



Department of Energy
 Office of Civilian Radioactive Waste Management
 Yucca Mountain Site Characterization Office
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U.S. DEPARTMENT OF ENERGY (DOE) POSITION ON QUALIFICATION OF EXISTING DATA (SCPB: N/A)

The September 27, 1995, Technical Exchange of Data Qualification provided a timely forum for discussion of issues related to technical data. In the years ahead, Yucca Mountain Site Characterization Office (YMSCO) will be reviewing what existing data needs to be incorporated into licensing documentation. Existing data is likely to play a greater than anticipated role in the technical basis for DOE's conclusions.

Each data set YMSCO reviews for qualification has unique attributes and any means to qualify a data set must be specifically tailored to those attributes. NUREG-1298, "Qualification of Existing Data for High-Level Nuclear Waste Repositories," is implemented by the Office of Civilian Radioactive Waste Management in the Quality Assurance Requirements Description (QARD) DOE/RW-0333P. The range of options specified in Supplement III of the QARD has lead YMSCO to evaluate and determine the most effective method for data qualification.

The enclosure defines DOE's planned approach for the qualification of existing data.

If you have any questions, please contact either Thomas W. Bjerstedt at (702) 794-7590 or Claudia M. Newbury at (702) 794-7942 of my staff or Stephen J. Bodnar of the Civilian Radioactive Waste Management System Management and Operating Contractor at (794) 794-1840.

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Enclosure:
 DOE Data Qualification
 Position

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YMSCO APPROACH TO QUALIFYING EXISTING DATA

QARD, DOE/RW-0333P, Revision 5 provides the following definitions:

Qualification of Data, "A formal process that is intended to provide a desired level of confidence that data is suitable for its intended use."

Qualified Data, "Data initially collected or developed under a NRC approved quality assurance program or unqualified data that has been qualified in accordance with the QARD."

Unqualified Data, "Data developed prior to the implementation of an NRC approved quality assurance program that meets Office of Civilian Radioactive Waste Management requirements or data developed outside an approved NRC Quality Assurance Program such as by oil companies, universities, or data published in technical or scientific publications. Unqualified data does not include information accepted by the scientific and engineering community as established fact."

YMSCO considers these definitions and has embodied their intent in the identification of data sets to be qualified, in scoping and implementing a process for qualifying existing data sets that support quality-affected activities.

YMSCO's intentions for future data qualification evaluations and acceptance of data are as follows. Minor revisions to existing procedures will be pursued during FY 1996 to parallel these intentions:

1. QUALIFICATION;

Existing data will be qualified as required by the QARD, Supplement III. The qualification process for existing data meeting these requirements is described in appropriate implementing documents. Based on our lessons learned from previous qualification exercises, we intent to focus the option of equivalent 10 CFR 60 Subpart G programs to the equivalent programmatic controls required by the QARD. Our intent is to compare the controls on the existing data to present day controls at a programmatic level instead of looking at equivalent procedure steps that are required by today's standards. DOE will, in all cases, review the technical adequacy of existing data but not necessarily via a peer review. Part of a technical review for adequacy may include a review of program equivalence.

2. ACCEPTANCE;

There are sources of technical data generated outside the project that are nationally recognized, and that are routinely accepted by the technical community. While these data are reviewed and accepted as factual, they are not qualified.

Acceptance of these types of data to support quality-affecting activities involves a review by subject matter experts. The review provides a documented evaluation of the data for inconsistencies along with a review to examine the basis and extent to which the data are used

within the technical community. This review does not include forensic examination, evaluation of data collection techniques, or development methodologies beyond reference to the source. If the review indicates these data sets are technically correct and suitable for intended use, they are accepted as factual for use in support of quality-affected activities. Data set typical of this category, and the organizations responsible for generating it include, but are not limited to:

- a) National Oceanographic and Atmospheric Administration for atmospheric and meteorological data.
- b) U.S. Departments of Commerce, Transportation, Interior, Labor, and Energy for socioeconomic data, road and rail data, land data, population data, and nuclear waste data, respectively.
- c) U.S. Environmental Protection Agency for environmental data.
- d) National Academy of Sciences for scientific data and analyses.
- e) National Electric Institute for waste characteristics data.
- f) U.S. Geological Survey seismological data.