What is a Risk Assessment?
A risk assessment is a proven way to manage the many hazards associated with aggregate operations. A risk assessment is a systematic process conducted by a competent person or persons who evaluate a task, identify potential hazards, analyze risks, control those risks, and document the assessment and corrective actions taken. A risk assessment may also be called a Job Safety Analysis (JSA) or Job Hazard Analysis (JHA). Keep in mind, the practice of thinking before you act is most important, and a risk assessment does not always have to be a significant undertaking in paperwork. While this is appropriate in some circumstances, other times, a quick field risk assessment is a good option.

Why Conduct a Risk Assessment?
Risk assessments help workers evaluate tasks, identify risks, and control those risks before beginning work to minimize the likelihood of a serious injury or fatality occurring. They are also useful for management when evaluating whole systems. Risk assessments are valuable tools that help methodically think through processes, jobs, and approaches in a forward-thinking and proactive manner, rather than a reactive one, to prevent harm. They allow management to reduce risks through policies and procedures, training on a specific hazard and providing the proper PPE to protect the worker.

Hazard vs. Risk
We often use hazard and risk interchangeably, and while the concepts are related, they are distinct. A risk assessment first identifies hazards, then looks at the likelihood of an incident occurring and the severity. For example, moving machine parts are a hazard, but the risk is minimal when properly guarded.

Evaluating Risks
Using a Risk Assessment Matrix can help evaluate how risky a hazard is based on its probability and severity. For more information on Risk Assessment Matrices, see additional resources on the Health & Safety page at NSSGA.org.
STEP ONE: Identify hazards
- What physical hazards are there (e.g., lifting, slip/fall, overhead, electrical, low lighting, heights)?
- What behavioral/human hazards are there (e.g., fatigue, inexperience, distraction)?

STEP TWO: Determine who could be harmed and how
- Who is involved with the task and what training have they had?
- Based on hazards identified in step 1, how could they be hurt or exposed to the hazard(s)?

STEP THREE: Evaluate the risks
Use the Risk Assessment Matrix for each hazard identified:
- What is the probability of harm occurring?
- How severe would the harm be?

STEP FOUR: Take action
- What measures should be taken to eliminate or control the hazards?
- Use the hierarchy of controls. In this order, ask, can we:
  1. Eliminate the hazard?
  2. Substitute for a safer alternative?
  3. Use an engineering control?
  4. Use an administrative control?
  5. Use PPE?

STEP FIVE: Record & evaluate
- How effective are the controls?
- Did we record the risk assessment?
- Did adequate personnel sign off?

Repeat if needed, applying lessons learned.