Improving Contractor Performance

Keep Safety in Mind From the Start

By Jerome Spear

Contractors are often hired for the technical competency and skill that is required to construct a project conceptualized by the project owner and designed by the owner's architect/engineer. However, since the construction project occurs on the owner's site, the owner is potentially exposed to additional liability (i.e., OSHA fines and tort liability) that must be considered. In general, there are two approaches to address such potential liabilities: hands-off or hands-on.

The question of liability is complex. Some case law gives an incentive to owners to keep contractors at arm's length, while other case law appears to require owner involvement that gives rise to additional liability.[1] As a result, it appears that preventing an injury may be the best way to prevent a lawsuit. Contractor safety, health and environmental performance can be improved by integrating EHS activities and considerations into the contracting process, which includes prequalification and contractor selection, designing and planning, work-in-progress assessment and verification and post-construction performance evaluation.

Prequalification and Contractor Selection

A formal prequalification process is an important initial step in establishing an effective contractor EHS program. Although EHS personnel are not typically in control of the contractor prequalification or selection process, there are opportunities to provide input on the EHS performance of prospective contractors.

The prequalification process typically involves the prospective contractor providing the owner with a completed prequalification questionnaire (PQQ) and supporting documents and programs. The purpose of the PQQ is to identify those contracting organizations with effective safety management systems and proactive cultures. The completed PQQ should be evaluated by a review panel comprising a variety of experts from various departments within the company. Areas of expertise represented should include the following:[2]

- **Safety, health and environmental issues**—Looking at culture, safety systems of work, regulatory compliance, safety performance
- **Technical issues**—Reviewing organizational structure, discipline/trade skills, ability and experience of similar contracts
- **Quality issues**—Evaluating the ability of the contracting organization to ensure the integrity and quality of the service
- **Financial issues**—Ensuring that resources are available to meet the demands, performance standards and costs

Prequalification Criteria

The effectiveness of the contractor's risk reduction practices should be the basis for contractor safety prequalification criteria. Commonly used criteria include the following:

- **Experience modification rate:** It is common practice for owners who have a formal contractor EHS program to require contractors to have an EMR of 1 or less.
- **Injury frequency and severity rates:** Specific target injury rates are typically company specific and are often revised (i.e., lowered) periodically by the owner based on the owner's contractor safety goals.
- **EHS program evaluations:** EHS program evaluations are time-consuming and more subjective than reviewing injury statistics, but the evaluator should base his

or her judgment on the presence or absence of specific EHS management system elements.

- **Integration of EHS on current projects:** The most effective means of evaluating a contractor's EHS capabilities is to visit a job site to evaluate their performance.[3] The prospective contractor should also be interviewed to assess corporate safety culture, EHS knowledge, management skills and philosophy.
- **OSHA and EPA citation history:** A contractor that is subject to regular scrutiny by OSHA should be avoided since the presence of that contractor would increase the likelihood of OSHA inspections performed at the owner's site. OSHA inspection records are public and may be obtained by conducting a company search on the OSHA inspection database Internet site (www.osha.gov/cgi-bin/est/est1).
- **References from previous customers:** The owner should talk with previous customers and determine whether or not they were satisfied with the contractor's EHS performance.

EHS Contract Requirements

Prudent contractors usually include the cost of supplying safety equipment and employee training in their bids.[4] Consequently, their bids may be higher, causing owners to look elsewhere. In other words, some effective EHS programs go unrewarded. Owners can change this by making EHS considerations an integral part of project management. Many owners have well-written contractor EHS programs, and incorporating their standards as specific contract requirements should be considered. The more specific the requirements stated in the contract, the greater the ability the owner has to ensure the work is conducted in a safe manner.[3] EHS requirements should also be objectively stated to avoid ambiguity and interpretation issues. The project team should work with legal and contract specialists to formulate project safety specifications.

Although EHS contract specifications vary from company to company and often from project to project, the following topics should be considered when developing EHS project requirements:[5]

- Naming the person who will be responsible for overseeing contractors' performance and ensuring that the work is performed in a safe manner
- Requiring all contractors to prepare and submit an acceptable EHS plan that defines supervisory and employee safety training prior to the start of their particular work
- Listing specific published EHS standards and hazard prevention requirements
- Listing special EHS requirements that are to be followed for unique hazards not adequately defined in the provisions contained in the published EHS standards referenced above
- Listing qualifying requirements for eligible contractors to ensure that bidders are restricted to those contractors whose past EHS performance indicates that they are competent and safe contractors and includes an assessment of the contractor's current EHS capabilities

Designing and Planning for Safety

Considering EHS issues while designing and planning the project could have a dramatic impact in reducing injuries that may occur during construction. EHS considerations not addressed during the initial design phase often cost significantly more to retrofit or otherwise correct after the project is completed or even during the construction phase.

The owner's project team should include an industrial hygienist or safety engineer who analyzes conceptual project designs and predicts hazards that may evolve.[4] Performing formal EHS assessments and reviews during the designing and planning phase can identify and assess hazards early on so that the project team can eliminate them or provide engineering solutions to efficiently control them during the construction phase. Some specific examples of how EHS issues may be addressed during the design and planning

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phase include specifying temporary decking to be installed as soon as possible to prevent injury from falling, designing permanent stairways and walkways to be constructed first so that the use of temporary scaffolding is minimized and removing or relocating utilities.

Work-in-Progress Assessment and Verification

A monitoring program typically includes EHS performance reporting, inspections by owners and contractors and incident reporting. Owners often require periodic (at least monthly) reports to be submitted to the owner to track the contractor's EHS performance. Consideration should be given to measure and track both results-based metrics, such as injuries and incidents, and activity-based metrics, such as inspections, audits, job safety analyses completed, toolbox safety meetings, number of corrective actions from audits and behavior observation and feedback.

Once the contractor is on site, the owner should periodically monitor the work practices of the contractor. If improper EHS practices are observed, the owner needs to take action to ensure the responsible contractor(s) corrects the situation. From a legal perspective, the owner is exercising reasonable diligence.[6] Owners should consider monitoring contractor compliance with EHS requirements on an ongoing basis. The frequency of monitoring should depend on the level of risk associated with the work the contractor is performing. The contractor should conduct internal EHS inspections according to their procedures. The contractor's self-inspection reports may either be submitted to the owner or be available to review on request. A formal system should be established to review the audit findings with the contractor(s) to determine corrective actions needed, person(s) responsible for implementing the corrective action and due dates to ensure the deficiencies are corrected in a timely manner.

Post-Construction Performance Evaluation

After the completion of the project, a post-construction evaluation of the contractor's performance should be conducted. The EHS portion of this evaluation should incorporate data from the contractor's monthly reports, audit findings and observations. This comprehensive report can be used to build a database of contractors for future projects.[4] Furthermore, contract close-out reports should be completed by both company and contractor management teams that detail the positive and negative aspects of the contract and the recommendations for similar contracts in the future. If the contractor does not meet the owner's expectations and requirements, a meeting may provide the contractor an opportunity to discuss the issues and develop a corrective action plan. In some cases (consistent with contracting provisions), the owner may determine that the contractor should be removed from the approved contractor list.

Successful contracting management requires the involvement of various owner and contractor representatives. The key to improving EHS performance is through integration into the contracting process, which includes establishing formal prequalification and contractor selection criteria and incorporating EHS requirements into the contract. Since designing and planning with construction safety in mind provides the greatest opportunity to minimize incidents in the field, formal EHS reviews should be performed during the designing and planning phases of the project. Finally, the contractor's performance should be evaluated both during and on completion of the project to not only provide feedback for performance improvement as needed but also to determine if the contractor should be considered for future projects.

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AIHA Guideline Provides In-Depth Look at Construction Contract Documents

If you'd like more in-depth information on how best to build a construction contract with health and safety in mind, the AIHA guideline *Health and Safety Requirements in Construction Contract Documents* may be of interest. This new publication, developed by the AIHA Construction Committee, identifies practices and procedures currently used in the industry to manage contractor health and safety activities from the conceptual phase through construction and post-construction work. Its six chapters and nine supporting appendices address construction health and safety contract concerns and will assist project managers in developing appropriate contract language.

For more information, visit www.aiha.org/marketplace.htm or call AIHA Customer Service at (703) 849-8888.

References

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