

**Accurate NDE & Inspection, L.L.C.**  
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Broussard, Louisiana, LA 70518  
Phone (337) 839-1055  
Fax (337) 839-1059

April 23, 2012

**U.S. Nuclear Regulatory Commission**  
Region IV  
Division of Nuclear Materials Safety  
1600 East Lamar Blvd  
Arlington, TX 76011-4511

ATTN: Roy Caniano, Director  
Division of Nuclear Materials Safety

RE: Confirmatory Order EA-11-043

Dear Mr. Caniano,

This is to confirm that the Willful Violation Training has been completed. Attached is a letter from the training contractor, a copy of the employee test, and a copy of the course material.

If you should have any questions, please do not hesitate to call me at (337) 839-1055. Your cooperation is greatly appreciated.

Sincerely,

Eddie Stelly  
Accurate NDE & Inspection

## Willful Violation and Deliberate Misconduct Training

**Description:** This training is designed to inform all employees of the definition and severity of willful violation of regulatory requirements and to emphasize the company's commitment to ensuring that all employees understand the expectation to comply with all regulatory requirements. The training will cover examples of willful violation and penalties associated with such violations. There will be an exam given at the conclusion of the training. Employees failing the exam will receive remedial training and will be re-tested.

**Length:** 1 hr. 20 min.

### Training Outline

Topic	Time
1. Introduction * Discussion of "Willfulness", "Deliberate Misconduct" and "Careless Disregard" <i>(Includes elements discussed in the NRC Enforcement Manual (Chapter 6))</i>	5 min.
2. 10 CFR 30.9, "Completeness and Accuracy of Information"; 10 CFR 30.10, "Deliberate Misconduct"; 10 CFR 30.7, "Employee Protection"	10 min.
3. Examples of enforcement actions taken against individuals	10 min.
4. NRC's "Safety Culture" policy statement (NUREG/BR-0500)	5 min.
5. Willful issues and penalties issued to Accurate NDE on March 20, 2007 and July 28, 2011	10 min.
6. Importance of complying with company procedures and regulations especially during "non-normal" events (discussion will include past radiography events that have resulted in overexposures)	10 min.
7. Steps to follow if equipment does not function while conducting radiography	10 min.
8. Test*	15 min.
9. Test review	5 min.

\* Copies of all tests will be kept on file for inspection by the regulatory agency.

# Willful Violation Training

**Willful Violation....  
Making The Right Choices!**



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**Agenda**

*Introduction: Willful Violation (Deliberate Misconduct or Careless Disregard?)*  
10 CFR 30.9 – 10 CFR 30.10 – 10 CFR 30.7

*Enforcement Actions Against Individuals*

*NRC's "Safety Culture" Policy Statement*

*Past Willfulness Issues & Penalties Received by Accurate*

*Importance of Complying with Procedures & Regulations (Especially During Non-Normal Events)*

*Steps to Follow if Equipment Does Not Function*  
*Willful Conducting Radiography*

**Conclusion**

**Test**



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**Ethics is Centered  
Around Making the Right Decisions**

Behavior That Leads to "Willful Violation"

1. Deliberate Misconduct
2. Careless Disregard



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**What is a Willful Violation?**

A violation "in which an NRC requirement has been breached through a voluntary and intentional action or lack of action other than a mistake or error."  
*(NRC Inspection Manual, Chapter 6)*

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**Willful violations can result from deliberate actions, or careless disregard.**

**What's The Difference?**



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**The Elements of Deliberate Misconduct (or Violation) Typically Include:**

1. A person's actions were voluntary;
2. The person committing the violation knew a requirement existed, understood the requirement, and knew the requirement was applicable at the time; and
3. The person knew that his or her actions were contrary to the requirement.



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## Willful Violation Training

**The Elements of Careless Disregard Typically Include:**

1. A person's actions were voluntary;
2. The person acted with reckless disregard or indifference to:
  - a. The existence of the requirement;
  - b. The meaning of the requirement; or
  - c. Whether the intended conduct conformed to the requirement



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**10 CFR §30.9**

**Completeness and Accuracy of Information**

1. Information provided to the NRC shall be complete and accurate in all material respects.
2. Licensees shall notify the NRC of information identified as having a significant implication for public health and safety or common defense and safety.
3. It's a violation to fail to make the notification to the NRC within 2 days of it's identification.



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**10 CFR §30.10**  
**Deliberate Misconduct**



1. Licensees, employees and others may not engage in deliberate misconduct that causes (if not detected) a licensee to be in violation of any rule, regulation, order, or other term or condition issued by the NRC.
2. Licensees, employees and others may not deliberately submit to the NRC information that the person knows to be incomplete or inaccurate in some respect.

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**10 CFR §30.10**  
**Deliberate Misconduct (cont.)**



3. Penalties for violation of this section can include modification, suspension or revocation of the license and imposition of civil penalties of up to \$140,000.

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**10 CFR §30.10**  
**Deliberate Misconduct (cont.)**



4. Deliberate misconduct by a person means an intentional act or omission that the person knows:
  - would cause a licensee to be in violation of a rule, order, regulation, condition or limitation issued by the NRC; or
  - constitutes a violation of a requirement, procedure, instruction, license condition, etc.

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# Willful Violation Training

**10 CFR §30.7**  
**Employee Protection**

1. Discrimination against an employee for engaging in certain protected activities is prohibited.
2. Protected activities include (but are not limited to):
  - providing the NRC information about alleged violations of regulatory requirements;
  - refusing to engage in any unlawful practice;



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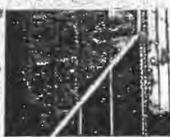
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**10 CFR §30.7**  
**Employee Protection (cont.)**

- requesting the NRC Institute action against the employer for enforcement of these requirements;
- testifying in proceedings regarding any provision of the statutes covered under employee protection;
- assisting or participating in activities covered under employee protection



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**10 CFR §30.7**  
**Employee Protection (cont.)**

3. Any person who believes they have been discharged or discriminated against for engaging in protected activities may seek remedy through the Dept. of Labor Employment Standards Admin., Wage & Hour Div.



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**Enforcement Actions Against Individuals**

NRC's "Safety Culture" Policy Statement

Past Willfulness Issues & Penalties Received by Accurate

Importance of Complying with Procedures & Regulations  
(Especially During Non-Normal Events)

Steps to Follow if Equipment Does Not Function  
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**Case History #1**  
(Violation of 10 CFR § 30.9 & § 30.10)

- October 2007 a licensee timely reported the loss of a fluid density radioactive gauge from its Rock Springs, WY facility.
- The company took extensive action to locate the gauge and investigate the circumstances surrounding the loss.
- The gauge was not located and the company filed their report with the NRC as required.

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**Case History #1 (cont.)**

- January 2008 NRC conducted an inspection to review the circumstances of the loss and an investigation to determine if the RSO willfully falsified inventory documents.
- Results of the inspection and investigation determined that:
  - ▶ The RSO failed to maintain records complete and accurate
  - ▶ The RSO's failure might have resulted from deliberate misconduct

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## Willful Violation Training

### Case History #2

(Violation of 10 CFR §30.9 & §30.10)

- 2008 a radiography company rec'd. several violations:
  - ▶ failure to provide complete & accurate information
  - ▶ rad. asst. performing radiography with no dosimeter
  - ▶ rad. asst. performing radiography without supervision
  - ▶ failure to secure radiographic exposure device
  - ▶ failure to remove damaged exposure device from service
  - ▶ failure to notify NRC of damaged exposure device
  - ▶ rad. asst. performing radiography without a practical exam
  - ▶ dosimeters not calibrated every 12 months
  - ▶ no alarm on storage vault in darkroom

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### Case History #2 (cont.)

- An ADR meeting was held with NRC and Orders were issued as a result of the meeting
- June 2009, while the Orders were in effect, a radioactive exposure device was lost.
- The company failed to notify the NRC, and the NRC only found out after the local sheriff's office recovered the device and notified the NRC

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### Case History #2 (cont.)

- Several violations resulted over the next few months:
  - ▶ rad. personnel failed to secure rad. device on the vehicle
  - ▶ the RSO failed to notify NRC of a lost device
  - ▶ in July & August 2009:
    - ✦ the company failed to implement all IC requirements
    - ✦ a rad. exposure device was left in a truck at a residence
    - ✦ the truck was left unattended at the residence
  - ▶ in October 2009 the company President provided false testimony to NRC while under oath

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# Willful Violation Training

**Case History #2 (cont.)**

- NRC found that the company:
  - ▶ violated 10 CFR 30.9 by failing to provide complete and accurate information; and
  - ▶ violated 10 CFR 30.10 by deliberately providing false testimony to an NRC investigator
- Consequences:
  - ▶ The NRC Ordered suspension of all radiographic activities by the company
  - ▶ An Order was issued prohibiting the company President from participating in NRC activities for 7 years

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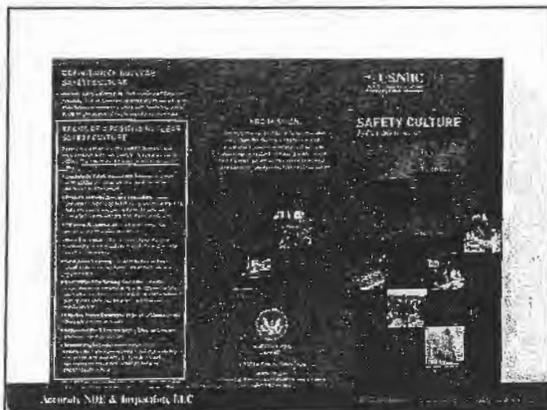
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## Willful Violation Training

**NRC Inspection of Accurate NDE in 2010**  
*(Final NRC Decision In 2011)*

- NRC conducted an inspection in May 2010 on an offshore platform & identified 5 violations:
  - ▶ a rad. attempted source retrieval without notifying the RSO first;
  - ▶ rad. failed to maintain accurate information concerning personnel monitoring;
  - ▶ rad. personnel failed to wear personnel monitoring at all times while performing radiography;

(cont.)

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**NRC Inspection of Accurate NDE in 2010**  
*(Final NRC Decision In 2011)*

- ▶ rad. personnel failed to conduct a radiation survey when the camera was placed into storage;
- ▶ the company failed to immediately report the loss of a radiation source.

**Outcome:**  
Accurate NDE entered into discussions with the NRC and reached an agreement to take several steps to ensure that no such future events occur, including this training.

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## Willful Violation Training

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #1

**Description:** After performing radiography at the base of a waste storage tank, the radiographer heard the stand, holding the guide tube and collimator, fall as he was cranking out the source. After straightening out the guide tube, he cranked the source back in. He then removed his dosimetry, picked up a survey meter and walked up to the end of the guide tube, and removed the collimator, without looking at the survey meter.

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #1 (cont.)

As he was removing the guide tube from the exposure device, the source fell to the ground.

**Exposure Estimates:** Whole Body – 8.9 rem  
Right Hand – 1,070 rem

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #2

**Description:** A radiographer and assistant were performing radiography on a tank when the radiographer left the area to load film. The assistant began cranking out the source when the stand holding the guide tube fell. The assistant's ratealarm began to go off when the stand fell, so he cranked the source back into the camera. He thought the source was back in the camera since his ratealarm stopped alarming, so he did not survey the area when he went up to re-position the stand and guide tube. (It was later determined that his ratealarm was malfunctioning.)

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## Willful Violation Training

### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #2 (con't.)

When the assistant returned to the crankouts and cranked the source out, he noticed that his ratealarm did not alarm, so he checked his dosimeter and found that it was off-scale. When the radiographer returned, the assistant told him that his dosimeter was off-scale, but said that he did not think he received an exposure, but that he thought he had bumped it and it went off scale.

Neither individual told the RSO about the incident until the assistant's hand began to show signs of radiation injury.

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #2 (con't.)

##### Exposure Estimates:

Whole Body: 366 mrem  
Hand: 1,500 – 3,000 rem

The attending physician stated that amputation of one or more fingers could be necessary.

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #3

**Description:** After completion of radiographic operations, an assistant disassembled the equipment to move it. While doing this he removed the guide tube and draped it around his neck so his hands would be free to carry the remaining equipment.

When the assistant removed the guide tube from around his neck the source fell from the tube to the ground. The assistant notified the radiographer, who called the company owner, and the owner arranged for retrieval of the source.

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## Willful Violation Training

### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #3 (con't.)

The radiographer's badge was immediately sent for processing. The assistant was not wearing a badge, and was immediately sent to a hospital for medical examination.

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Case #3 (con't.)

#### Exposure Estimates:

Cytogenetic studies indicated likely doses of 47rem to the radiographer and 24 rem to the assistant. The assistant developed an area of redness to the left side of his neck, which later showed signs of more significant damage to the skin tissue.

The physician determined that the observed effect indicated a overexposure of approximately 5,000 - 7,000 rem to the skin.

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### Importance of Complying with Procedures and Regulations During Non-Normal Events

#### Discussion:

- Some of the willful violations observed:
  - ▶ Failing to perform a survey after retracting the source back into the camera
  - ▶ Failing to personally supervise assistants / trainees while performing radiographic operations
  - ▶ Failing to immediately notify the RSO and process the badge after a dosimeter went off-scale
  - ▶ Failing to wear dosimetry when performing radiography

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# Willful Violation Training

## Importance of Complying with Procedures and Regulations During Non-Normal Events

Discussion: (con't.)

- It's important to follow procedures and regulations especially during non-normal events (such as stands falling over, etc.)
- A radiation survey after retracting a source back into the camera is one of the most important procedures performed on job-sites
- Supervision of assistants / trainees while performing radiographic operations must be a primary focus on job-sites

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## Importance of Complying with Procedures and Regulations During Non-Normal Events

Discussion: (con't.)

- Radiographic personnel must constantly evaluate whether the equipment being used is proper for the situation (such as using a magnetic stand to hold a 12-pound collimator)
- Radiographic personnel must always remember the significance of radiation doses that can result from misuse of radiographic sources

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Steps to Follow if Equipment Does Not Function While Conducting Radiography

Conclusion

Test

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# Willful Violation Training

## Steps to Follow if Equipment Does Not Function Properly During Radiography

### • If equipment malfunctions:

- ▶ Perform a radiation survey of the area & post an actual 2 mR/hr boundary
- ▶ Place "Caution - Radiation Area" signs at the boundary
- ▶ **UNDER NO CIRCUMSTANCES** is the area to be left unattended by the radiographer in charge
- ▶ Maintain visual surveillance over the area and notify the RSO
- ▶ Wait for the RSO's instructions before proceeding with any further actions

**DON'T PANIC** If help isn't immediately available. Remember that no harm will be done if everyone stays behind the boundaries.

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## Steps to Follow if Equipment Does Not Function Properly During Radiography

### • Source Recovery:

- ▶ The RSO must be immediately contacted if a source cannot be fully retracted back into the camera
- ▶ Only radiographer instructors who have been specifically authorized by the RSO may attempt source recovery operations, and then **ONLY AFTER SPECIFIC RSO APPROVAL**
- ▶ The RSO will direct specific recovery operations after discussion with the radiographer instructor on the scene (specific recovery procedure steps are detailed in the Emergency Procedures section of Accurate NDE's O&E Procedures Manual)

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**Ethics**  
You  
Feel

**Ethics is Centered  
Around Making the Right Decisions.**

- ▶ How would you feel if your failure to perform a survey caused another person to get overexposed and either suffer a serious injury or lose their job?
- ▶ How would you feel if your failure to supervise an assistant resulted in him getting seriously overexposed?
- ▶ How would you feel if your failure to follow required procedures resulted in someone you trained developing the same habit of not following procedures, and they got seriously overexposed?

***Choose to make ethical decisions -  
everyone's health and safety depends on it!***

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