

Case Scenario for a New Nanotechnology Enabled Paint or Coating

- Identifying Risk Management Method Needs, ELSI Considerations in a Product Development Process

Developing Considerations for Day 2

Disclaimer-The case scenario is a fictitious scenario and not intended to portray any product in commercial development

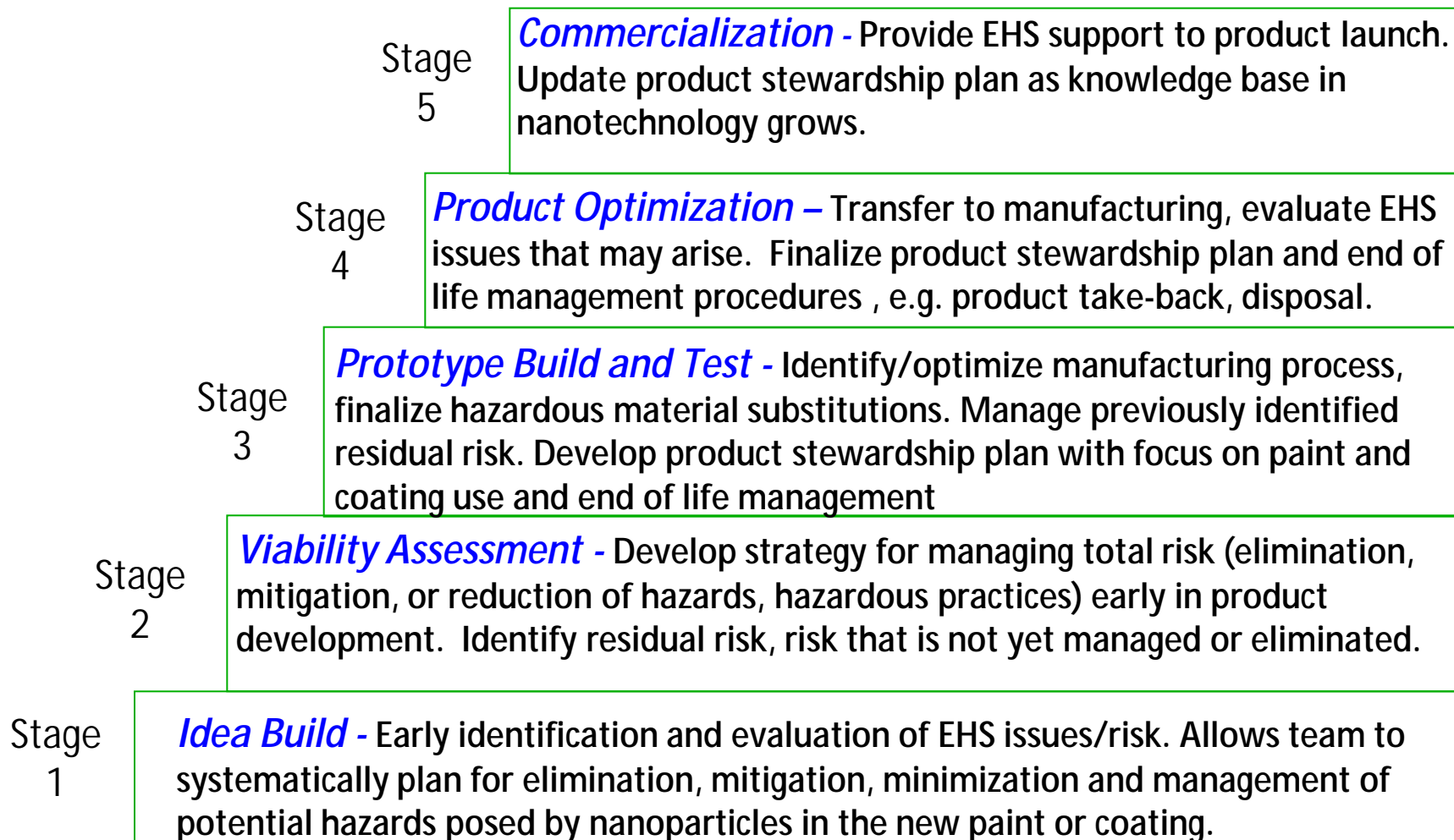
Overview

- Purpose: Gain audience and subject matter expert input into the research questions that must be asked and answered as a new product is developed
- Case Scenario
 - Consider a paint or coating that will be used in both manufacturing and consumer applications
 - The product contains a novel nanoparticle that will improve product performance
 - Enhanced product capability, product safety and environmental stewardship are customer requirements

A Conceptual Model for EHS in Product Development

ISO 9001:2008

A "stage-gate" process for developing a new paint or coating



Thought Starters for Table Discussion

- **The role of RMM and ELSI should be considered during each step of product development**
 - Idea Build: What type of data is needed on the nanoparticle before a product can proceed from an idea to a research project?
 - Viability Assessment: How and when should the product developers consider consumer use, misuse and disposal?
 - Prototype: What research studies or regulatory interventions should be required prior to manufacturing?
 - Product Optimization: What type of consumer safety data is needed and how should it be communicated?
 - Commercialization: How should manufacturer keep up with new information and update product stewardship plans?