Commission Briefing on Controlling Release of Solid Materials

May 3, 2000

Outline of Briefing

- Rationale for examining approach
- Staff actions
- Stakeholder concerns and reactions to date
- Status of technical bases
- International activities
- Recommendations

Rationale for examining NRC approach for controlling release of solid materials

- Standards for solid materials with small amounts of radioactivity
  - Recycle, reuse, or disposal
  - Case-by-case decisions
  - Protective of public health and safety
- Detectability

Staff actions

- Published Issues Paper on 6/30/99
  - Presents issues and alternatives related to control of solid material
- Four facilitated public meetings
- NRC website and listserver access
  - http://www.nrc.gov/NMSS/IMNS/controlsolids.html

Stakeholder concerns and reactions to date

- Comment from public meetings and in letters:
  - Metals, scrap, and cement industries
  - Sanitary waste facility operators
  - Citizens groups and individuals
  - Licensees and licensee organizations
  - Health Physics Society and individual HPs
  - Federal and State agencies, Tribal governments

Metals, scrap, and cement industries

- Oppose free release of contaminated solid materials because of potential for economic and health impacts
- Detection systems at metal facilities may alarm at levels meeting NRC criteria
- Metals industry could support
  - Restricted applications (nuclear use, landfills) with labeling and tracking requirements
  - Unrestricted use under certain specified conditions

Citizen groups and individuals

- Isolate radioactive wastes and prohibit release into consumer products
  - Risks are too high, avoidable, and involuntary
  - Can't accurately predict, measure, or track
  - Issues of trust with licensees and government
- Recapture material previously released

Licensees and Health Physics Society

- Need national standard for recycle, reuse, or disposal
- Doses negligible and small fraction of 10 CFR Part 20 public dose limit
- Prohibiting release would disrupt operations and waste resources without accompanying health benefit
- Endorse American National Standards Institute N13.12

Technical bases elements

- Doses to individuals -- relationship to concentrations
- Inventory of materials and equipment
- Doses to populations
- Costs
- Environmental impact
- Measurement methods

Technical bases issues

- Technical review of doses to individuals -- NUREG-1640
- Conflict of interest
  - Inventory of materials and equipment
  - Doses to populations
  - Cost estimates
  - Environmental impact
  - Measurement methods

International activities in the area of clearance

- IAEA/EC/individual nations setting standards and criteria
- Trade and import issues

Recommendations

- National Academies study to provide recommendations on possible alternatives
  - NRC staff initiating actions to solicit contract proposal
- Continue to develop technical bases

Recommendations (cont'd)

- Stay informed of international initiatives and related EPA and DOS activities

- Defer final decision on whether to proceed with rulemaking