

**Foster Wheeler Environmental Corporation  
Idaho National Engineering and Environmental Laboratory  
Idaho Falls, Idaho**

**General Information**

<b>Client Name:</b>	Foster Wheeler Environmental Corporation
<b>Project Value:</b>	\$185,000,000
<b>Period of Performance:</b>	June 2000 to June 2006



**Project Overview**

RIO Technical Services Inc. was contracted by the Foster Wheeler Environmental Corporation to support design and license an Independent Spent Fuel Storage Installation (ISFSI) and first of it's kind dry transfer facility at the Idaho National Engineering and Environmental Laboratory (INEEL).

**Scope of Work**

- RIO developed and implemented an ASME NQA-1 Quality Assurance Program that governed work in design, licensing, production, and operation of radioactive shielding containers and other equipment pertaining to storage systems and/or transportation package systems for radioactive materials. This plan was designed to ensure compliance with Appendix B of U.S. Federal Regulation 10 CFR 50.
- RIO developed an Integrated Safety Management Plan for the ISFSI project that provided a phased approach to the submittal of the SAR for each of the subprojects to meet the accelerated design and construction schedules. Safety-related information provided at each phase of the subproject was sufficient for DOE to approve the start of the each phase, e.g., design, construction, and equipment purchase.
- Since Reliable end-of-life isotopic concentrations were not available for older spent fuel that was to be reprocessed, RIO provided the methodology required to measure spent nuclear fuel radiologic characteristics that provided validated end-of-life and burn up information. RIO also developed a method to validate the back-calculated values needed to provide qualifiable information for NRC licensing of dry storage, transportation and for acceptance to the geological repository. This measurement was required to provide a valid assurance of any calculated data.
- RIO prepared the Environmental Report for the facility and site area which included data related to geology, hydrology, and meteorology for the site area as well as reviews of the area demographics, ecological resources and archeological resources.
- RIO developed the methodology for the characterization, storage, and conditioning requirements of spent nuclear fuels in preparation for interim storage and repository disposal that the NRC now uses in required qualified data packages to support NRC licensing efforts.