



Pattern of Violations

Screening Criteria and Scoring Model – 2009

A computer-generated report is run that retrieves data for the most recent 24 months available for every mine under MSHA's jurisdiction. Mines currently in an "Active" status (on the date the report is generated) are reviewed to determine if a potential Pattern of Violations may exist.

Initial Screening Criteria (30 CFR §104.2)

The following screening criteria are used to perform the initial screening required under 30 CFR §104.2. Mines meeting **all** of the following criteria are further screened to identify mines meeting appropriate specified criteria for the potential Pattern of Violations, among those listed in 30 CFR §104.3.

At least **ten** S&S Citations/Orders, at mines classified as Surface and Facility, **issued** during the 24 month review period.

At least **twenty** S&S Citations/Orders, at mines classified as Underground, **issued** during the 24 month review period.

At least two "elevated enforcement" actions, [i.e. type action is 104 (b), 104 (d) or 107(a)], **issued** during the 24 month review period.

The ratio of Citation/Orders **issued** in the most recent 12 months of the review period to the number of Citations/Orders **issued** during the previous 12 months of the review is 70% or greater.

The mines' rate of S&S Citations/Orders **issued** per 100 inspection hours during the 24 month review period is equal to or greater than 125% of the National rate of S&S Citations/Orders **issued** per 100 inspection hours for that mine type and classification.

The number of S&S Citation/Orders **issued** per 100 inspection hours during the last two quarters is greater than the Industry Average for this mine type and classification **OR** the number of elevated enforcement Citations/Orders **issued** per 100 inspection hours during the last two quarters is greater than the Industry Average for this mine type and classification.

A minimum of two "elevated enforcement" **final orders** of the Commission, [i.e. type action is 104 (b), 104 (d) or 107(a)] during the 24 month review period.

At least one S&S 104 (d) issuance that became a **final order** of the Commission during the 24 month review period.

At least ten S&S Citations/Orders, at mines classified as Surface or Facility, that are **final orders** of the Commission during the 24 month review period.

At least **twenty** S&S Citations/Orders, at mines classified as Underground, that are **final orders** of the Commission during the 24 month review period.

The information used to screen mines includes a **raw weighted score** for each operation meeting the above criteria as follows:

- a. The number of S&S citations and orders issued per 100 Inspection Hrs. that became **final** during the 24 month review period times the weight assigned to this factor; plus
- b. the number of 104(b) (failure to abate) orders issued per 100 Inspection Hrs. for failure to abate an S&S issuance that that became **final** during the 24 month review period and multiplying by a factor of 5; plus
- c. the number of 104(d) (unwarrantable failure) citations and orders issued per 100 Inspection Hrs. that became **final** during the 24 month review period and multiplying by a factor of 5; plus
- d. the number of 107(a) (imminent danger) orders issued¹ per 100 Inspection Hrs. during the 24 month review period and multiplying by a factor of 5.

This **raw weighted score** is increased by:

- e. 5%-20% for operations with injury rates above the national average for the same mine type and industry grouping as follows:

<i>Degree 1-4 Injury Rate Multipliers</i>			
<i>IR Greater than Nat'l. Avg. and less than or equal to 2 times the Nat'l. Avg.</i>	<i>IR Greater than 2 times the Nat'l. Avg. and less than or equal to 3 times the Nat'l. Avg.</i>	<i>IR Greater than 3 times the Nat'l. Avg. and less than or equal to 4 times the Nat'l. Avg.</i>	<i>IR Greater than 4 times the Nat'l. Avg.</i>
5%	10%	15%	20%

¹ Imminent Danger orders are not assessed and thus do not become “final orders” of the Commission. Therefore, the number of Imminent Danger orders issued is used in this score.

- f. 5%-20% for operations with injury severity rates (number of days lost X 200,000 divided by the total work hours reported) above the national average for the same mine type and industry grouping as follows:

<i>Degree 1-4 Injury Severity Rate Multipliers</i>			
<i>ISR Greater than Nat'l. Avg. and less than or equal to 2 times the Nat'l. Avg.</i>	<i>ISR Greater than 2 times the Nat'l. Avg. and less than or equal to 3 times the Nat'l. Avg.</i>	<i>ISR Greater than 3 times the Nat'l. Avg. and less than or equal to 4 times the Nat'l. Avg.</i>	<i>ISR Greater than 4 times the Nat'l. Avg.</i>
5%	10%	15%	20%

- g. 5%-20% for operations with **final** S&S citations and orders per 100 inspection hours (VPIH) above the 24-month national average for the same mine type and industry grouping as follows:

<i>VPIH Multipliers</i>			
<i>VPIH Greater than Nat'l. Avg. and less than or equal to 2 times the Nat'l. Avg.</i>	<i>VPIH Greater than 2 times the Nat'l. Avg. and less than or equal to 3 times the Nat'l. Avg.</i>	<i>VPIH Greater than 3 times the Nat'l. Avg. and less than or equal to 4 times the Nat'l. Avg.</i>	<i>VPIH Greater than 4 times the Nat'l. Avg.</i>
5%	10%	15%	20%

The final weighted score must be greater than or equal to the average weighted score for all active mines of the same mine type and industry classification.

Pattern Criteria Screening (30 CFR §104.3)

30 CFR § 104.3 requires that one of the following pattern criteria be met: (1) a history of repeated significant and substantial violations of a particular standard; (2) a history of repeated significant and substantial violations of standards related to the same hazard; or (3) a history of repeated significant and substantial violations caused by unwarrantable failure to comply. Only citations and orders that are final may be considered in determining if these criteria have been met. For a Pattern of Violations review, mines must have at least five S&S citations of the same standard that became **final orders** of the Commission during the most recent 12 months.