



SP Chemical Issues Working Group

Material Assessment Strategy (MAS) End of Life Vehicle Materials

June 2013 – SP Meeting Update



Material Assessment Strategy (MAS) Overview

- Phase 1 – Principles and Framework
- Phase 2 – Human exposures to chemicals in vehicle compartment
- Phase 3 – Environmental exposures from wear debris
- Phase 4 – Exposures associated with end of life vehicles

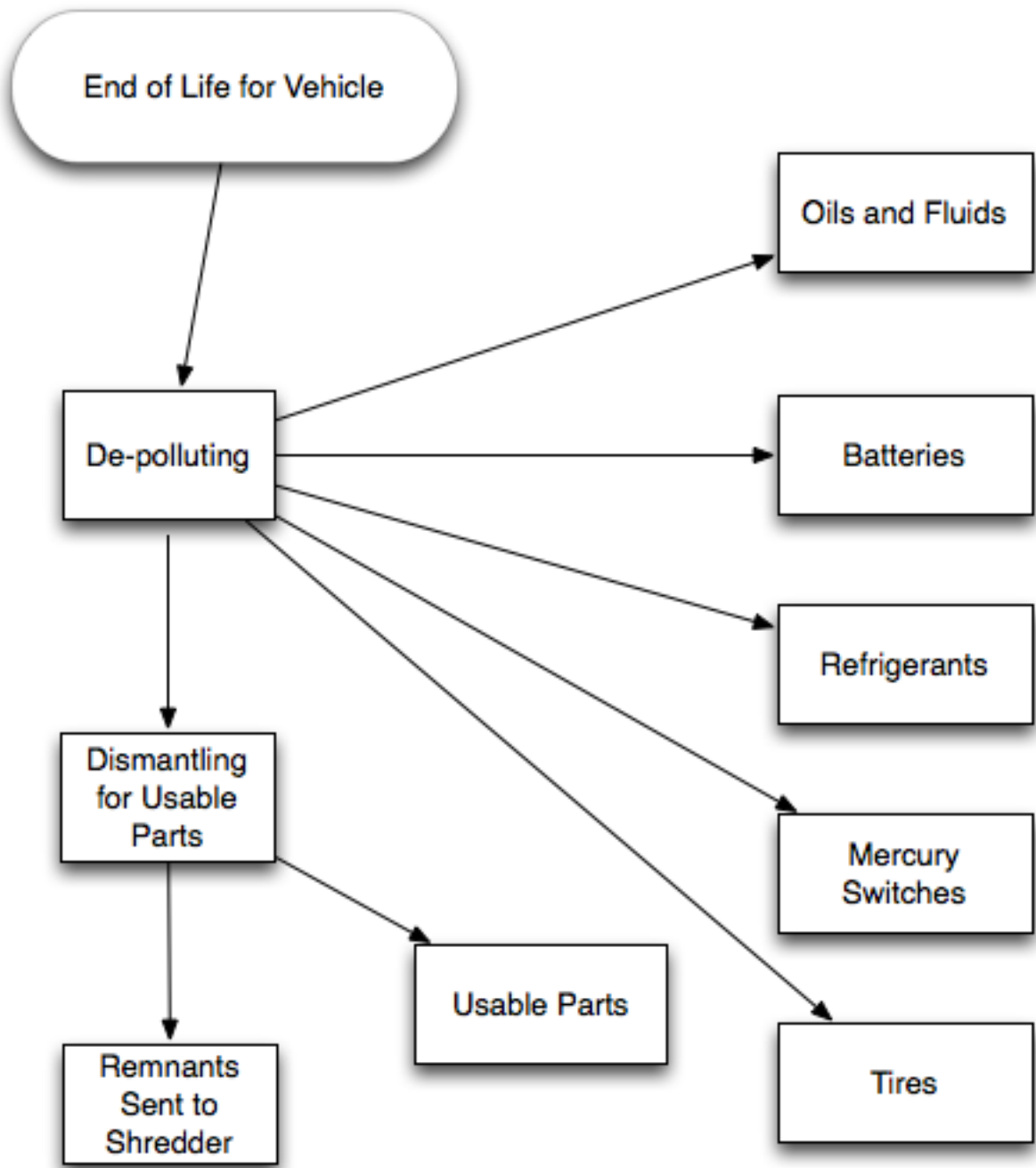


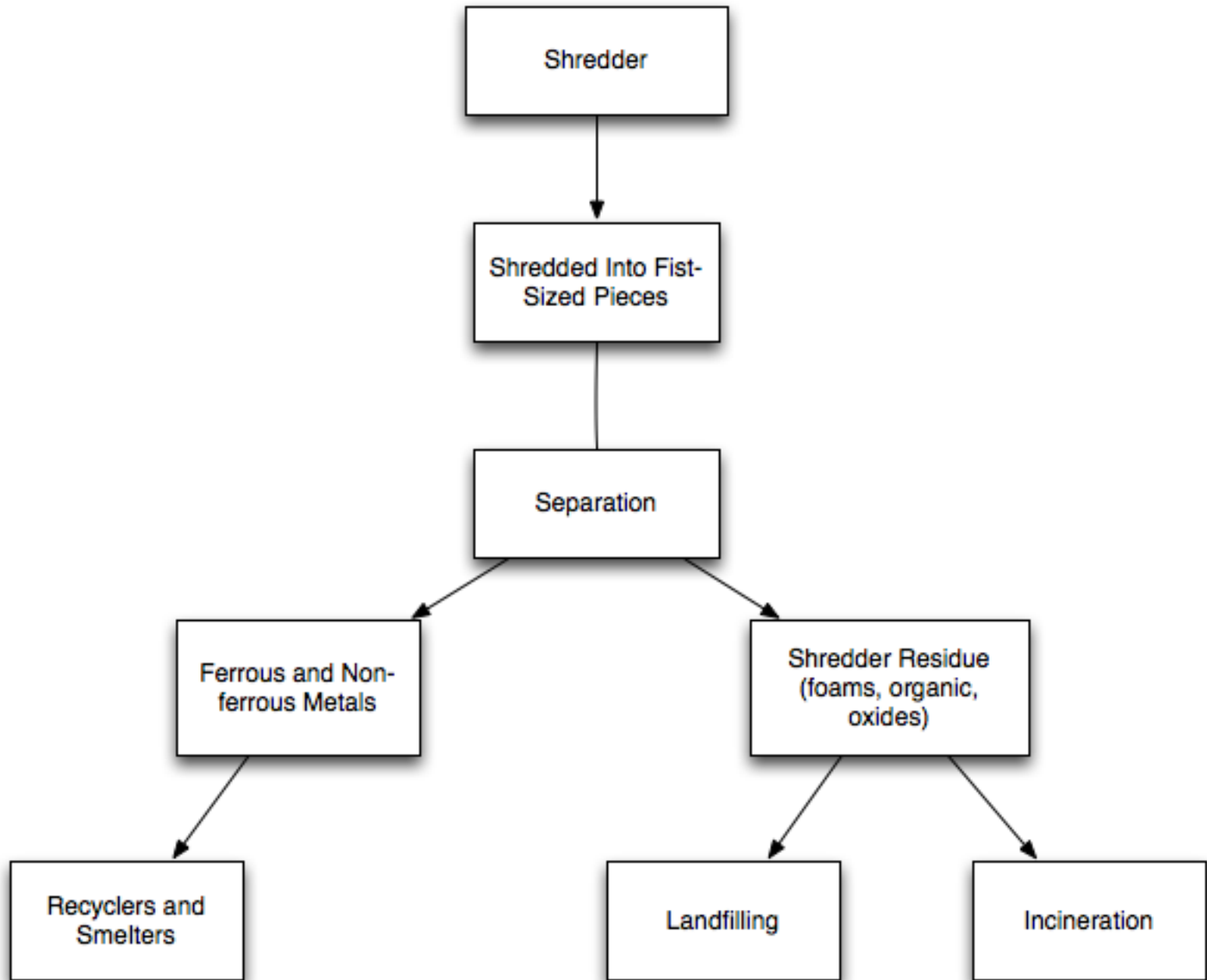
Guidelines - Setting Expectations

- A successful MAS will:
 - Enable better design of products by optimizing chemical selection
 - Minimize issues associated with vehicle ELV processing

Guidelines - Setting Expectations

- Use of Outputs
 - Design stage and retrospective analysis
 - Ingredient and material optimization
- Addressing Issues Identified
 - Considerations
 - Are acceptable alternatives available?
 - Cost, function, supply
 - Options include
 - Reduction in concentration of chemicals of concern
 - Modifications to reduce availability of chemical
 - Substitutions
 - No action







Assumptions

- Area of greatest concern - Shredder residue
 - Complex materials and mixtures
 - Populations with possible exposures:
 - Waste management workers
 - Residents close to landfill sites or incinerators
 - Possible environmental exposures
 - On-site storage prior to landfilling or incineration
 - Landfill leaching



Assumptions

- Reasonable processes in place to safely handle and recycle/reuse:
 - Oils and fluids
 - Batteries
 - Refrigerants
 - Mercury switches
 - Tires

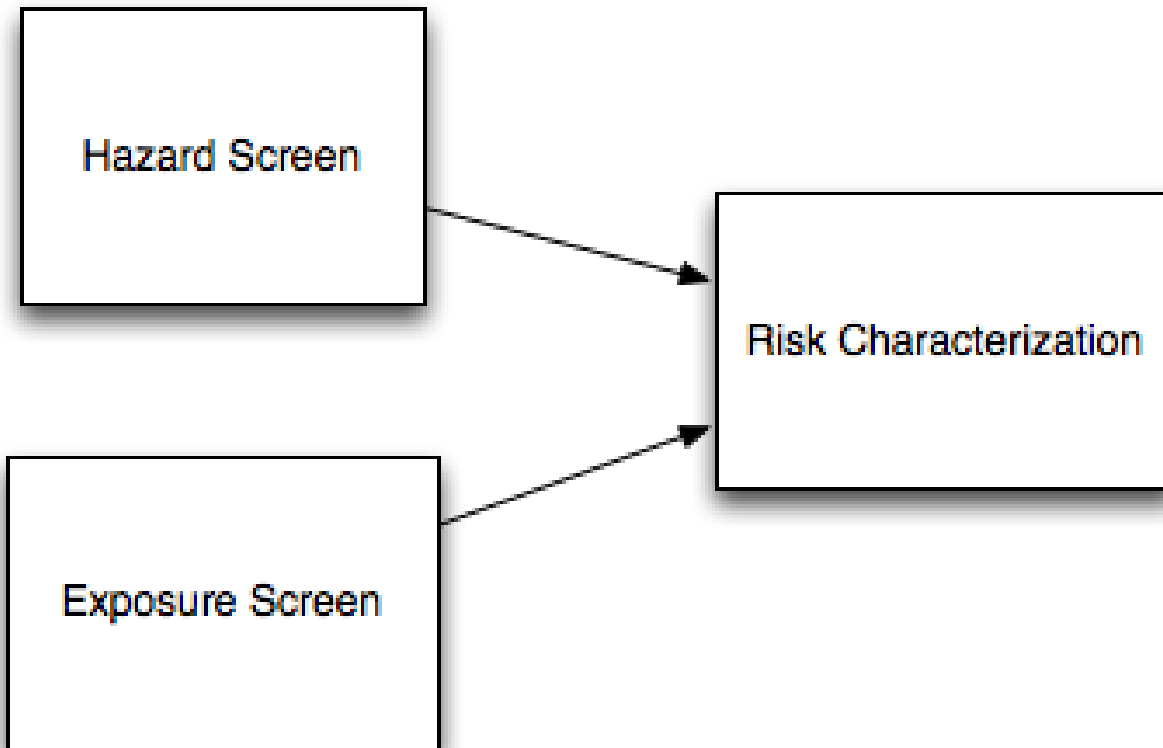


Starting Point

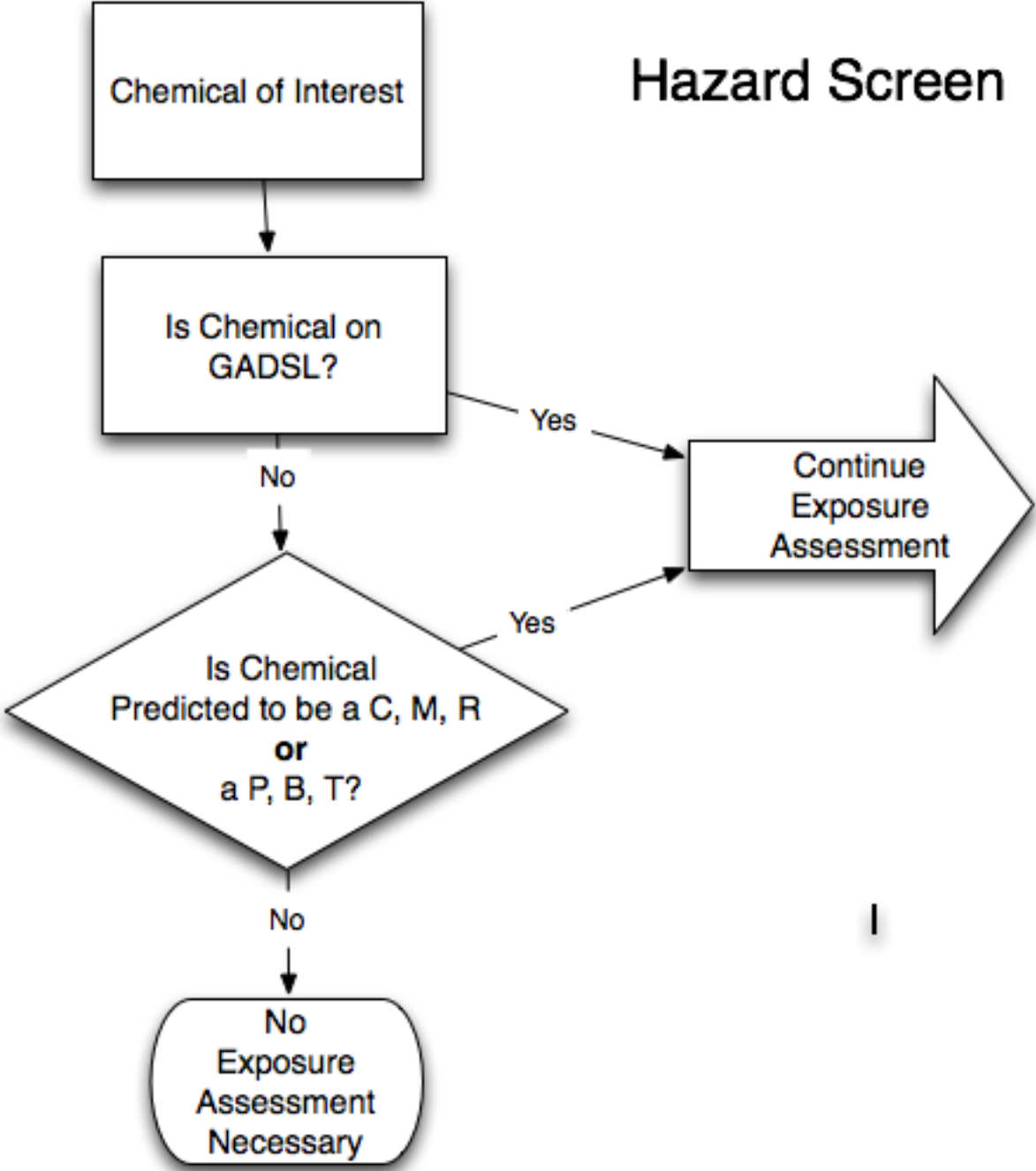
- Knowledge

- Identity of the chemicals you are using
 - Hazard?
- Location of chemical in vehicle
 - Material
 - Part
- Fate of chemical-containing component at end of vehicle life
 - Exposure?

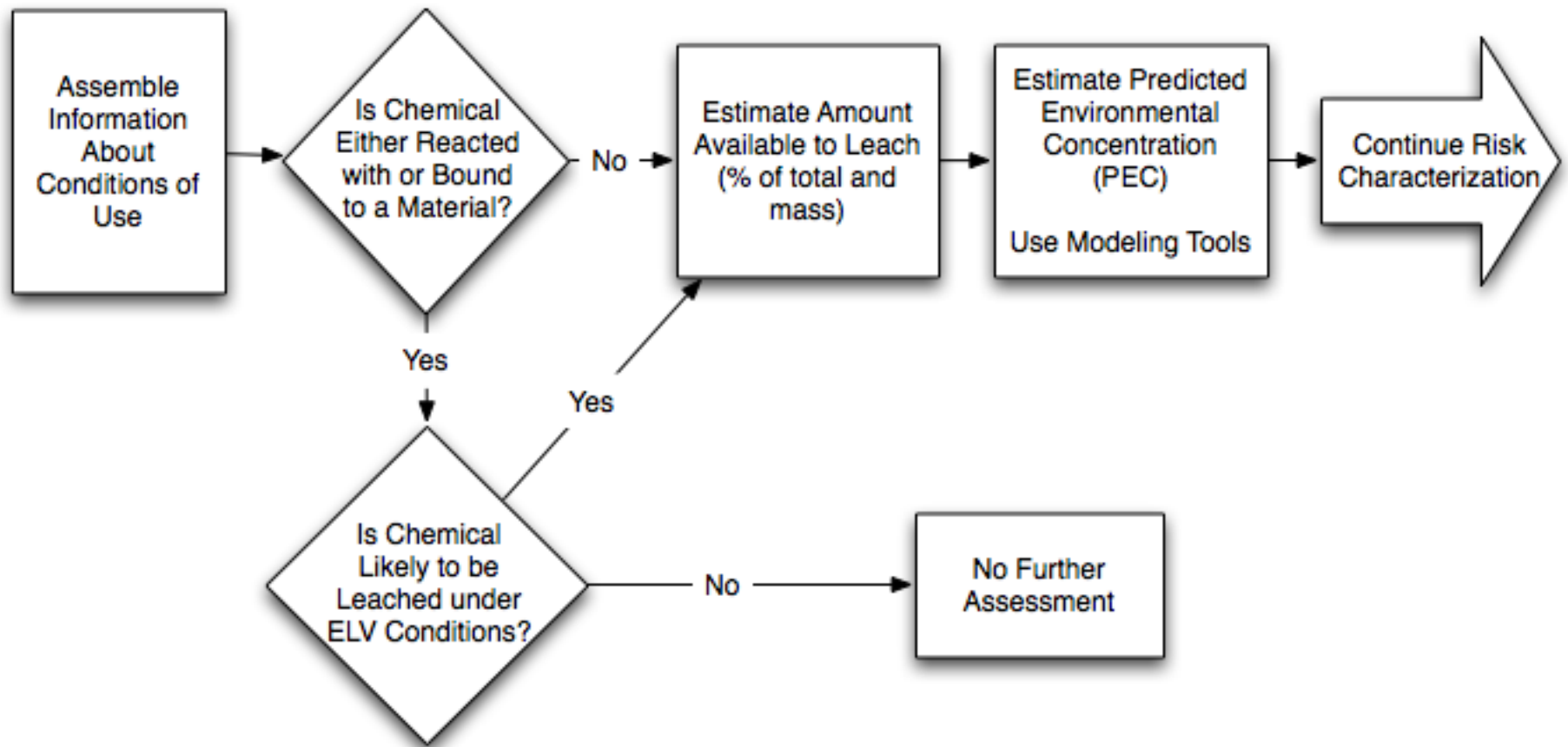
Flow of Analysis



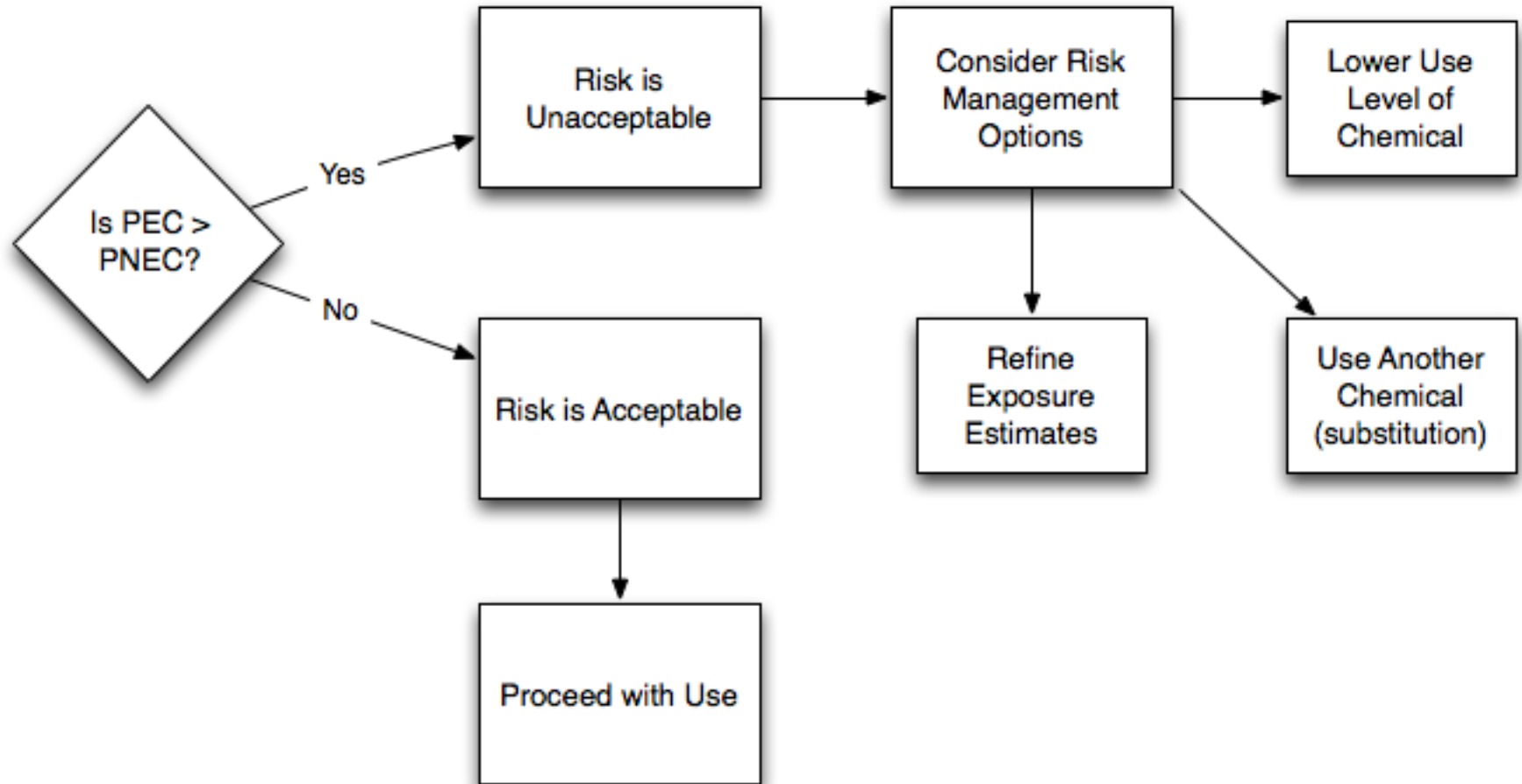
Hazard Screen



Exposure Screen



Risk Characterization





Next Steps

- MAS Work Group conference call scheduled in July to review in detail and finalize process
- Produce refined guidance documents and flow charts
- Wrap up