FactSheet

Information from research and animal studies on nanomaterials has identi ed some potential safety hazards and health effects. ¹ Because nanotechnology is a rapidly emerging eld, more information will likely become available about potential health and safety hazards associated with some nanomaterials. The health hazard potential depends on the particular nanomaterial and a person's exposure level. For example:

UÊ `i~Ì^vÞ^~}ÊÌ...iÊ"œÃÌÊ> « «ÀÊe «À^>ÌiÊÃ>" « •^~} method to determine the quantities, airborne concentrations, durations, and frequencies of worker exposures to nanomaterials 7; and UÊ iÌ iÀ "^~~~}ÊÜ...>ÌÊ>``^Ì^œ~>•ÊVÊœ~ÌÀœ•ÃÊ ">ÞÊLi needed based on the exposure assessment results and evaluating the effectiveness of controls already in place. Employers should adopt the most effective controls available to limit worker exposure.

Because the research and use of nanomaterials continues to expand and information about potential health effects and exposure limits for these nanomaterials is still being developed, employers should use a combination of the following measures and best practices to control potential exposures:

Engineering Controls

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enclosures 8 (e.g., glove box, laboratory hood, process chamber) equipped with high-ef ciency particulate air (HEPA ⁹) Iters.

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local exhaust ventilation (e.g., capture hood,

⁷ One sampling protocol available is the Nanoparticle Emis

sion Assessment Technique (NEAT) that NIOSH developed to qualitatively determine21(I)-17(o)-19(9C BT /T1_)97(A)47(T)-3-19(9C)1(s)-270(s)-34((a)-3(f (t T)54(e)11(s)6754(e)15.83A290pu)-3(h)-19(e N)-17(a)-16(45)-3(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-16(h-19(c N)-17(a)-17(a)-16(h-19(c N)-17(a)-17