

EFCOG Best Practice #271

Recommended Criteria and Thresholds for Safety and Health (S&H) Metrics for Prequalifying Subcontractors

Facility:

DOE Complex

Best Practice Title:

Recommended Criteria and Thresholds for Safety and Health (S&H) Metrics for Prequalifying Subcontractors

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Brief Description of Best Practice:

This Best Practice provides contractors with minimum threshold criteria for evaluating subcontractors during the prequalification process for work performed in furtherance of the DOE mission.

Why the best practice was used:

This Best Practice was developed due to an identified need to recommend minimum threshold criteria for S&H metrics to assist with prequalifying subcontractors.

What are the benefits of the best practice:

This Best Practice provides contractors with a consistent set of minimum evaluation criteria for selecting subcontractors, helping to promote and sustain strong safety performance. By establishing clear expectations, it supports a more uniform approach to prequalifying subcontractors across the DOE complex.

What problems/issues were associated with the best practice:

This Best Practice establishes thresholds for S&H metrics (e.g., Total Recordable Case (TRC Rate, Experience Modification Rate (EMR), etc.) to assist with prequalifying subcontractors.

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How the success of the Best Practice was measured:

This is a new Best Practice; however, multiple DOE locations follow similar pre-qualification requirements for their subcontractors.

Description of process experience using the Best Practice:

Introduction: Prequalifying the subcontractor and lower-tier subcontractors is an essential step in ensuring success when executing subcontracted work. It involves evaluating them prior to awarding a subcontract to ensure they meet the necessary qualifications, capabilities, and standards. Key reasons to prequalify the subcontractor include ensuring the subcontractor can provide quality work, mitigate risk, comply with regulations, continuously improve safety and health performance, maintain budget control, and ensure timely completion of a project.

This Best Practice provides minimum criteria for S&H metrics to prequalify subcontractors for on-site work activities.

Evaluating subcontractor S&H prequalification using metrics of past performance such as Experience Modification Rate (EMR), Total Recordable Cases (TRC), and Days, Away, Restricted, or Transferred (DART) rates is crucial as they provide insights into historical S&H performance and potential risks, helping to screen out poor performers. Serious and repeated violations, along with fatalities and willful violations, highlight deficiencies in S&H practices and compliance, indicating areas where subcontractors may pose significant risks to project safety and health, and may need careful oversight.

Purpose: Provide minimum recommended criteria and thresholds for S&H metrics when prequalifying a subcontractor.

Process: To prequalify for subcontracted work, subcontractors must meet certain requirements.

Subcontractors are asked to provide the following information during the pre-qualification process:

- Experience Modification Rates (EMR) for the past three years
- TRC and DART rates for the past three years
- The North American Industry Classification System (NAICS) code for OSHA reporting purposes.
- OSHA 300A Logs for the past three years.
 - Include form 300 (without names) if there are injuries/illnesses reported on the 300A forms.
- Provide description of good faith efforts to prevent future occurrence if any of the following apply:
 - Occurrence of fatalities in the last three years.

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- Receipt of OSHA citations within the past three years.
- TRC and DART rates for the past three years are above the national average found in Table 1 of the Bureau of Labor Statistics website (<http://www.bls.gov/iif/oshsum.htm>).
- Recordable injuries related to the subcontractor's scope of work occurring within the past three years, as requested.

When reviewing subcontractor profiles, evaluate key metrics such as the Total Recordable Case (TRC) rate and Days Away, Restricted or Transferred (DART) rate. See Table 1 for evaluation criteria.

Table 1. Subcontractor Safety Prequalification Rubrics

Experience Modification Rate (EMR)	Measures past S&H performance; industry average is 1.0	Average of Past Three Years	≤ 1.0
Total Recordable Cases (TRC) Rate	Number of total recordable cases per 200,000 work hours	Average of Past Three Years	≤ NAICS Avg
Days Away, Restricted, or Transferred (DART) Rate	Incidents resulting in lost workdays or restrictions cases per 200,000 work hours	Average of Past Three Years	≤ NAICS Avg
Serious/Repeated Violations	Average number of serious/repeat violations per OSHA/State Plan inspection	Past Three Years	≤ 0
A subcontractor may still be considered acceptable if they fail to meet two of the defined above safety targets. However, failing to meet more than two targets will result in a not acceptable status.			
Fatalities	Number of work-related fatalities	Past Three Years	0
Willful Violations	Number of willful violations	Past Three Years	0
Failure to meet either the Fatalities or Willful Violations targets will result in a not acceptable status.			

In certain cases, it may be necessary to establish contractor-specific internal processes to accommodate specialty or unique subcontractors who do not meet the standard safety prequalification criteria found in Table 1. This process may include, but is not limited to, a comprehensive evaluation of the S&H risks the subcontractor may introduce to the project, management approval, and the development of mitigation plans to effectively minimize any additional risks.

Note: For employer with fewer than 100 employees, you may consider using the BLS Quartile Data tables ([Survey of Occupational Injuries and Illnesses Data : U.S. Bureau of](#)

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[Labor Statistics](#)) to benchmark Total Recordable Cases (TRC) Rate and Days Away, Restricted, or Transferred (DART) Rate against similarly sized establishments for a more accurate analysis.

Appendix A – Example Experience Modification Rate (EMR) Calculation:

When evaluating subcontractor EMR, the contractor may calculate a 3-year EMR average.

Example calculation of EMR and comparison to "target" of ≤ 1 .

- Calculate a combined average from most recent 3-year period.
- The "target" for this element of the prequalification is a 3-year average at or below 1.0.

Year	2023	2024	2025	3-Year Average	0.666
EMR	0.797	0.6	0.6		

In this example, the contractor meets the criteria by achieving a three-year average EMR of less than 1.

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Appendix B – Example TRC and DART Calculation:

When evaluating subcontractor TRC and DART rates, the contractor may choose to calculate a 3-year average rate, calculate a rate to include average cases and average hours for a 3-year span, or analyze these rates separately for each year.

Example calculation of TRC and DART and comparison to applicable incidence rates for contractor NAICS code as found on the U.S. Bureau of Labor Statistics (BLS) website.

3-Year Case Average Example Calculation:

- Identify number of TRC and DART cases for each applicable year being evaluated.
- Calculate 3-year average case rate for each element.
- Determine total employee hours worked for each year being evaluated and calculate 3-year average.
- Yearly case rate for each element is calculated with the following formula:

$$Rate = \left(\frac{3 - year\ case\ average \times 200,000}{3 - year\ hours\ worked\ average\ by\ all\ employees} \right)$$

- Identify the subcontractor NAICS code and record applicable incident rates.
- The target for this element of the prequalification is a 3-year average at or below the BLS incident rate.

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	Year 1	Year 2	Year 3	3-Year Average	3-Year Case Rate	BLS NAICS Average	Pass/Fail
TRC Cases	3	0	0	1	1.36	1.6	Pass
DART Cases	3	0	0	1	1.36	0.5	Fail
Total Employee Hours	215,000	115,000	112,000	147,333			

In the example above the subcontractor passed the criteria for TRC, but failed DART cases using the NAICS code.

3-Year Case Rate Average Example Calculation:

- Calculate TRC and DART rates for each year.
- Add all rates together and divide the sum by three.

	Year 1	Year 2	Year 3	Rate Average	BLS NAICS Average	Pass/Fail
TRC Cases	3	0	0	0.93	1.6	Pass
DART Cases	3	0	0	0.93	0.5	Pass
Total Employee Hours	215,000	115,000	112,000			
Rate	2.80	0.0	0.0			

In the example above, the subcontractor passed the criteria for both TRC and DART using the NAICS code.

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Appendix C – Terms and Definitions

Term	Definition
Contractor*	The contracting organization, office, or individual tasked with prequalifying a subcontractor.
Days Away, Restricted, or Transferred (DART) Rate	DART specifically measures the frequency of workplace incidents that result in days away from work, restricted work activity, or job transfers.
Experience Modification Rate (EMR)	EMR is a measure of a company's historical safety performance and claims experience compared to others in the same industry.
Fatalities	An employee death resulting from a work-related incident or exposure.
Repeated Violations	A repeated violation if the organization, office, or individual has been cited previously for the same or a substantially similar condition.
Serious Violations	A serious violation exists when the workplace hazard could cause an accident or illness that would most likely result in death or serious physical harm, unless the employer did not know or could not have known of the violation.

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Subcontractor*	A contractor at any tier hired to perform specific tasks by the contracting organization, office, or individual.
Total Recordable Case (TRC) Rate	The number of recordable injuries and illnesses occurring among a given number of full-time workers (usually 100 full-time workers) over a given period of time(usually one year).
Willful Violations	A violation in which the employer either knowingly failed to comply with a legal requirement (purposeful disregard) or acted with plain indifference to employee safety.

*These are definitions as they apply to this document.