



Sustainable Construction Safety and Health (SCSH) Rating System

FAST FACTS

COMPANY NAME

Anonymous

PROJECT NAME

Case Study #1

PROJECT SUMMARY

- 3 stories, ~300,000 SF
- Manufacturing facility
- New construction
- CM/GC contract
- 2 year project duration
- 600 workers at peak
- >1 million worker-hours

LOCATION

Northwest

BUILDING TYPE

Steel frame with precast exterior panel

CHALLENGES

- Miles of underground conduit
- Extensive mech. utilities
- Deep trenches for underground utilities

SCSH HIGHLIGHTS

- Safety in GC selection
- Safety in contracts
- Daily coordination mtgs.
- Pre-task planning
- 3-week look-ahead schedule
- Design for safety using Building Information Model (BIM)

Project Rating:



Credits Earned: 93.9

Number of Required elements fulfilled: 25 (100%)

Number of Elective elements fulfilled: 22 (88%)

PROJECT DESCRIPTION

The facility is founded on cast-in-place footings and piers. The facility's skeleton is structural steel with metal decking and lightweight concrete slab-on-deck. The roofing consists of insulation board and a membrane roofing system. The exterior of the building is mainly clad with metal panels with a steel stud back-up system.

The CM/GC's past safety performance was a major criterion in the owner's pre-qualification process. The CM/GC also used past safety performance as one of the criteria when selecting its subcontractors.

Building Information Modeling (BIM) was used extensively for mechanical, electrical, plumbing, and fire sprinkler design, coordination, and installation. BIM helped to avoid clashes and changes in the field, which benefited safety tremendously.

The CM/GC provided a full-time safety professional for the project, and there were also several full-time subcontractor safety professionals. The owner's representative walked the site periodically and showed visible commitment to safety. All of the subcontractors submitted a site-specific safety plan before commencing work. A project safety orientation was conducted for all employees prior to their beginning work on the project. The orientation consisted of an introduction by the project superintendents and a detailed safety orientation by the site safety manager.

All workers on the site performed stretch and flex activities prior to the start of their shifts. Ergonomic risk factors were addressed in all pre-task plans.

SCSH RECOMMENDATIONS

- OSHA 10-hour class for all workers for future projects