Session Description: A detailed overview of Grease exhaust system Design, Construction, Maintenance, and inspections with various recommendations. Presentation follows Current NFPA96 and IBC guidelines with many real world experiences, pictures, and videos. This will also include overviews on new technologies for grease exhaust systems.

Speaker Bio: With over 35 years of experience in the Exhaust System Field(1974), Don Pfleiderer is the current president of Enviromatic Corporation. His accomplishments include various product patents and many innovative programs for grease exhaust systems. He is head of a renowned National Inspection Program for some of North America's largest restaurant chains. He is also an IKECA certified grease exhaust vent system cleaner (CESC #7308-09, exp 2/15/2010) and inspector (CESI #1001045, exp. 2/15/2010) and a member of the IKECA - ANSI standards consensus body for kitchen exhaust systems. Mr. Pfleiderer has done numerous presentations for the past fifteen years for various Fire, Health, and Building Departments as well as restaurant and building trade groups throughout Minnesota and the United States. Recently, Mr. Pfleiderer has also been doing and setting up presentations, training programs, inspections, and grease exhaust maintenance programs for insurance

companies. Mr. Pfleiderer annually conducts the Minnesota Building Code Official's certification training for the University of Minnesota. He has served or currently serves on education and/or ethic committees for the Minnesota Hospitality Association, IKECA, RFMA, and others. Mr. Pfleiderer has also been a frequent contributing technical writer for the Restaurant Facilities Business Magazine and the IKECA Journal.

Course outline:

Kitchen Grease Exhaust Vent Systems: Proper installation, maintenance, and inspection.

PART 1 Maintenance and inspections (60 Minutes)

1) Cause and effect: Grease buildup causes and effects.

a) What is all this buildup in the ductwork and what to do about it
b) What quality is for grease exhaust cleaning.
c) NFPA
d) IKECA
e) Pictures and articles on fires that resulted from inadequate cleanings.
f) Grease Fire statistics.

2) Quick look at Standard cleaning

a) Setup
b) Cleaning in progress
c) Before and after pictures of extreme buildups
d) Proper Documentations and pictures
e) Proper cleanup
f) Hood and access stickers (documentation)

3) Inspections

a) NFPA96 Standards
b) Insurance regulations
c) Permit programs
d) Looking into the systems.
e) Measuring the grease and the grease comb
f) Checking hidden areas outside the duct
g) Checking rooftop areas and fans
h) Several examples of hidden areas found by proper inspection showing inadequate cleanings (all examples were just completed by a professional company)

4) National Inspection program

a) What is the National inspection program?

b) Example of a typical job that passes inspections

c) Examples of various jobs that failed inspection with pictures showing why.

d) How the database picture inspection program works with example work orders and pictures.

e) Examples of areas of concern outside the duct covered by the inspection program including leaking ductwork above hoods

BREAK- 15 minutes

PART 2 Construction, design, and new Technologies (60 minutes)

1) Type of systems

a) Type 1 systems

b) Proper water leak testing

c) Examples of Non-compliant sealant use on ductwork

c) Type 2 systems

d) Extreme buildup in Type 2 systems

2) Recommended equipment and design guidelines

a) Proper access plate layouts

b) Option for fan hinges on side wall fans

c) The virtual box method for access plates

d) Proper and improper types of access plates

e) Blocked access plates

3) Hoods

a) Water wash style hoods

b) Hood and back wall gaps and effects

c) Hood efficiencies

d) New technologies

4) Fans

a) Types of fans

b) Proper hinges and upblast fan layouts

c) Upblast fan Clean out port requirement

d) Safe roof access to fans

e) Rooftop grease and grease containment examples along with Electronic Precipitator example

f) Where does all that cleaning solution and grease go?

PART 3: FINAL SUMMARY PAGE/ Q & A session (2-10 minutes)