

ASMI 2016

Year in Review



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ASMI 2016 in Review

During the calendar year of 2016, the ASMI inspection team performed 658 health and safety inspections, which identified 438 violations of the mining code for corrective actions by the mine operators.

This compared to 670 Inspections in 2015 with 618 nov's, 180 less violations than 2015.

ASMI achieved a 99% inspection rate for Arizona Mine Sites.

No Cessation Orders were issued to mine operators in 2016.

ASMI Fatal Accidents 2016



The last fatal accident at an Arizona mine site occurred on April 9th 2016.

On April 9, 2016, Mr. Brian Ortiz, a 25 year old married male from Safford, Arizona was found unconscious in a area located on the east side of the FMI Safford Tankhouse copper stripping area. The incident occurred during the time Mr. Ortiz was priming a diaphragm pump to circulate the electrolyte solution from a catch sump area. Employee had the potential to be exposed to electrical DC voltage and current at the Commercial and Return HDPE pipe line containment area.

From 1912 to 2016, Arizona Mines claimed 1,559 lives. 1918 alone cost 93 lives.

1994, 2003, 2015 are the only years when Arizona had no fatalities at our mines and smelters.

LTIR / NFDL



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	2012	2013	2014	2015	2016
National Accident Incidence Rate	1.8	1.7	1.8	1.6	1.5
Arizona Accident Incidence Rate	1.4	1.7	1.3	1.3	1.5

2016 Statistics



Types of Operations	Number of Inspections	Violations Written	Average Number of Employees	Number of Mines
Surface Metal Mines, Mills, SX-EW Plants, Smelters, and Refineries	89	113	7980	57
Rock Products, Sand & Gravel, Pits, Quarries, Batch and Hot Plants	449	262	2333	515
Underground Mines	24	5	112	15
Contractor Totals	96	58		
Mine Totals	562			
TOTALS	658	438	10,425	587

Violations



Unsafe Equipment

Electrical Violations

Abandoned Mines Inventoried and Secured



Fiscal Year
2007-2017

Inventoried
5217

Secured
1561

Total Mines inventoried 8445*

*Does not include the AZMILS database of 10,000 mines compiled by Department of Mineral Resources in the 1990's

1969-2006
37 years

(32) Fatalities
0.86 per/year

fatality approx. every 2.12 year

(17) Serious Injuries
.45 per/year

injury approx. every 1.31 years

2007-2016
9 years

(2) Fatalities
.22 per. Year

fatality approx. every 9.9 years

(4) Serious Injuries
.44 per/year

injury approx. every 4.34 years

ASMI Inspection Trends



- ❧ Common LT Accident reported to ASMI is Falls. Inspectors will be looking at potential.
- ❧ Contractor Violations observed will be written to the Contractor and may also be written to the Mine Operator on ARS – 304 B, Operator Responsibility.
- ❧ ASMI uses R11-1-801 which references the NEC for Installation and Maintenance. ARS 27-304 Operator Responsibility for NFPA 70E-205.3: “Electrical equipment shall be maintained in accordance with manufacturers’ instructions or industry consensus standards to reduce the risk associated with failure” and the subsequent exposure of employees to electrical hazards.

ASMI Inspection Trends



- ❧ With so many inactive or closed Rock Products compliance to ARS 27-318 and Reclamation will be reviewed.
- ❧ Pursuant to A.R.S. §27-1226 (A) Beginning January 1, 2007, if a surface disturbance cannot be practicably reclaimed concurrently with an exploration operation or at an aggregate mining unit, reclamation shall be initiated within one year after cessation of aggregate mining activity.
- ❧ Pursuant to A.R.S. §27-1324 (B) A person who violates this chapter or a rule, order or reclamation plan approval adopted or issued pursuant to this chapter is subject to a civil penalty of not more than one thousand dollars for each day of violation, not to exceed fifteen thousand dollars for each violation. At the inspector's request, the attorney general shall file an action in superior court to recover civil penalties as prescribed by this section.





The End



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