Radioactive Materials Product Stewardship
Nuclear Fixed Gauges and Tritium Exit Signs
Research Scope of Services
DRAFT - January 31, 2003

Task 1: Background Report on Radioactive Product Stewardship
Prepare a background report on radioactive materials product stewardship to be used as an informational resource for national dialogue. The report will include the following:

- Executive Summary

- Overview of key stakeholder groups and description of roles with respect to nuclear fixed gauge and tritium exit sign manufacturing, sales, use, and disposal
  - Manufacturers
  - Alternative product manufacturers
  - Industry associations
  - Distributors
  - Recyclers
  - Government agencies (regulators, material acceptance programs, other)
  - Non-government organizations

- Overview of current radioactive materials product stewardship initiatives
  - Define radioactive materials product stewardship
  - Type of program, initiator, quantities, costs, lessons learned, funding sources:
    - Product labeling initiatives (e.g. alternative non-radioactive product)
    - Education initiatives
    - Manufacturer initiatives (e.g. incentives)
    - Other initiatives (rental, disposal, storage, etc.)

- Regulatory Issues and Requirements (state, national)
  - Licensing, labeling, inspections, training, education, etc.
  - Radioactive product management (production, use, installation, collection, storage, transportation, reuse, recycling, and disposal)
  - U.S. Customs requirements
  - Other
• Overview of nuclear fixed gauge (for nuclear fixed gauges not included in EPA feasibility study*) and tritium exit sign market data
  o Product functionality
  o Product applications
  o Toxic components
  o Major product manufacturers
  o Product costs
  o Major distribution channels
  o Quantity of nuclear fixed gauges and tritium exit signs produced/sold annually in U.S. by end-user application
  o Quantity of nuclear fixed gauges and tritium exit signs imported to and exported from U.S. by end-user application

• Alternative Non-Radioactive Products: Overview of fixed gauge (for nuclear fixed gauges not included in EPA feasibility study*) and exit sign market data
  o Product functionality
  o Product applications
  o Toxic components
  o Major product manufacturers
  o Product costs
  o Major distribution channels
  o Quantity of alternative non-radioactive fixed gauges and exit signs produced/sold annually in U.S. by end-user application
  o Quantity of alternative non-radioactive fixed gauges and exit signs imported to and exported from U.S. by end-user application
  o Considerations for implementing alternatives
  o Comparison of alternative products versus radioactive products

• End of life management data
  o Overview of current nuclear fixed gauges and tritium exit signs collection and disposal programs
  o Programs to identify and manage unwanted, abandoned, lost, stolen, or improperly disposed radioactive sources
  o Overview of product recycling and reuse initiatives
  o Overview of safety risks, exposure pathways, potential environmental impacts, human health risks, and equipment damage associated with improper disposal via municipal solid waste incineration, medical waste incineration, hazardous waste incineration, landfilling, metal recycling, abandonment, or other
Task 2: Contact Key Stakeholders
- Identify key stakeholders (industry associations, manufacturers, retailer, recyclers, contractors, etc.)
- Develop draft questions for stakeholder interviews
- Conduct stakeholder interviews
  o Introduce stakeholders to the project
  o Identify issues that are important to different stakeholders
  o Get feedback on project summary and research scope of services from stakeholders
  o Determine stakeholders’ interest in participating in national dialogue
  o Document highlights of interviews for use in Action Plan and dialogue

Task 3: Develop Product Stewardship Action Plan for Nuclear Fixed Gauges and Tritium Exit Signs
- Define problem statement
- Establish product stewardship goals
- Define key issues for negotiation
- Define opportunities and barriers to implementing product stewardship programs, including identification of solutions and evaluating the feasibility of the solutions.
- Overview of product stewardship agreements reached during Phase I
- Preliminary evaluation of Phase I agreements
- Incorporate relevant information from Tasks 1-2 into Action Plan

* The EPA plans to conduct a feasibility study for nuclear fixed gauges used for measuring thickness. This study will be focused on four industries and will also include an evaluation of alternatives to these nuclear fixed gauges.