#### 30 Struck by block wall – Inspection #1192351

A **59 year old male** employee was fatally injured when he was struck by a falling cement masonry wall. On the day of the incident, the victim, a Superintendent/Equipment Operator, and three other employees, were working inside a Dextrose/Fructose Refinery building conducting demolition activities. The crew was cutting notches in a steel I-beam within the Carbon Column Area when it collapsed unexpectedly, along with a nine foot high cement masonry wall which struck the victim, and injured another employee as they were trying to escape the area. During the investigation it was determined, that the company had conducted an engineering survey and developed work procedures for the demolition. However, the employer did not effectively ensure implementation of the demolition plan. The actual work conducted was inconsistent regarding timing of the sequence of cuts. Employees performed cuts on structural steel columns, and diagonal cross braces of the Carbon Column Area structure in a sequence which differed from outlined procedures, causing the structure to become unstable and prematurely collapse, carrying the cement masonry wall along with it.

### **Citation(s) as Originally Issued**

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

### Citation 1 Item 1a

TCA 50-3-105(1)	Each employer did not furnish to each of its employees conditions of employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious injury or harm to its employees. In that the employer did not ensure employees were protected from struck-by/crushed-by hazards while performing demolition activities; written procedures were not implemented during the felling of the Carbon Column Area Structure resulting in an unplanned collapse. Feasible means of abatement of this hazard, among others. Would be to follow the company's Job
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	felling structures which directs employees to perform cuts in a specific sequence.

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# **Citation 1 Item 1b**

29 CFR 1926.850(a)	An engineering survey was not performed by a competent
	person to determine the condition of the framing, floors, and
	walls and the possibility of unplanned collapse of any portion
	of the structure prior to permitting employees to start
	demolition operations. In that the engineering survey
	conducted by the employer did not address the cement
	masonry unit wall; therefore, exposing employees to struck-
	by/crushed by hazards while performing demolition activities.

# **Citation 1 Item 2**

29 CFR 1926.21(b)(2)	The employer did not instruct each employee in the recognition
	and avoidance of unsafe conditions and the regulations
	applicable to his/her environment to control or eliminate any
	hazards or other exposure to illness or injury. In that the
	employer did not provide employees performing demolition of
	the Carbon Column Area Structure with adequate training in
	the recognition and avoidance of hazards.

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Photo 1 of 1: Southeast side of the Fructose Building after the Carbon Column Area collapsed. The cement masonry wall that struck the victim is designated by the red arrow.