



NUCLEAR WASTE TECHNICAL REVIEW BOARD
1995 FALL BOARD MEETING

ROUND TABLE DISCUSSION: THE USES OF TSPA

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TSPA'S CAN HELP SET PRIORITIES NOW

- O FOR TSPA'S FOCUSED ON VARIABILITY**
 - Identifies Important Contributors to Risk
 - Use Expert Judgment & Auxiliary Analyses to Identify Uncertainties

- O FOR TSPA'S INCORPORATING UNCERTAINTY AND VARIABILITY**
 - Directly Quantifies Important Contributors to Risk

LIMITATIONS

- O TRANSPARENCY
- O NEEDS SUPPORT BY SPECIFIC SCIENTIFIC DISCIPLINES AND FIELD STUDIES
- O ADEQUACY OF ABSTRACTION; LEVEL OF AGGREGATION AND SIMPLIFICATION
- O VALIDITY OF MODELS
- O RESOURCES SUFFICIENT FOR LEVEL OF ROBUSTNESS DESIRED IN PA
- O LARGE UNCERTAINTIES/BOUNDING ASSUMPTIONS MAY MASK TRUE BEHAVIOR
- O COMPLIANCE ANALYSIS STRATEGY ALWAYS PRESENT

TO MAKE TSPA MORE USEFUL,
REDUCE LIMITATIONS

VALIDITY OF COMPLIANCE ASSESSMENTS

- O TSPA CANNOT PREDICT THE EXACT BEHAVIOR OF THE REPOSITORY FAR INTO THE FUTURE.
- O TSPA CAN ONLY ESTABLISH A REASONABLE ENVELOPE OF REPOSITORY PERFORMANCE.
- O YOU CAN GET AS MUCH VALIDITY AS YOUR COMPLIANCE STRUCTURE NEEDS AND AS YOUR BUDGET ALLOWS.

TSPA'S CAN BE SIMPLIFIED AND EFFECTIVELY USED

- O THE COSTS MAY BE GREAT, BECAUSE OF THE NEED TO DEMONSTRATE ROBUSTNESS**

- O THE NEED MAY BE LESS GIVEN CONTINUING GREATER CAPABILITY AND DECREASING COSTS OF COMPUTATION**

- O PA TOOLS SHOULD FIT THE APPLICATION**
 - Different Tools May Be Needed For:
 - (1) Compliance Demonstration
 - (2) Assisting program development
 - (3) Other purposes