ACGIH® Nanotechnology Health and Safety: Case Studies in the Occupational Setting

Best Practices for Powder/Slurry Nanomaterials:

- 1. Wear latex or rubber gloves when working with the materials.
- 2. Wear full skin coverage including long sleeve shirts and Tyvek®, PPE sleeves, or uniform.
- 3. Use half or full-face respirator depending on the pH of the material. Caustic or acidic materials need the full-face respirator.
- 4. Wear safety glasses or goggles if needed.
- 5. Cleaning of equipment used by the powders should be done while donning a respirator.
- 6. Vacuums must have HEPA filtration system with proper maintenance/filter change.
- 7. Wear respirator when using vacuum.
- 8. Use hairnets or hats to keep powders out of the hair and off the scalp.
- 9. Use proper ventilation in really dusty environments, (i.e. elephant trunk or hoods.)
- Use automated transfer systems whenever possible. Reduce the amount of exposure to employees by using smaller containers as opposed to 55-gallon drums.
- 11. Help minimize dust exposure by gently moving material as opposed to rough handling.
- 12. Change out of work clothes at the end of the day and shower to avoid offsite contamination.
- 13. Do not use compressed air as a cleaning tool. Use a vacuum system.

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