggregates
Town of Eagar	Various Mine Sites	Aggregate Plant	Aggregates
Tri County Materials	Various Mine Sites	Portable Aggregate Plant	Aggregates
TRI-R Constuction	Golden Vertex Moss Mine	Custom Crushing	Aggregates
United States Bureau of Reclamation	Portable	Crushing	Aggregates
US Forest Service	Various Pits Coconino, Kaibab NFS	Screening	Cinders
Wheeler Construction aka WCI Mining LLC.	Portable	Portable Aggregate Plant	Aggregates
White Mountain Cinders	Portable	Cinders	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 2017:

Miners	701
Contractors	1,663
Others	163

Total Participants Trained 2,527

Of total participants trained - 125 received First Aid/CPR/BBP certifications.
Total participants trained in 2017 = 80 more than 2016.

A total of 615 participants received multiple certifications for CFR Parts 48 & 46 so the Total Certificates issued in 2017 = 3,142.

Others trained include participants from agencies such as:
Arizona Department of Environmental Quality (ADEQ)
Bureau of Land Management (BLM)
Bureau of Reclamation
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 8708 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 2017 ASMI inventoried 118 mines; secured 106 mine features; 21 of which were permanently backfilled and 85 were fenced and signed; 164 Notice of Violations were issued; 22 Corrective Actions were received/submitted; the remaining 142 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 accidents or fatalities were reported in calendar year 2017.

Mined Land Reclamation

Hardrock Mining Industry

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 2017, the following sites reported an approximate 621 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 74,667 acres have been disturbed through 2017, with an approximate estimate of 627 acres of private mined lands having been reclaimed by most these reporting mine sites.

Mining Company	Mine Site	Disturbed Acres 2017	Total Acres Reclaimed	Total Acres Disturbed
Gold Road Mining Corp	Gold Road	0	0	24.2
ASARCO	Hayden	3	0	3754
ASARCO	Mission	2	0	8357.82
ASARCO	Ray	-	-	9157
Silver Bell Mining, LLC	Silver Bell	61	0	2056
BHP Billiton	Miami Unit	-	-	560
Pinto Valley Mining Corp	Pinto Valley	-	382.8	3669.3
Resolution Copper (old magma)	Superior	0	0	103
Carlota Copper Co.	Carlota	0	203	904
Origin Mining Company	Mineral Park	0	0	1225.5
Arizona Minerals Inc.	Hermosa Taylor Deposit Exploration	-	-	513.5
Freeport-McMoRan Mining	Bagdad	126	0	7786.7
Freeport-McMoRan Mining	Miami	0	0	4697
Freeport-McMoRan Mining	Morenci	128.61	0	16628
Freeport-McMoRan Mining	Sierrita	0	0	10083.06
Freeport-McMoRan Mining	Twin Buttes	0	0	1452.2
Freeport-McMoRan Mining	Safford	175	0	3378

Golden Vertex	Moss Mine	101.54	0	101.54
Rosemont Copper Company		0	40.6	9.1
Vulture Peak Holdings	Vulture Mine	24	1.5	207.746
Totals		621.15	627.9	74,667.67

Aggregate Mining Industry

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 218 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 2016-2017), reported that an approximate 36.5 acres of mined lands were reclaimed for 2017, and 249 acres of new disturbance were reported during this period. As reported by the mine sites in the Aggregate (sand & gravel) mining industry, during the 2017 reporting period, the aggregate industry is beginning to rebound along with Arizona’s construction industry.

The Arizona State Mine Inspector estimates the following reported totals with approximately 48,930 acres of private land have been approved for the potential of aggregate industry utilization, and is estimated for future land disturbance. Currently, 20,399 acres have been reportedly disturbed through all reportable years, with an approximate estimate of 2,119 acres of private mined lands having been reclaimed.

Disclaimer about Information Accuracy: Although every effort has been made to provide complete and accurate information; due to Agency and federal information backlog, some data may not be available by due date of report, therefore the Arizona State Mine Inspector’s Office makes no warranties, express or implied, or representations as to the accuracy of content of this report.