The University of Washington

OSHA

Susan Harwood Training and Educational Material Development Grant FY 2011

Developing Fall Protection Training Materials for Non-English Speaking and Illiterate Construction Workers

Case 6
02/2013

English

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A. Long description

(Excerpt[1] from FACE website (case 9506) with partial modifications in the scenario)

On November 21, 1994, a 60-year-old male painter foreman (the victim) died of injuries received in a 35-foot fall from a scaffold…

…The employer was a commercial painting contractor that had been in business under the present ownership for 23 years, and employed anywhere from 20 to 90 painters, depending upon the workload. The employer had a written safety policy and basic written safe work procedures. Weekly safety meetings were conducted by the supervisor at the jobsite and training was conducted on the job. Fall protection equipment were supplied by the employer. The victim had worked for the employer for 20 years. This was the first fatality experienced by the employer.

…The employer had been contracted to scrape, prepare, and repaint the window frames and roof eaves of a church… The men had finished most of the window frames using extension ladders and were ready to begin work on the roof eaves using a tubular scaffold. The scaffold stages were 5-feet-high by 3-feet-wide by 6-feet-long. Seven stages were necessary to access the eaves. The men did not put the side rails on the seventh stage. Two 12-inch-wide boards were placed on the floor of the 7th stage, leaving a 12-inch gap between the edge of the boards and the outside rail of the scaffold.

On the day of the incident, the victim was working from the scaffold scraping the eaves while a co-worker was working from an extension ladder finishing the windows. After their morning break, the victim began to climb the scaffold and instructed the co-worker to place additional scrapers and a propane torch in the tool basket that was tied to a pull rope attached to the top rail of the scaffold. As the co-worker was gathering the tools to place in the basket, he heard a noise and looked up to see the victim falling from the top of the scaffold. The victim fell between the edge of the floor board and the outside of the scaffold, falling approximately 15 feet before striking a cross brace on the scaffold. The victim was flipped to the outside of the scaffold and fell an additional 20 feet, landing on a 36-inch-high air conditioning unit. The victim was unconscious but breathing…He died later at hospital due to the injuries.

B. Learning objectives

a. By the time the trainee completes the training, he/she should be able to understand how <u>unsafe working conditions might lead to a scaffold fall fatality similar to case #6.</u> "Each employer -- shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees" (OSH Act Section 5(a)(1)).

[1] Italic text at section a (long description) represents excerpts from FACE website.

b. "The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury" (1926.21(b)(2)). The second goal of the training for this case is to raise the workers' awareness about the causes of the fall incident and the safe way to paint the roof eave on top of a scaffold, in order to avoid the incident.

C. Lesson plan

The trainee will be shown the figures, which are to be narrated by the trainer, to understand completely the situation leading to fall. Also, he or she will be taught the safe methods of task performance to avoid the incident. Worker's rights to (1) having a safe and healthful work environment and (2) filing a complaint free from discrimination are other objectives of this case which should be addressed. It is recommended that copies of the OSHA safety and health complaint form be distributed to the trainees to show the required elements in a valid complaint. The trainer should emphasize that if the worker request anonymity, the worker's identity would remain anonymous after filling a complaint form.

Finally, the workers' knowledge should be assessed through two major questions which address: a) the cause of the scaffold fall incident presented during the training, and b) the alternative safe actions that could be taken to avoid similar incidents.

D. Assumptions

i. **Activity**: Scraping the roof eaves as part of a painting work
ii. **Location**: 35 feet high from the ground, on top a tubular scaffold. (Scaffold stages: 5-feet-high by 3-feet-wide by 6-feet-long. Seven stages were needed to access the 35-foot high eaves. Seventh stage had no side rails. Two 12-inch-wide boards were placed on the floor of the 7th stage. A 12-inch gap was left between the edge of the board and the outside rail of the scaffold.)
iii. **Work expectation**: Doing a good safe job in a reasonable amount of time
iv. **Scenario**: Working on top of the scaffold to scrape the roof eaves, a worker fell 15 feet through the gap between the floor board and scaffold rails, struck the scaffold cross brace, was flipped to the outside of the scaffold and fell additional 20 feet before hitting an air conditioning unit. He died later due to the injuries.

E. Questions

i. Ask what unsafe action(s) caused the incident.
Items to be discussed:
- Training – The employer shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the

hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards (1926.454(a)).

- No Scaffold Inspections – Scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift, and after any occurrence which could affect a scaffold's structural integrity (1926.451(f)(3)).
- Scaffold erection - Scaffolds must be designed by a qualified person (1926.451(a)(6)) and constructed under the supervision of a competent person (1926.451.(f)(7)).
- Safety issues regarding work on top of a scaffold
- Covering scaffold stages

ii. Ask what action(s) can be taken to avoid the incident. (Which is the correct, or safe, way of performing the task? **The answer is B**)
Items to be discussed:

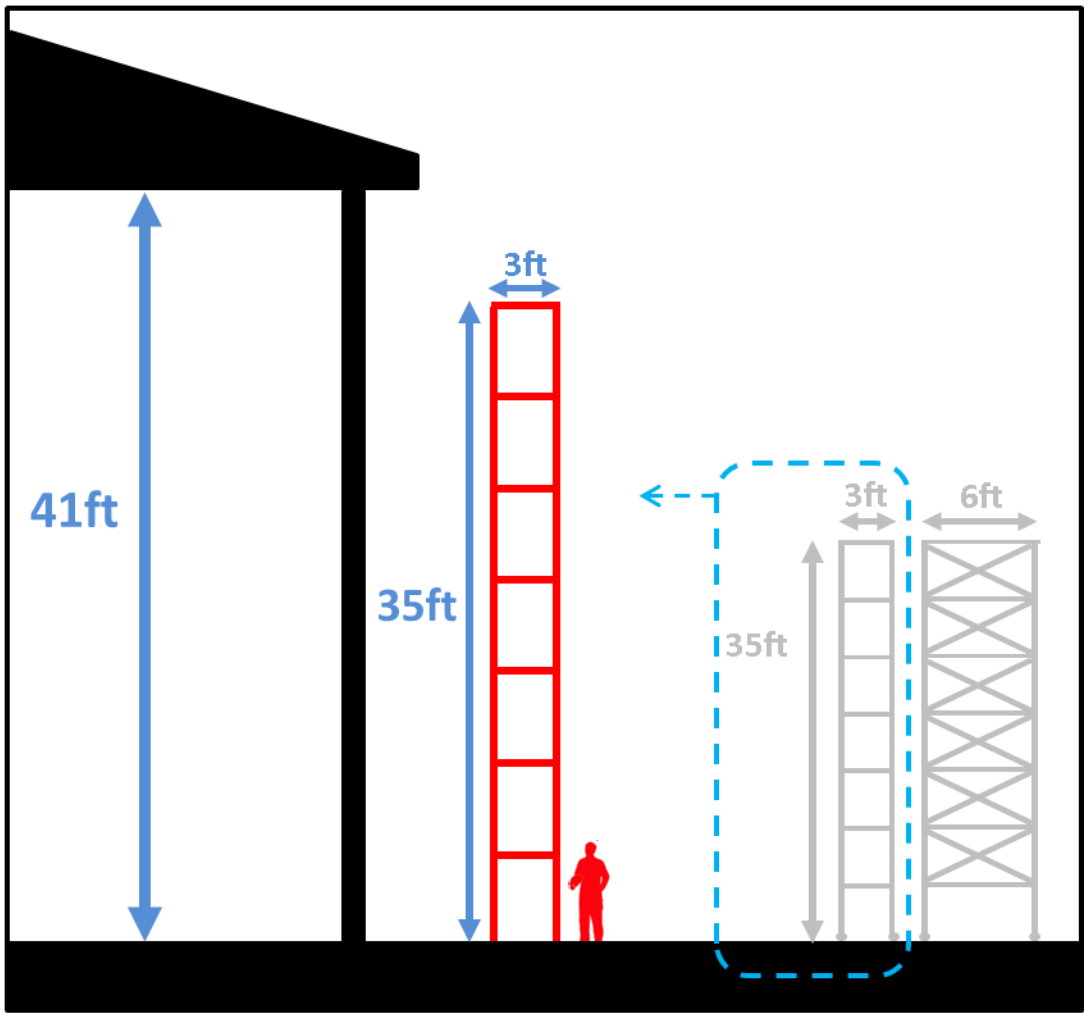
- Training – The employer shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards (1926.454(a)).
- Use fully planked scaffolds.
- Ensure proper access to scaffold.
- Plumb and level.
- Tie in to the wall.
- Complete ALL guardrails (top rail, mid rail, and toe boards).
- Ensure stable footing.
- Inspect before use (by competent person).
- Use personal fall protection equipment.
- The scaffolds in options A and C did not have access ladders. Also, option A did not have guard rails installed and option C was not fully planked. This would make these options unsafe from the start.

F. Short description

Working on top of the scaffold to scrape the roof eaves, a worker fell 15 feet through the gap between the floor board and scaffold rails, struck the scaffold cross brace, was flipped to the outside of the scaffold, and fell additional 20 feet before hitting an air conditioning unit. He died later due to the injuries.

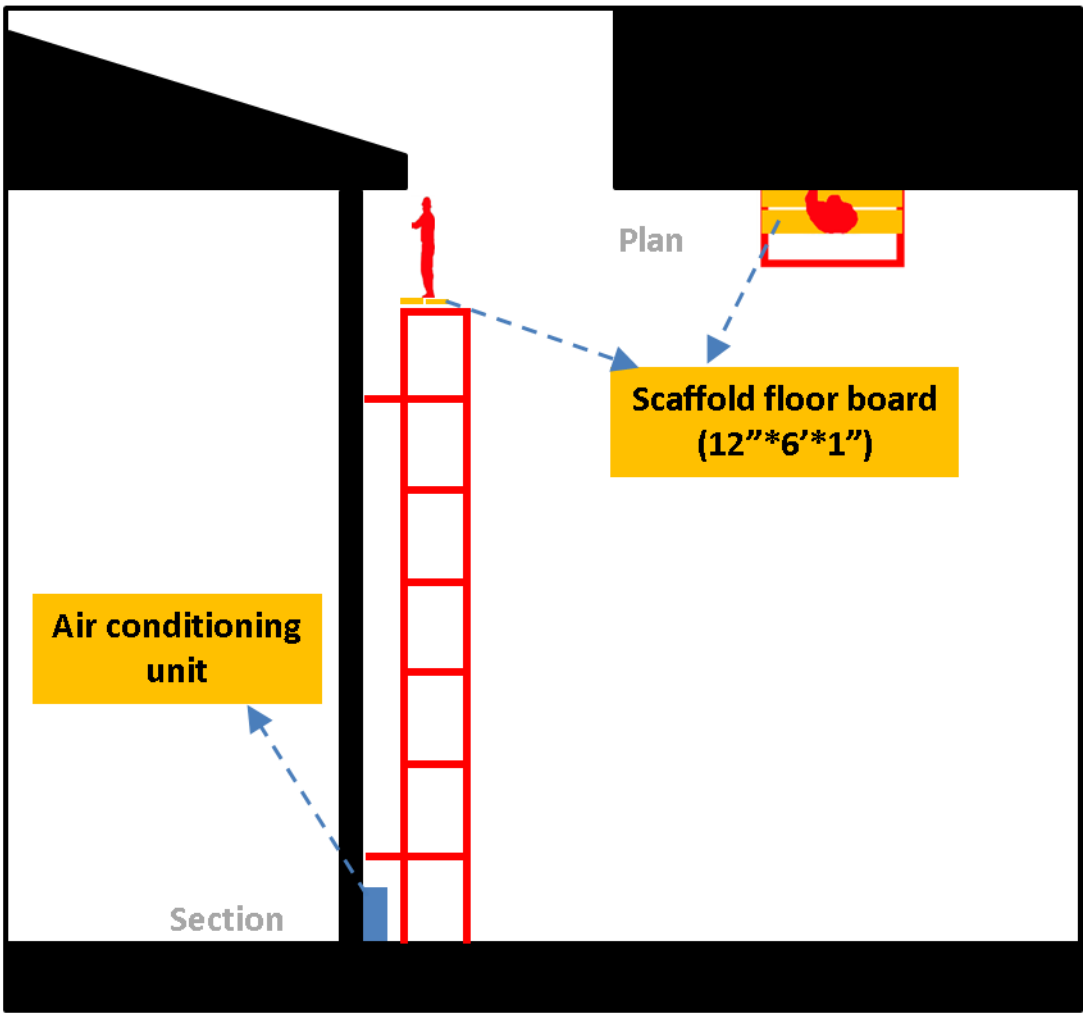
G. Pictorial Prototype

1



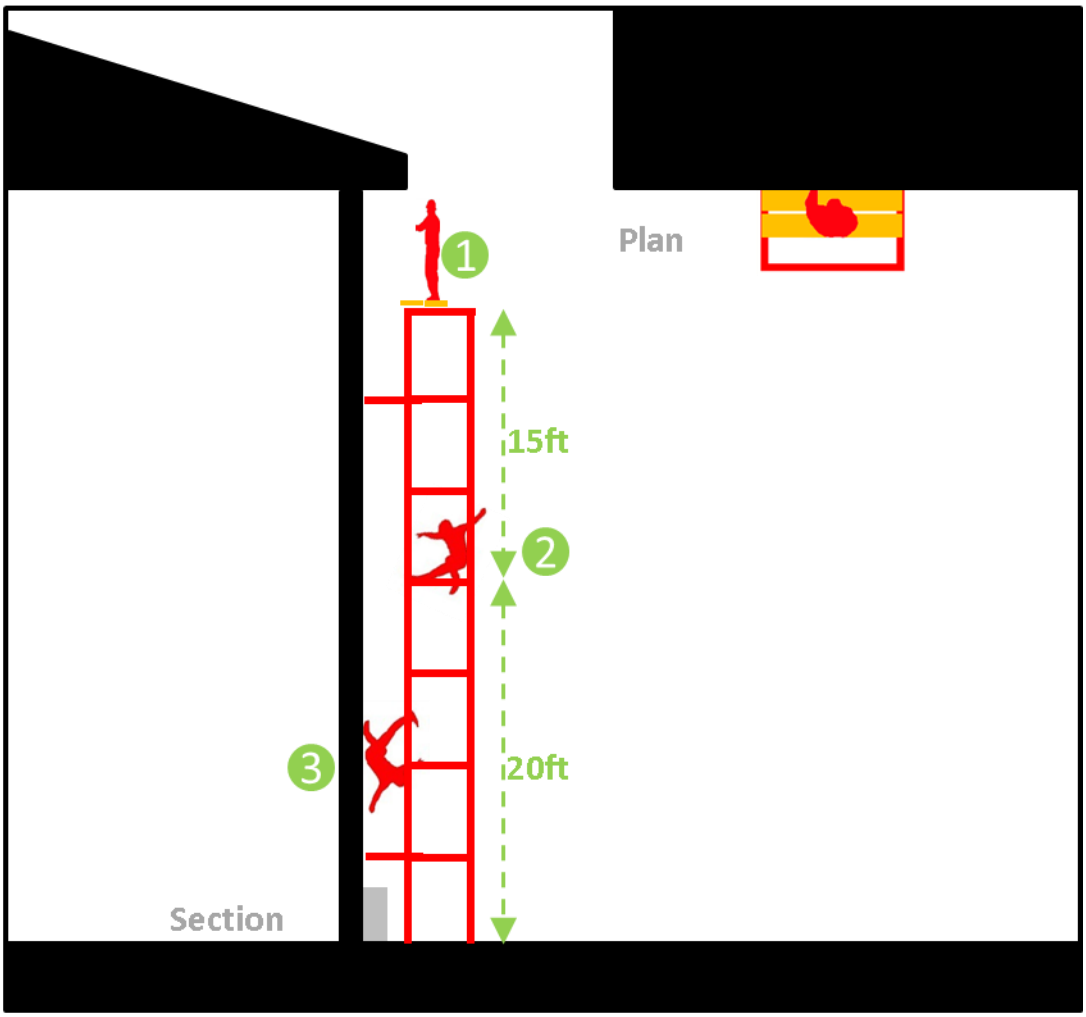
"Scrape the roof eave."

2



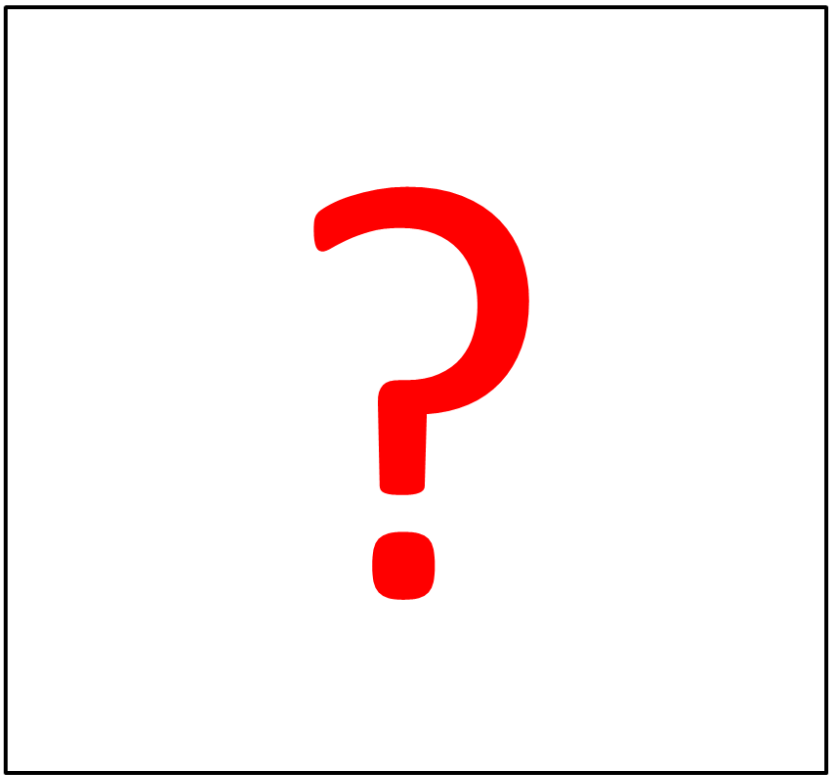
“Let’s get started.”

3



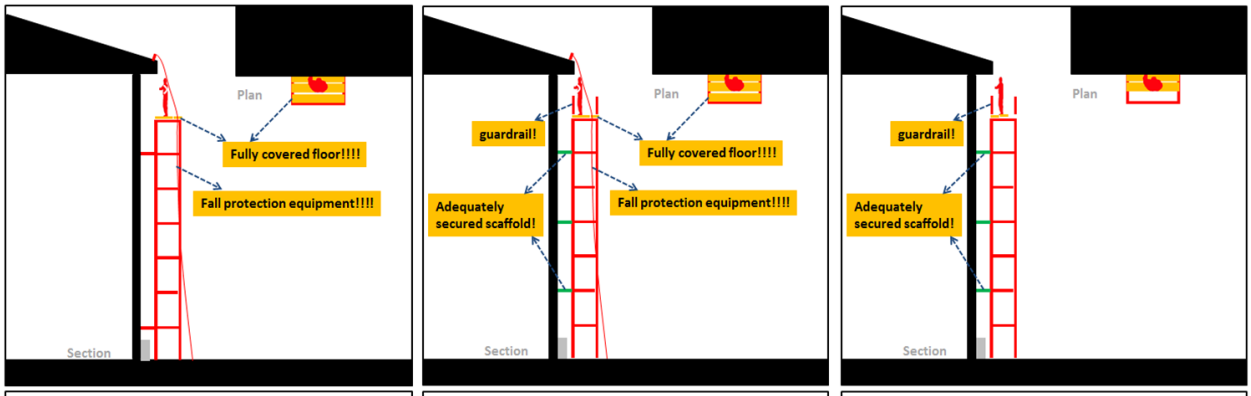
"Oops! I fell through the gap within scaffold floor."

4



What could I have done differently before my death?

1. Why was the method used to perform the task in this example unsafe?
2. Which is the correct, or safe, way of performing the task?



"Use fully-covered floor, and fall protection equipment?"

"Use fall protection equipment, fully-covered floor, guardrail, adequately-secured scaffold and access ladder?"

"Use guardrail and adequately-secured scaffold?"

A **B** **C**

You have the **RIGHT** to:

1. Ask OSHA to inspect your workplace. (1-800-321-OSHA)
2. Exercise your rights under the law without retaliation and discrimination.
3. Receive information and training about hazards, methods to prevent the harm, and OSHA standards that apply to your workplace. The training must be in a language you can understand.
4. Get copies of test results done to find hazards in your workplace.
5. Review records of work-related injuries and illnesses.
6. Get copies of your medical records.

U. S. Department of Labor
Occupational Safety and Health Administration

Notice of Alleged Safety or Health Hazards

For the General Public:

This form is provided for the assistance of any complainant and is not intended to constitute the exclusive means by which a complaint may be registered with the U.S. Department of Labor.

Sec 8(f)(1) of the Williams-Steiger Occupational Safety and Health Act, 29 U.S.C. 651, provides as follows: Any employees or representative of employees who believe that a violation of a safety or health standard exists that threatens physical harm, or that an imminent danger exists, may request an inspection by giving notice to the Secretary or his authorized representative of such violation or danger. Any such notice shall be reduced to writing, shall set forth with reasonable particularity the grounds for the notice, and shall be signed by the employee or representative of employees, and a copy shall be provided the employer or his agent no later than at the time of inspection, except that, upon request of the person giving such notice, his name and the names of individual employees referred to therein shall not appear in such copy or on any record published, released, or made available pursuant to subsection (g) of this section. If upon receipt of such notification the Secretary determines there are reasonable grounds to believe that such violation or danger exists, he shall make a special inspection in accordance with the provisions of this section as soon as practicable to determine if such violation or danger exists. If the Secretary determines there are no reasonable grounds to believe that a violation or danger exists, he shall notify the employees or representative of the employees in writing of such determination.

NOTE: Section 11(c) of the Act provides explicit protection for employees exercising their rights, including making safety and health complaints.

For Federal Employees:

This report format is provided to assist Federal employees or authorized representatives in registering a report of unsafe or unhealthful working conditions with the U.S.Department of Labor.

The Secretary of Labor may conduct unannounced inspection of agency workplaces when deemed necessary if an agency does not have occupational safety and health committees established in accordance with Subpart F, 29 CFR 1960; or in response to the reports of unsafe or unhealthful working conditions upon request of such agency committees under Sec. 1-3, Executive Order 12196; or in the case of a report of imminent danger when such a committee has not responded to the report as required in Sec. 1-201(h).

INSTRUCTIONS:

Open the form and complete the front page as accurately and completely as possible. Describe each hazard you think exists in as much detail as you can. If the hazards described in your complaint are not all in the same area, please identify where each hazard can be found at the worksite. If there is any particular evidence that supports your suspicion that a hazard exists (for instance, a recent accident or physical symptoms of employees at your site) include the information in your description. If you need more space than is provided on the form, continue on any other sheet of paper.

After you have completed the form, return it to your local OSHA office.

NOTE: It is unlawful to make any false statement, representation or certification in any document filed pursuant to the Occupational Safety and Health Act of 1970. Violations can be punished by a fine of not more than $10,000. or by imprisonment of not more than six months, or by both. (Section 17(g))

Public reporting burden for this voluntary collection of information is estimated to vary from 15 to 25 minutes per response with an average of 17 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An Agency may not conduct or sponsor, and persons are not required to respond to the collection of information unless it displays a valid OMB Control Number. Send comment regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the Directorate of Enforcement Programs, Department of Labor, Room N-3119, 200 Constitution Ave., NW, Washington, DC; 20210.

OMB Approval# 1218-0064; Expires: 05-31-2014

Do not send the completed form to this Office.

OSHA-7(Rev. 9/93)

U. S. Department of Labor
Occupational Safety and Health Administration

Notice of Alleged Safety or Health Hazards

			Complaint Number	
Establishment Name				
Site Address				
	Site Phone		Site FAX	
Mailing Address				
	Mail Phone		Mail FAX	
Management Official			Telephone	
Type of Business				

HAZARD DESCRIPTION/LOCATION. Describe briefly the hazard(s) which you believe exist. Include the approximate number of employees exposed to or threatened by each hazard. Specify the particular building or worksite where the alleged violation exists.

Has this condition been brought to the attention of:	☐ Employer ☐ Other Government Agency(specify)
Please Indicate Your Desire:	☐ Do NOT reveal my name to my Employer ☐ My name may be revealed to the Employer
The Undersigned believes that a violation of an Occupational Safety or Health standard exists which is a job safety or health hazard at the establishment named on this form.	(Mark "X" in ONE box) ☐ Employee ☐ Federal Safety and Health Committee ☐ Representative of Employees ☐ Other (specify) _____

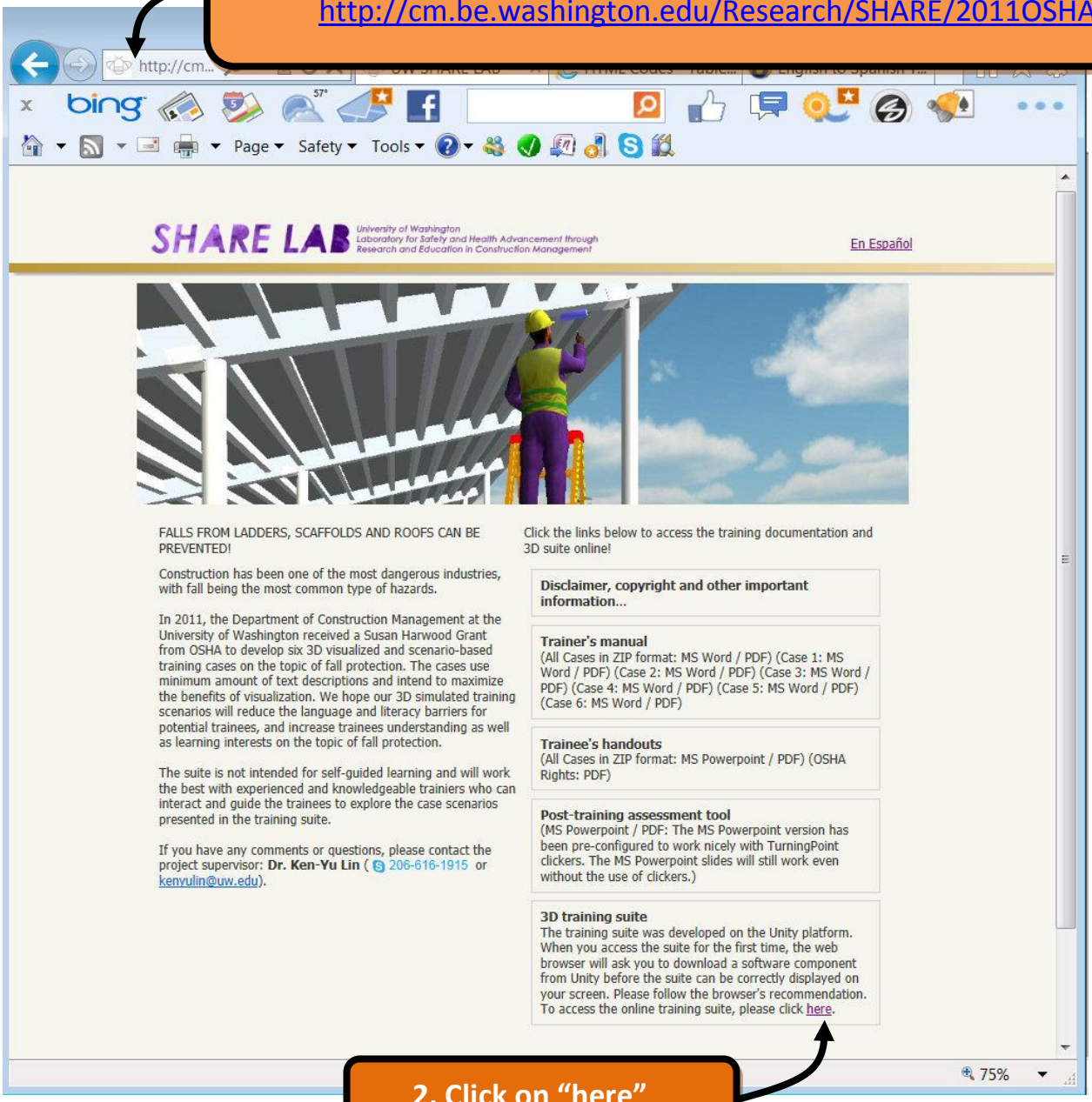
Complainant Name		Telephone	
Address(Street,City,State,Zip)			
Signature		Date	

If you are an authorized representative of employees affected by this complaint, please state the name of the organization that you represent and your title:

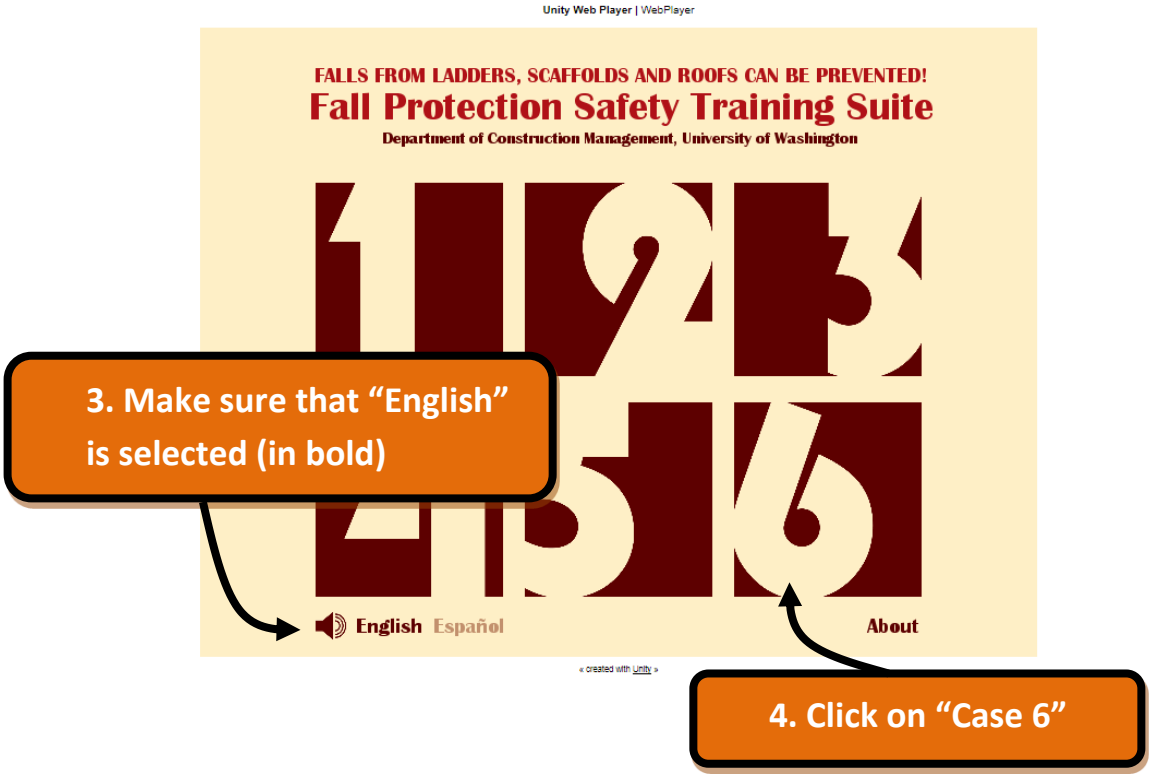
Organization Name: Your Title:

1. Click on the link below or copy/paste it onto your browser:

http://cm.be.washington.edu/Research/SHARE/2011OSHA/



2. Click on "here"


Unity Web Player | WebPlayer
FALLS FROM LADDERS, SCAFFOLDS AND ROOFS CAN BE PREVENTED!
Fall Protection Safety Training Suite
Department of Construction Management, University of Washington
English Español
About
« created with Unity »
3. Make sure that “English” is selected (in bold)
4. Click on “Case 6”