Viking Seminar Information Sheet

Seminar (Event) Title: **Advanced Applications of Fire Protection Systems**

Seminar Description: Through discussion, activities and interactive labs this seminar will explore the components and operation of more complex water-based fire protection system with a focus pre-action and deluge sprinkler systems In additions there will be an introduction to storage protection, gas systems, and foam fire protection systems. Topics covered will include system applications, configurations, and components.

Duration (Days): 2 days

Number of Modules: 7

Total Instructional Minutes: 660 (11 hours)

Seminar Format(s): Lecture, Activity, Hands-on Labs and demonstration

Participant Materials: Sprinkler Guides, Data Sheets and Digital Tools

Learning Outcomes: Upon completion of this seminar the attendee will be able to:

1. Identify the components of Deluge/Pre-action systems and describe their function
2. Recognize the benefits of the Viking SureFire System and explain the system functions
3. Compare the benefits of the various types of Flow Control Systems
4. Recognize the benefits of the Viking Fire Cycle System and explain the system functions
5. Explain the difference between the storage commodity protection approach and the occupancy hazard protection approach
6. Discuss the applications and type of Foam Systems
7. Describe various Viking Gas Suppression Systems

Assessment Method(s): Activity Participation

TITLE: MODULE 1: **DELUGE SYSTEMS**

Duration: (120min)

Learning Outcomes: At the conclusion of this module the participant will be able to:

1. Identify the application of deluge systems
2. Describe the different types of deluge systems
3. Recognize the components of deluge systems
4. Explain the operation and restoration of deluge systems

Delivery Methods: Lecture, demonstration, in-class and hands-on activity

Activity Descriptions: Data Sheet Reading, Tripping and resetting valves

Assessment Method: Activity Participation

TITLE: MODULE 2: **PRE-ACTION SYSTEMS**

Duration: (180min)

Learning Outcomes: At the conclusion of this module the participant will be able to:

1. Identify the application of pre-action systems
2. Describe the different types of pre-action systems
3. Recognize the components of pre-action systems
4. Explain the operation and restoration of pre-action systems
5. Recognize the benefits of the Viking SureFire System and explain the system functions

Delivery Methods: Lecture, demonstration, and hands-on activity

Activity Descriptions: Tripping and resetting valves

Assessment Method(s): Activity Participation

TITLE: MODULE 4: **FLOW CONTROL SYSTEMS**

Duration: (90min)

Learning Outcomes: At the conclusion of this module participant will be able to:

1. Identify the application of Flow Control systems
2. Describe the different types of Flow Control systems
3. Recognize the components of Flow Control systems
4. Explain the operation and restoration of Flow Control systems
5. Recognize the benefits of the Viking Fire Cycle System and explain the system functions

Delivery Methods: Guided Activity

Activity Descriptions: VR Lab

Assessment Method(s): Activity Participation

TITLE: MODULE 5: **PROTECTION OF STORAGE OCCUPANCY**

Duration: (90min)

Learning Outcomes: At the conclusion of this module participant will be able to:

1. Identify commodity types and storage configurations
2. Discuss storage protection objectives and challenges
3. Select appropriate storage sprinklers based on the commodity and storage configuration

Delivery Methods: Lecturing and activity

Activity Descriptions: Navigate the Quick Reference Guide

Assessment Method(s): Activity Participation

TITLE: MODULE 6: **VIKING FOAM SYSTEM**

Duration: (90min)

Learning Outcomes: At the conclusion of this module the participant will be able to:

1. Explain the application of foam systems
2. Discuss foam system terminology
3. Identify foam systems components (concentrate, proportioning and delivery)

Delivery Methods: Lecturing

Activity Descriptions: Videos and Suppression Lab

Assessment Method(s): Activity Participation

TITLE: MODULE 7: **VIKING GAS SUPPRESSION SYSTEMS**

Duration: (90min)

Learning Outcomes: At the conclusion of this module the participant will be able to:

1. Explain the different types and application of gas suppression systems
2. Discuss gas suppression system terminology
3. Identify gas suppression systems components

Delivery Methods: Lecturing and activity

Activity Descriptions: Videos and Suppression Lab

Assessment Method(s): Activity Participation