WELCOME!

Welcome to the Hard Hat Training Series by Safety Provisions! Today, we'll be discussing excavators.

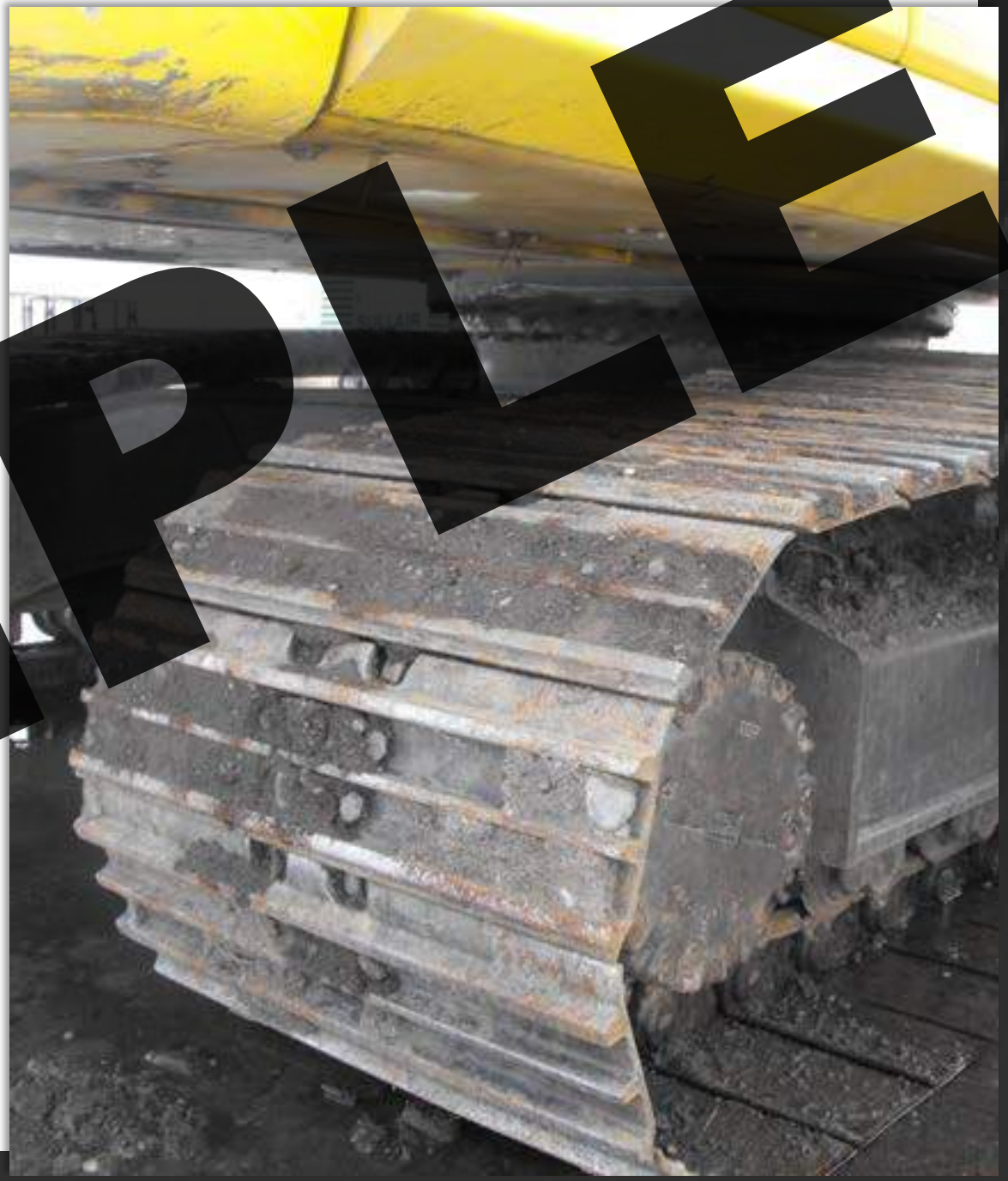
Excavators are versatile machines that can be used for a wide variety of tasks. Common uses for excavators include digging, lifting heavy objects, demolition work, landscaping, and more.

However, this versatility means that operators need to be prepared to work safely during all kinds of tasks. Even in ordinary circumstances, mistakes and bad habits can have severe consequences for operators and other workers. Consider the following accident.

Dan was using an excavator to dig out a work area. His co-worker Nate was surveying the area and performing other tasks. As they worked, Nate motioned to Dan that he needed to talk to him.

Dan stopped the machine and began to exit while it was still running. As Dan was getting out, his jacket caught on one of the controls and the excavator jolted into gear. The unexpected shift knocked Dan off the excavator and into the path of the excavator's tracks.

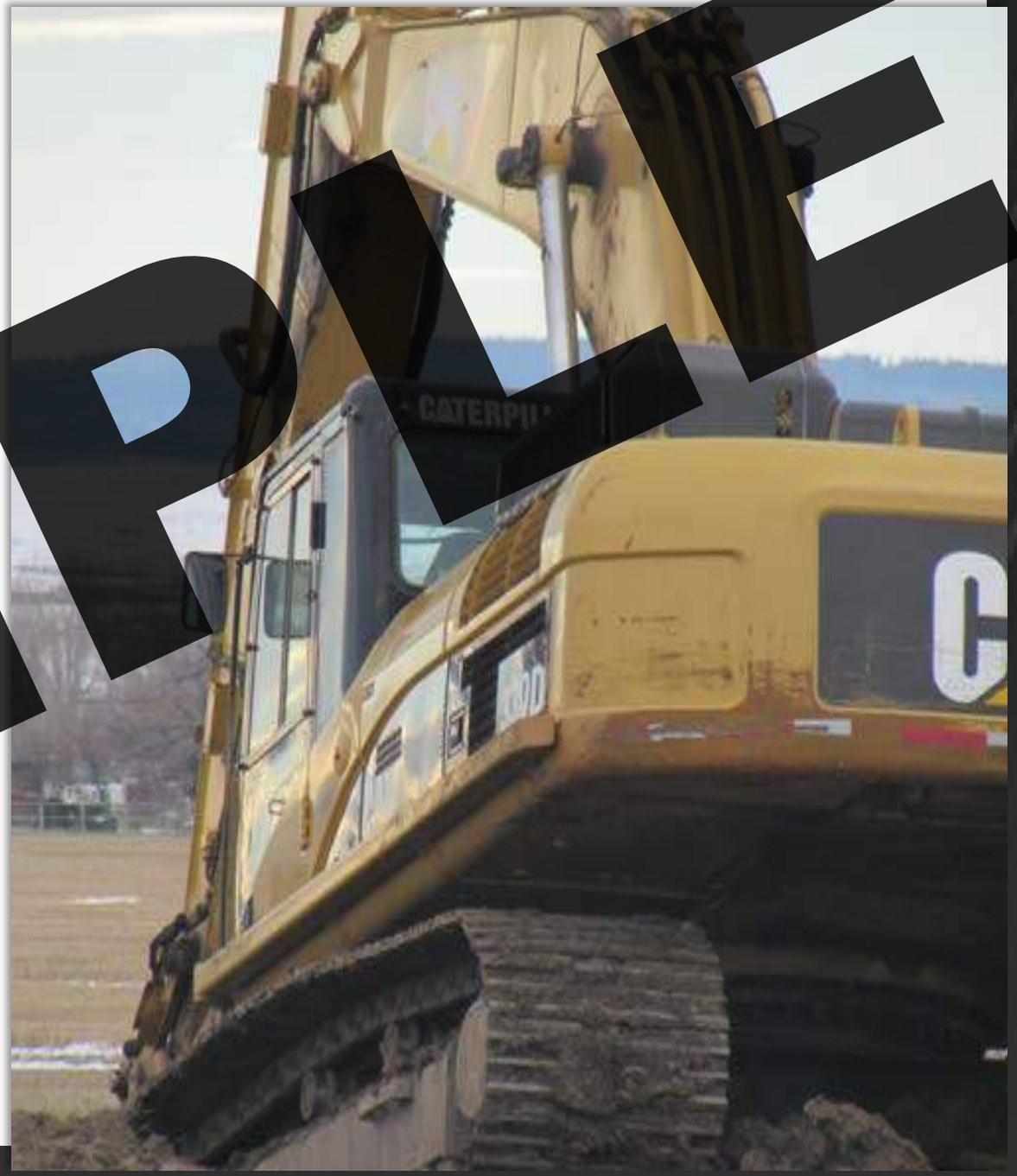
Nate saw Dan fall, so he ran to the machine to try and help him. However, he and Dan were both pulled under the tracks of the excavator and killed.



As you can see, excavators can be very dangerous, and mistakes such as those made by Dan and Nate can be fatal. Excavator operators need to receive thorough safety training if they want to protect themselves and the people they work with.

In this training, we will begin by discussing the inspections that you should perform at the beginning of each shift. We will describe the components of the machine that you should inspect, as well as the types of damage that you should watch out for.

Next, we will look at the stability issues that can cause an excavator to tip or roll over. We will focus on explaining how the machine's center of gravity affects its stability. We will also analyze the factors that can affect an excavator's center of gravity, such as ground conditions, lift weight, and slopes.



Finally, we will discuss important safety factors to consider as you operate an excavator. This includes knowing your own abilities and limitations, knowing your machine, and knowing your worksite. Understanding these factors will help you to avoid hazards and use the excavator safely.

Throughout this training, we will look at real, investigated accident profiles. In some cases, two or three similar accidents have been combined for the purpose of illustrating key safety principles. They will show just how quickly things can go wrong when safety procedures are ignored, resulting in injuries or fatalities.

STANDARDS

These are some of the main standards concerning today's topic. Many states or provinces have additional standards, as do some industries. We have provided these as a guide, but it's your responsibility to know all federal, local, and company rules that apply to your job site.

29 CFR 1926.600 – Equipment

29 CFR 1926.602 – Material Handling Equipment

29 CFR 1926.604 – Site Clearing

29 CFR 1926.650-652 – Excavations

29 CFR 1926 Subpart P App A – Soil Classifications

29 CFR 1926 Subpart P App F – Protective Systems

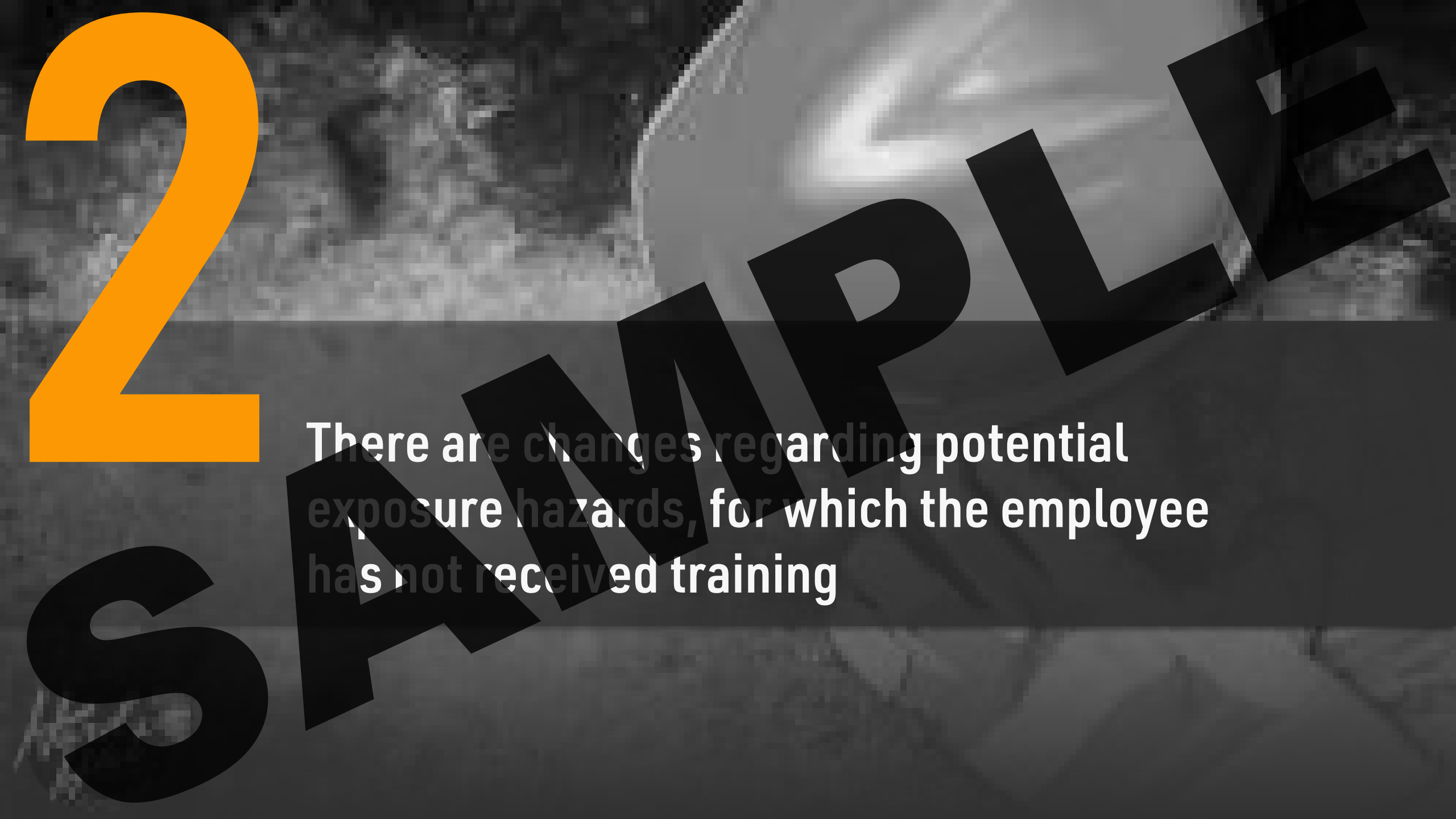
WHY TRAINING?

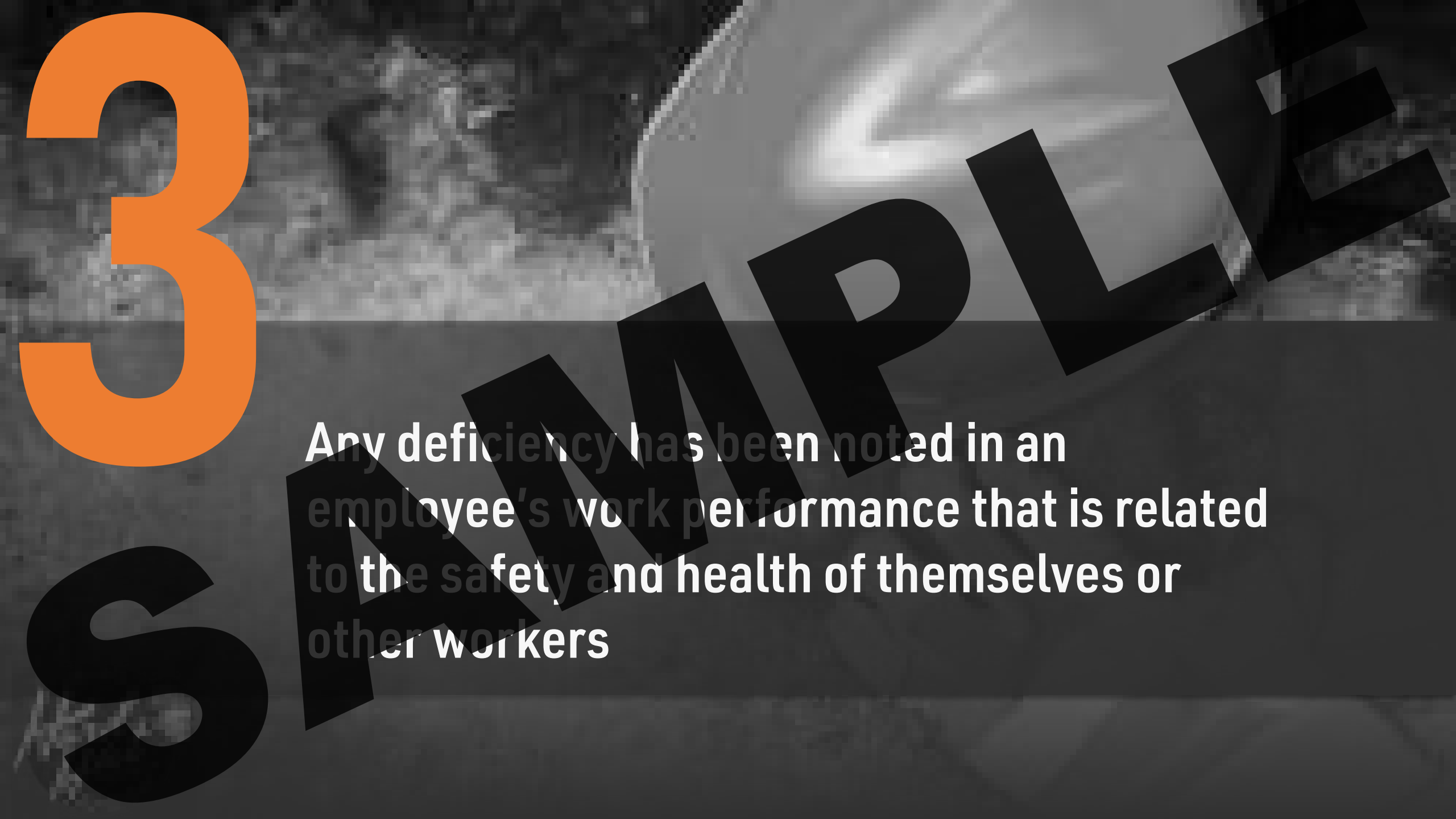
No matter the situation, [illegible] ask, "Where [illegible] deemed "qualified" [illegible] helps, yes, but regulations are very clear that employees must [illegible] (no matter how long they've been on the job) and that it is the employer who is responsible for overseeing that safety training, ensuring employees have the understanding, knowledge, and skills needed to operate safely.

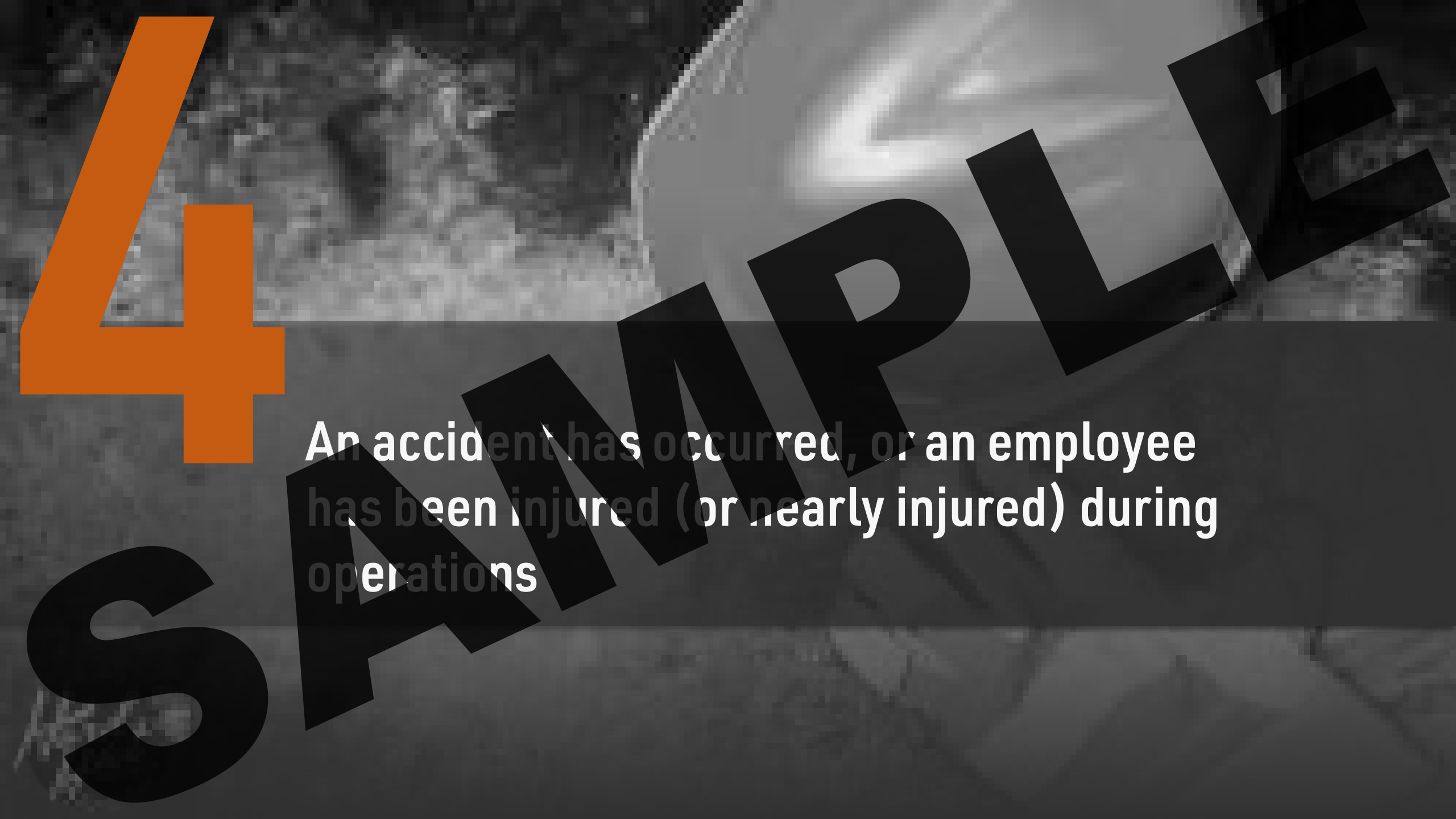
INITIAL TRAINING and REFRESHER TRAINING, as well as any WRITTEN AND PRACTICAL EVALUATIONS, must be documented and filed. At the very least, employers need to show proof of PROPER AND CONSISTENT TRAINING, in the way of TRAINING OUTLINES, CLASS LISTS, TRAINING GOALS, TESTS, CERTIFICATES, and SO ON. These documents should include the name of the person who taught the class or conducted the evaluation.

However, training is NOT just a one-and-done occurrence; it is ON-GOING. In fact, training should take place whenever there is a demonstrated need for it. Employees MUST receive REFRESHER TRAINING in the following instances…


1
There are changes in their assigned duties
SAMPLE


2
There are changes regarding potential exposure hazards, for which the employee has not received training
SAMPLE


3
Any deficiency has been noted in an employee's work performance that is related to the safety and health of themselves or other workers
SAMPLE


4
An accident has occurred, or an employee has been injured (or nearly injured) during operations
SAMPLE

The extent of training will be determined by the employer, but at the very least it should include CLASSROOM INSTRUCTION followed by a WRITTEN AND PRACTICAL EXAMINATION that prove continued competency.

Interior Anatomy