KEY WORDS -- 299 PM Control Devices

bin vent filter >> bag house affixed on a grain or cement silo to control loading PM

abrasion >> erosion resulting from contact with sharp-surfaced PM

acfm >> actual cubic feet per minute

baffle plates >> removes large abrasive PM >> important to prevent excessive bag wear

delta P [ΔP] >> pressure drop >> measure of flow resistance across device or ductwork

diffusion [expandability & compressibility] >> intermingling by natural movement

direct interception >> low inertia PM captured just before clearing fabric weave

acid dewpoint >> T at which acidic liquid droplets condense from the vapor phase

air-to-cloth ratio >> volume of gas entering fabric per unit area – velocity flow

baffle plates >> diffuser plates used to cause large PM to drop out of gas flow

blinding >> closing of filter medium pores resulting in reduced gas flow and ^dp

cake >> dust layer developed during filtration process

diffuser plates >> baffle plates used to cause large PM to drop out of gas flow

felt >> interlocked fabric structures without spinning, weaving or knitting

fines >> PM < 1 micrometer in aerodynamic diameter

fly-ash >> finely divided ash entrained in flue gases

hopper >> dust storage container at bottom of collection device

manometer >> mechanical instrument for measuring pressure

plenum >> pressure equalizing chamber of ducting system

nomex >> aromatic polyamide fiber (type of nylon, except nylon is not aromatic)

thimble >> adaptor unto which bags affixed; extending helps to reduce abrasion

u-tube manometer >> simplest method to measure pressure

rings >> metal bands sown into bags to prevent collapsing during reverse air

scrim >> loosely woven fabric onto which felt is needled

Teflon >> trademark for PTFE – polytetrafluoroethylene

tube sheet >> the steel plate that bags are suspended from in a BH