

**Civilian Radioactive Waste
Management System**

Management & Operating
Contractor



TRW Environmental Safety
Systems Inc.

Legal Weight Truck/ Tractor Trailer Testing

**Presentation to the Nuclear Waste Technical Review Board
Arlington, Virginia**

**T. C. Smith
June 14, 1995**

Outline

- **Why we need a legal weight truck (LWT)**
- **LWT test background**
- **Test results to date**
- **Programmed test results**

Why We Need a Legal Weight Truck

- Requirement to move some spent nuclear fuel by legal weight truck is known
- LWT system must comply with weight restrictions outlined in 1982 Surface Transportation Act
- LWT system could support transport of spent nuclear fuel via GA-4/GA-9 casks as early as 1998

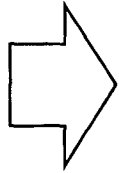
Legal Weight Truck Test Background

- **Nuclear Waste Technical Review Board briefed July 13, 1994**
- **Test broken down into two basic parts**
 - **Durability of the GA-9 trailer**
 - **Operational assessment of LWT transport system**
- **Durability test of GA-9 trailer completed**
 - **240,000 equivalent miles completed February 16, 1995**

Test Results to Date

- **Trailer designed, constructed, and tested in accordance with ANSI N14.30 standards**
- **Durability test verified overall structural integrity**
 - **All cracks occurred at connections**
 - **Stiffeners and gussets should not be welded around ends**
 - **Some structural connections required design mods**
 - **X-brace connections need reinforcement**
- **Trailer refurbished, inspected, and accepted by DOE in April 1995**

Programmed Test Events



- **Performance test—May 1995**
- **Human factors considerations—
August 1995**
- **Over-the-road assessment—April
1996 - June 1996**

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**Emphasis
Shifts from
Trailer to Tractor**