

**TENNESSEE VALLEY AUTHORITY  
COO TECHNICAL TRAINING**

Industrial Safety Training

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**TRAINING PROGRAM**

TVA Personnel Safety Training

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**COURSE TITLE** **COURSE NO.**

Escorted Site Access Training 00078307

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**LESSON TITLE** **ATIS NUMBER**

<b>PREPARED BY</b> Sidney M. Thacker	----- Signature / Date
<b>TRAINING MATERIAL REVIEW</b>	----- Signature / Date
<b>PROGRAM APPROVAL</b>	----- Signature / Date
<b>PROGRAM APPROVAL</b>	----- Signature / Date



## REVISION/USAGE LOG

Rev.	Description of Change	Date	Pages Affected	Reviewed by
0	Initial issue.	06/03/11	All	S.M. Thacker

- I. **PROGRAM:** Industrial Safety Training
  
- II. **COURSE:** TVA Personnel Safety Training
  
- III. **LESSON TITLE:** Escorted Site Access Training
  
- IV. **LENGTH OF LESSON/COURSE:** TBD
  
- V. **PREREQUISITES:**
  
- VI. **TRAINING OBJECTIVES**
  - A. **Terminal Objective**

Upon completion of this course, the participant will possess an understanding of the FPG requirements for escorted site access.
  
  - B. **Enabling Objectives**
    - 1. List the types of FPG areas discussed within this program.
    - 2. List the type of identification required by visitors to obtain authorized visitor access.
    - 3. List the person responsible for a visitor in the event of a site evacuation.
    - 4. List persons responsible to sign in where a sign log is controlling physical security perimeter.
    - 5. List the disposition of PPE upon leaving the facility.
    - 6. List the type of PPE to be worn by personnel in the office wing of the generating station.
    - 7. List training that must be accomplished prior to entering a site where gaseous/liquid ammonia is used.

**VII. TRAINING AIDS:**

- A. Computer with projector for Power Point Presentation
- B. Whiteboards and markers (when needed)

**VIII. TRAINING MATERIALS (include props):**

Standard NPG-SPP-14.4

**IX. REFERENCES**

This training was developed using the standard FPG-SPP-14.4.

1. FPG.SPP.14.010, Control System Physical Access and Monitoring
2. North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) Reliability Standard, CIP-006-1, Cyber Security - Physical Security of Critical Cyber Assets
3. TVA SPP 14.2, Physical Access Management
4. TVA SPP 14.3, Physical Security Standards
5. TVA Safety Manual, Procedure 309 - Head Protection
6. ANSI Z89-1-1997, "American National Standard for Industrial Protective Helmets"
7. TVA Safety Manual, Procedure 310 - Hearing Conservation
8. TVA Safety Manual, Procedure 304 - Eye and Face Protection
9. ANSI Z87.1, "American National Standard Practice for Occupational and Educational Eye and Face Protection"
10. TVA Safety Manual, Procedure 308 - Hand Protection.
11. TVA's Safety Manual, Procedure 307 - Foot Protection
12. FPG.SPP.10.004, Switchyard /Transformer Yard Access
13. ASTM F2413-05
14. TVA Safety Manual, Procedure 1022 - Arc Flash Hazard Calculation and Required Protection)
15. TVA Safety Manual, Procedure 1022 - Arc Flash Hazard Calculation and Required Protection) Appendix A
16. TVA Safety Manual, Procedure 312- Respiratory Protection



## X. Introduction

## Notes

### Purpose

To promote site access through a standardized list of personal protective equipment requirements and awareness training to each employee, contractor, and/or visitor that will be on TVA premises.

This class was developed using FPG-SPP 18 129 and will address both the Protected Area (PA) and Vital Areas (VA).

### Obj. 1

List the types of FPG areas discussed within this program.

**DO NOT BECOME SEPARATED FROM THE ESCORT**



**X. Lesson Body**

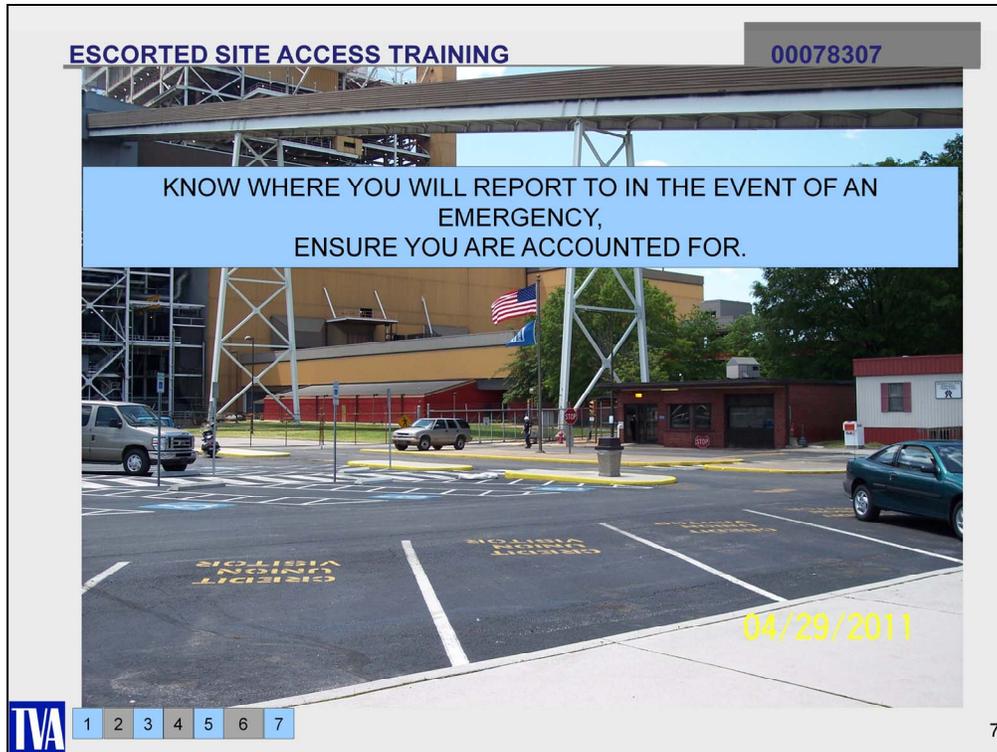
**Notes**

**A. Visitor Access**

1. Visitors will comply with the Visitor Management section of TVA SPP 14.2, Physical Access Management.
2. All visitors must have a designated contact. No visitors/vendors or sales representatives will be given access to the site without prior notification and pre-arranged escort.
3. All visitors/vendors and sales representatives must have a photo ID. They should present government-issued photo identification to security (i.e. driver's license). In the case of children under the age of 16, the tour group sponsors should present their photo ID (i.e. school field trip).

**Visitor Access** - Temporary access granted to an individual who has a business need within the secured area but does not have unescorted access privileges to that secured area. Visitor Access has to be escorted and logged.

**Objective 2**  
List the type of identification required by visitors to obtain authorized visitor access.



## X. Lesson Body

## Notes

### A. Visitor Access (continued)

4. Visitors will report to the main site entrance to log in with the administrative assistant or guard and obtain a visitor's badge. If visitor has a TVA badge, no other badge is required.
5. The badge must be displayed and visible at all times on the upper portion of the visitor's outer apparel.
6. The site contact needs to be notified and an escort dispatched.
7. Visitor escorts need to be authorized for unescorted access.
8. In the event of a site evacuation, the contact is responsible for the visitor during the emergency situation.
9. The contact is also responsible to ensure the visitor has the appropriate Personnel Protective Equipment (PPE) as necessary.

### Objective 3

List the person responsible for a visitor in the event of a site evacuation.

**Note:** Individuals without authorized unescorted access and who are not on the current authorized access list must be continuously escorted by authorized TVA personnel who meet the "Requirements for Unescorted Access" while in designated restricted areas.



**X. Lesson Body**

**Notes**

**A. Visitor Access (continued)**

- 10. When visiting a Physical Security Perimeter area with access controlled by sign-in log, both the escort and visitor will sign in and out.
- 11. Visitor behavior or activities that may constitute an unreasonable risk to the health and safety of the public, common defense and security are reported to Security immediately. These include, but are not limited to, acts of a worker injuring a fellow worker deliberately, committing theft, or purposefully mistreating equipment. Under such circumstances, visitors are escorted off site by the escort or TVA Security. In addition, escorts report such aberrant behavior of a visitor to the appropriate supervisor.
- 12. Escorts immediately notify Fossil Security when separated from a visitor.

Objective 4  
List persons responsible to sign in where a sign log is controlling physical security perimeter.



**X. Lesson Body**

**Notes**

**A. Visitor Access (continued)**

- 13. When finished, visitors will return the visitor's badge and log out with the administrative assistant or guard at the main entrance.
- 14. Visitor returns appropriate PPE as necessary.
- 15. Any access granted after normal working hours will have to be handled by the Production Supervisors' Office where they will be logged. A phone is mounted on the outside wall for visitors to call their plant contact.

Objective 5  
List the disposition of PPE upon leaving the facility.



## X. Lesson Body

## Notes

### B. General Office or Administrative Access Training Requirements

The following training is required for all individuals visiting or working outside the plant operating areas including general offices and administrative buildings.

FPG Site Access Visitors outside Plant Operating Areas, ATIS #00078308. This course is designed to provide personnel with the essential information for:

1. Understanding basic properties of gaseous and liquid ammonia and the ways to detect the presence of gaseous ammonia.
2. Understanding site emergency evacuation plans and how to properly escape the presence of gaseous ammonia.

#### PPE Requirements

General attire is permissible in the area of the office wing of the generating station either escorted or without escort.

Objective 6  
List the type of PPE to be worn by personnel in the office wing of the generating station.



**X. Lesson Body**

**Notes**

**C. Visitor Access to Plant Operating Areas**

PPE Requirements

The following personnel protective equipment is the minimum protection that is required for all individuals entering plant operating areas including warehouses, shops, coal handling areas, and construction areas.

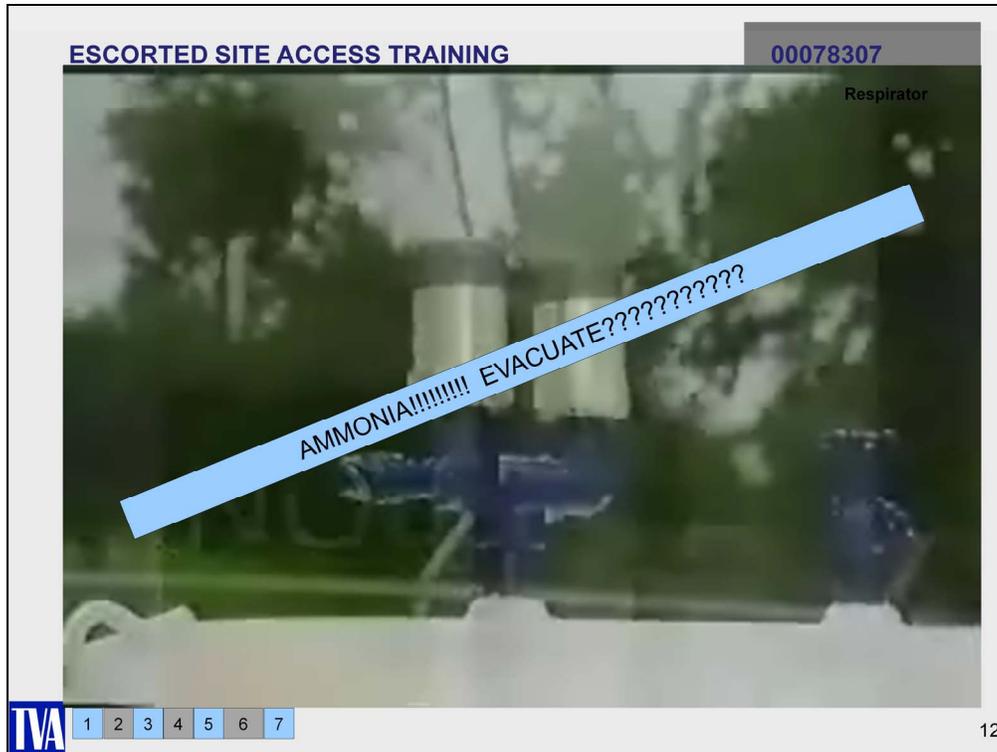
1. Head Protection (TVA Safety Manual, Procedure 309)
2. Hearing protection (TVA Safety Manual, Procedure 310)
3. Eye and Face Protection (TVA Safety Manual, Procedure 304).
4. Hand Protection (TVA Safety Manual, Procedure 308)
5. Foot Protection (TVA's Safety Manual, Procedure 307)
6. Shirts and full length pants must be worn.

**NOTE:**

Appendix A and B respectively of FPG-SPP-18.129 Site Access Procedure lists Eye and Face protection and types of Gloves to be worn in certain situations.

**NOTE:**

It is encouraged that each person carry a flashlight while walking through the plant.



## X. Lesson Body

## Notes

### C. Visitor Access to Plant Operating Areas

#### Training Requirements

The following training is required for all individuals walking through plant operating areas including warehouses, shops, coal handling areas, and construction areas. However, this training alone is not sufficient for unescorted individuals or those individuals sent to perform work in plant operating areas.

#### FPG Site Access Escorted Personnel ATIS #00078307.

This course is designed to provide personal with the essential information for:

1. Understanding basic properties of gaseous and liquid ammonia and the ways to detect the presence of gaseous ammonia.
2. Understanding site emergency evacuation plans and how to properly escape the presence of gaseous ammonia.
3. Understanding the roles and responsibilities of personnel escorting visitor / visitors inside plant operating areas.
4. Understanding the roles and responsibilities of person / persons being escorted inside plant operating areas. Selecting and wearing proper PPE.

#### **NOTE:**

When entering a site which uses ammonia, ensure you have a copy of the emergency evacuation plan to include contact phone numbers and your assembly area location.

#### Objective 7

List training that must be accomplished prior to entering a site where gaseous/liquid ammonia is used.

ESCORTED SITE ACCESS TRAINING 00078307

- BE AWARE OF YOUR SURROUNDINGS
- WATCH FOR TRIP AREAS
- BE ALERT FOR PUNGENT ODORS AS THIS COULD BE AMMONIA

**Ammonia gas is:**

- the most water soluble of all gases
- a colorless gas with a very pungent odor
- lighter than air

**Ammonia liquid is:**

- lighter than water

Water Soluble

AMMONIA

TVA 1 2 3 4 5 6 7 13

## XI. Lesson Body

## Notes

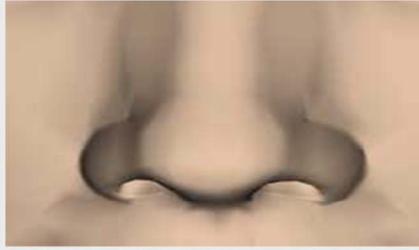
- C. **Ammonia awareness ATIS # 00059103** is required training for all employees who enter plants that use ammonia.

Properties of Ammonia:

1. Ammonia is one of the most water soluble of all gases.
2. Ammonia is a colorless gas with a very pungent odor

Water spray can be used to disperse ammonia

- **The nose is sensitive to the presence of ammonia gas in the air because of its very pungent odor**
- **Ammonia in the air appears as a dense heavy fog**



1 2 3 4 5 6 7

14

## XI. Lesson Body

## Notes

- D. Ammonia Detection
1. The nose is a very sensitive indicator of the presence of ammonia in air because of its very pungent odor
  2. Ammonia is a colorless gas, however when it is released from a pressurized system it draws water vapor from the air because of its cold temperature of around -28 degrees F. Therefore, ammonia in the atmosphere appears as a dense heavy fog .

REMEMBER-----  
WHEN UNSURE OR  
YOU HAVE ANY  
QUESTIONS ASK  
YOUR SUPERVISOR



1 2 3 4 5 6 7

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## XII. Summary

## Notes

This program has discussed the responsibilities of both the FPG visitor and the escort responsibilities as well as concerns dealing with ammonia. Should there be any doubt as to your actions, STOP and check with your supervisor.