

Appendixes

Appendix A.—Summary of Topics Considered at Evaluation Meeting During Initial Screen of Premanufacture Notices at the Environmental Protection Agency

- I. General Information for PMN Substances
 - A. Manufacturing Process and Chemistry
 - B. Physical-Chemical Properties
 - 1. Composition
 - 2. Physical form (solid, liquid, gel, etc.)
 - 3. pKa ionization constant
 - 4. Partition coefficient (affinity for aqueous and organic solvents)
 - C. Use Function
 - 1. Known and potential uses
 - 2. Production capacity and potential growth
 - D. Regulatory Concerns
- II. Assessments
 - A. Structural Activity Team Report
 - B. Health Hazards
 - 1. Metabolism, uptake, excretion
 - 2. Acute toxicity
 - a. LD₅₀ (amount of chemical necessary to kill 50 percent of test animals)
 - b. Other acute effects
 - 3. Carcinogenicity, mutagenicity, teratogenicity
 - 4. Other chronic effects
 - C. Ecological Hazards
 - 1. Effects on microbes
 - 2. Effects on invertebrates
 - 3. Effects on plants
 - 4. Effects on fish
 - 5. Effects on mammals and birds
 - 6. Effects on ecosystem process
 - D. Worker/Consumer Exposure
 - 1. Worker exposure from manufacture
 - 2. Worker exposure from processing
 - 3. Consumer exposure
 - E. Environmental Release
 - 1. Release from manufacture
 - 2. Release from processing
 - 3. Release from use
 - 4. Release from disposal
 - F. Environmental Fate
 - 1. Persistence
 - a. Degradation
 - b. breakdown products
 - G. Non-Risk Factors
 - 1. Company size and characteristics
 - 2. Substitutes (for the new chemical and old chemicals that the new chemical may substitute for)
 - 3. Potential new uses
 - 4. Financial effect of the PMN chemical on company
 - 5. Benefits to society
- III. Summary of Outstanding Problems of Scientific/Technical Concerns
 - A. Most Serious Problem
 - 1. Health hazard
 - 2. Ecological hazard
 - 3. Worker/consumer exposure
 - 4. Environmental release
 - 5. Environmental fate
 - 6. Non-risk factor
- IV.
 - A. Related Substances
 - B. Solvents (used in manufacture and processing)
 - C. Catalysts (used in manufacture and processing)
 - D. Byproducts (from manufacture and processing)
- V. Priority Problem in Profile