Products Review

Contacts:
Don Olson, dolson@chtnuclear.com
Rod Felts, rfelts@chtnuclear.com
Website: www.chtnuclear.com

1802 Fairfax Road
Greensboro, NC 27407
Phone: 336.852.5679
Fax: 336.852.6149

10 CFR Part 71

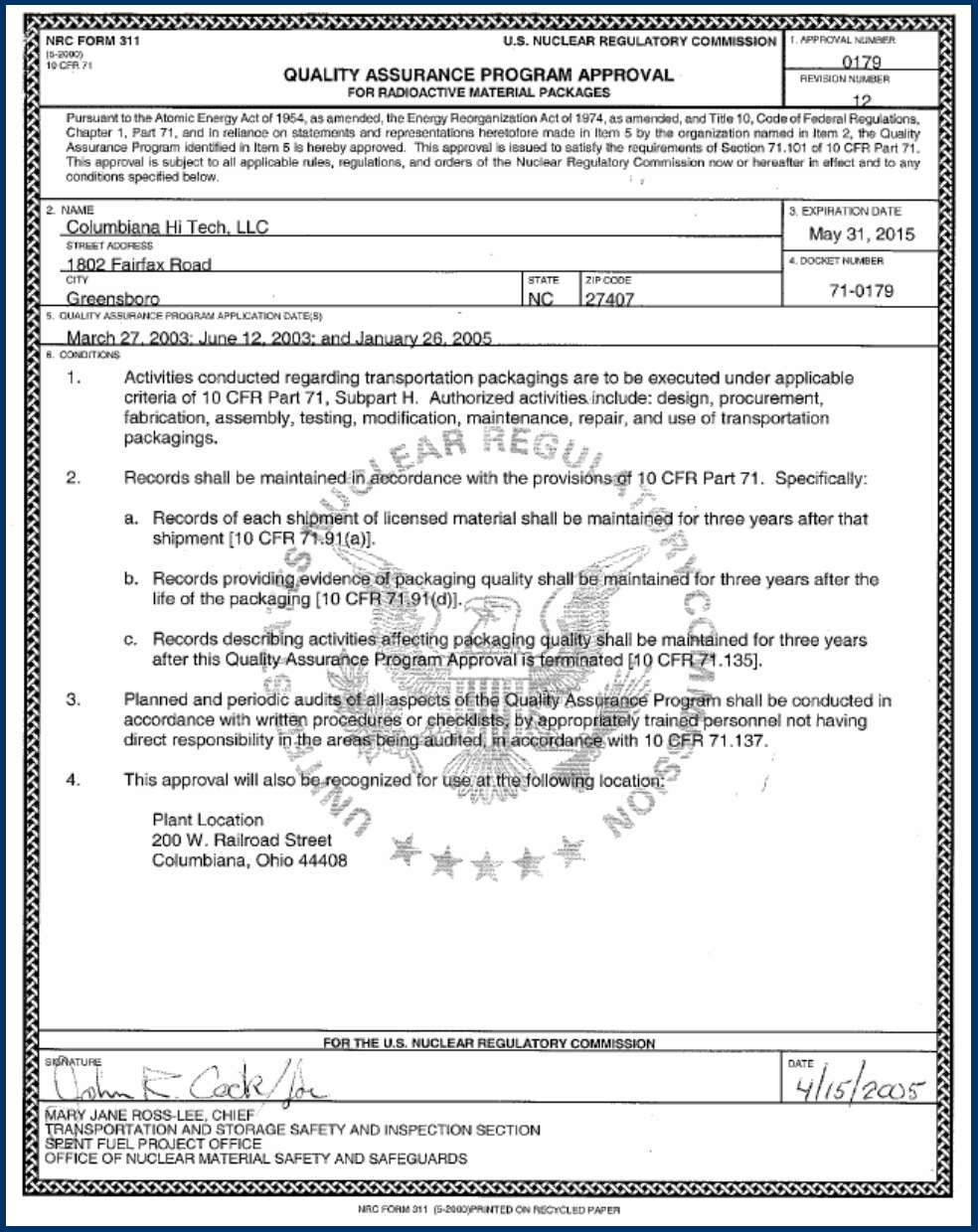
QA Services provided

to third parties.

U.S. NRC is not currently

issuing incremental

10 CFR Part 71 QA Licenses.



NRC FORM 311 (5-2000) 10 CFR 71

U.S. NUCLEAR REGULATORY COMMISSION

1. APPROVAL NUMBER: 0179
REVISION NUMBER: 12

QUALITY ASSURANCE PROGRAM APPROVAL
FOR RADIOACTIVE MATERIAL PACKAGES

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 71, and in reliance on statements and representations heretofore made in Item 5 by the organization named in Item 2, the Quality Assurance Program identified in Item 5 is hereby approved. This approval is issued to satisfy the requirements of Section 71.101 of 10 CFR Part 71. This approval is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

2. NAME: Columbiana Hi Tech, LLC
STREET ADDRESS: 1802 Fairfax Road
CITY: Greensboro | STATE: NC | ZIP CODE: 27407

3. EXPIRATION DATE: May 31, 2015

4. DOCKET NUMBER: 71-0179

5. QUALITY ASSURANCE PROGRAM APPLICATION DATE(S): March 27, 2003; June 12, 2003; and January 26, 2005

6. CONDITIONS

1. Activities conducted regarding transportation packagings are to be executed under applicable criteria of 10 CFR Part 71, Subpart H. Authorized activities include: design, procurement, fabrication, assembly, testing, modification, maintenance, repair, and use of transportation packagings.

2. Records shall be maintained in accordance with the provisions of 10 CFR Part 71. Specifically:

   a. Records of each shipment of licensed material shall be maintained for three years after that shipment [10 CFR 71.91(a)].

   b. Records providing evidence of packaging quality shall be maintained for three years after the life of the packaging [10 CFR 71.91(d)].

   c. Records describing activities affecting packaging quality shall be maintained for three years after this Quality Assurance Program Approval is terminated [10 CFR 71.135].

3. Planned and periodic audits of all aspects of the Quality Assurance Program shall be conducted in accordance with written procedures or checklists, by appropriately trained personnel not having direct responsibility in the areas being audited, in accordance with 10 CFR 71.137.

4. This approval will also be recognized for use at the following location:

   Plant Location
   200 W. Railroad Street
   Columbiana, Ohio 44408

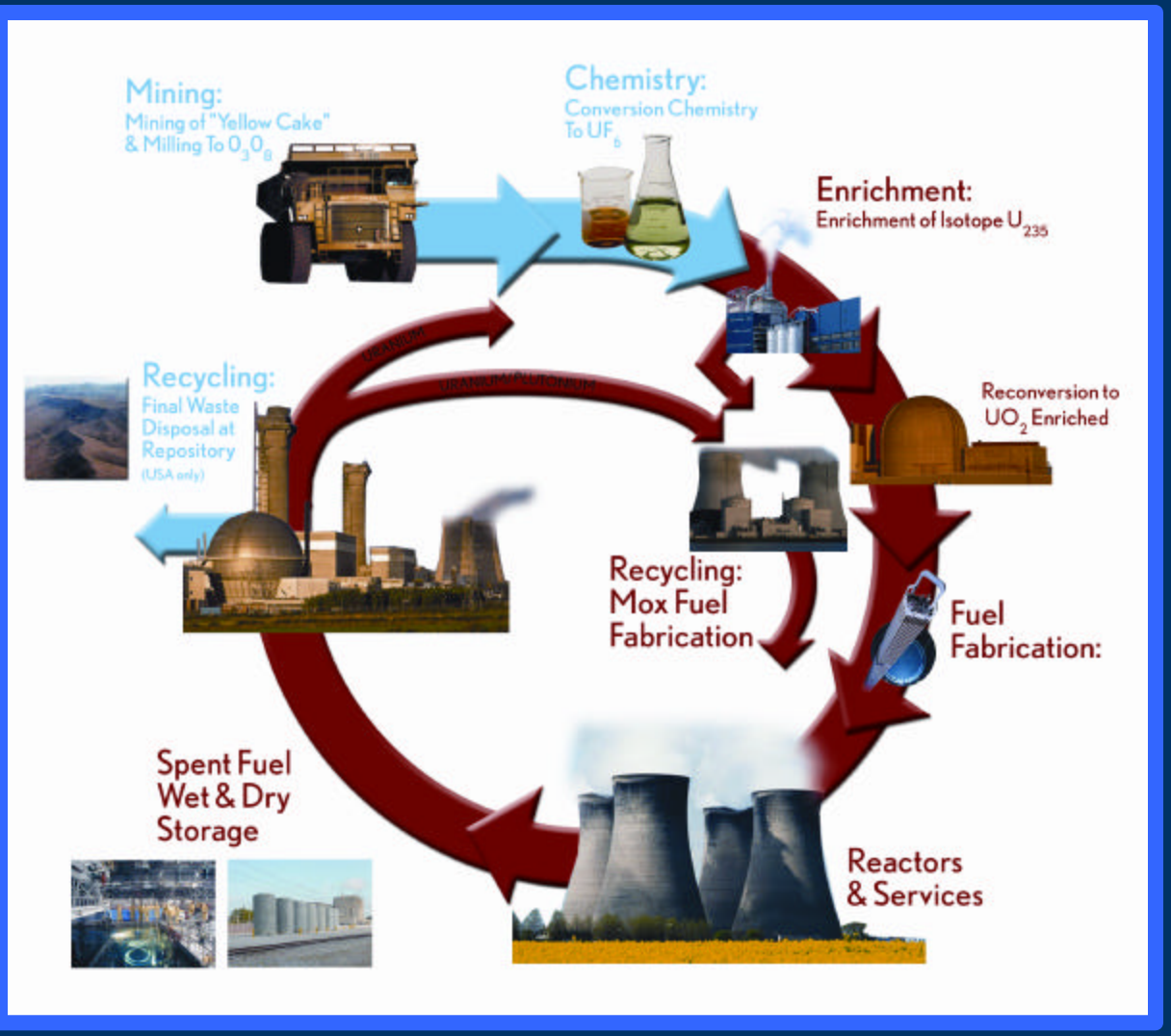
FOR THE U.S. NUCLEAR REGULATORY COMMISSION

SIGNATURE: John R. Cook /for | DATE: 4/15/2005

MARY JANE ROSS-LEE, CHIEF
TRANSPORTATION AND STORAGE SAFETY AND INSPECTION SECTION
SPENT FUEL PROJECT OFFICE
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

NRC FORM 311 (5-2000)PRINTED ON RECYCLED PAPER

Nuclear Fuel Cycle – CHT Participation



CHT Participation denoted in red

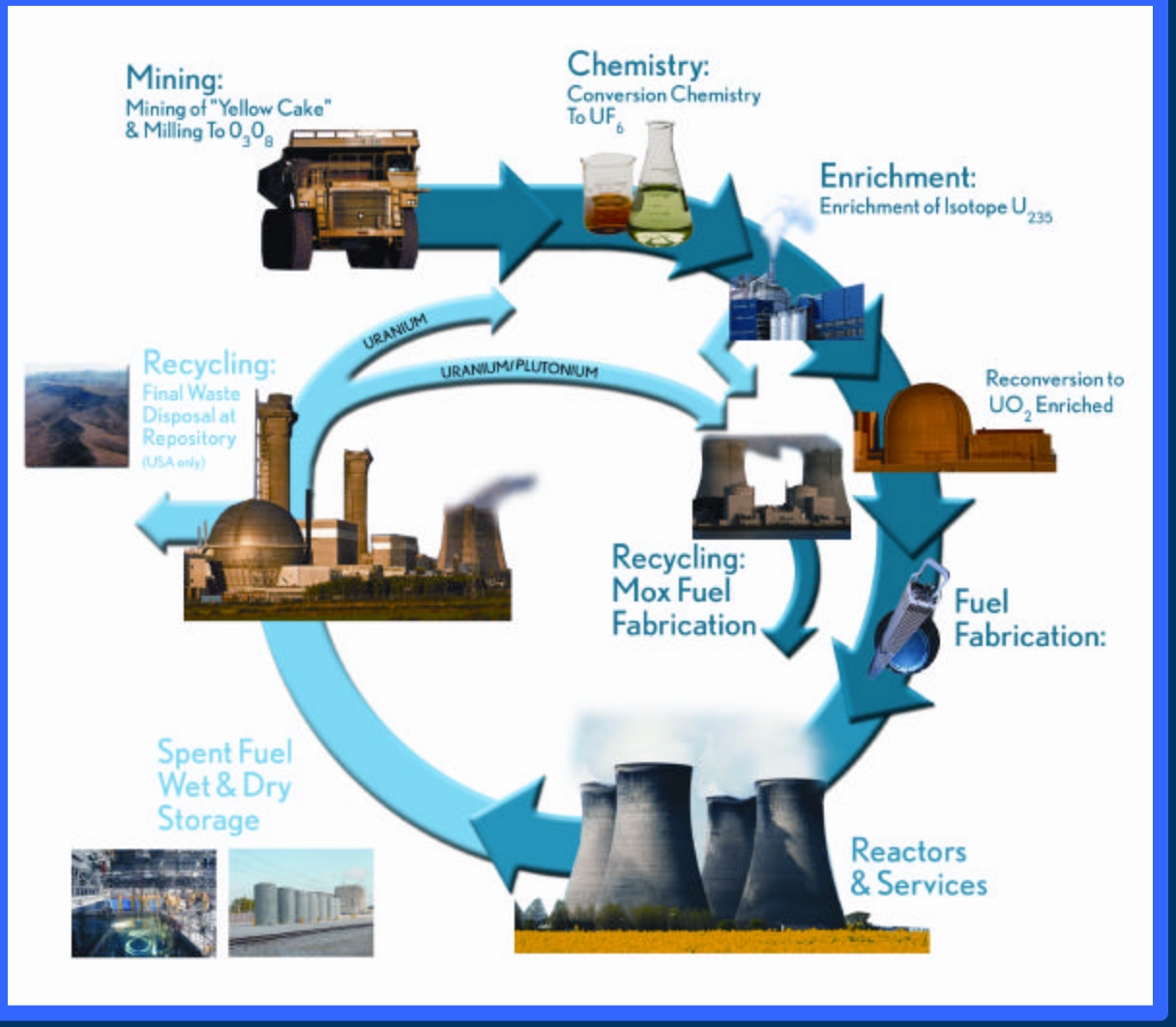
The CHT strategy concentrates on products where the Intellectual Property and regulatory approval is controlled by CHT or where manufacturing know-how and quality assurance credentials are predicating factors.

CHT products are not used in the Mining Conversion phases, and presently are not used in the repository component of the Recycling phase.

CHT products are used in the Enrichment Reconversion, Fuel Fabrication, Spent Fuel and Recycling: Mixed Oxide (MOX) Fuel Fabrication. Upon completion by the U.S. DOE of a permanent repository, CHT products will be in use in this phase. The CHT strategy concentrates on specialized equipment and on packages that contain fissile isotopes, high level radioactive spent fuel, and plutonium.

Although not portrayed in the diagram, CHT products are used in the USA Weapons Cleanup Market for the storage and transportation of irradiated fuels, by-product solids and solutions, down-blended Highly Enriched Uranium (HEU) UF_6, and MOX fuel derived from plutonium weapons.

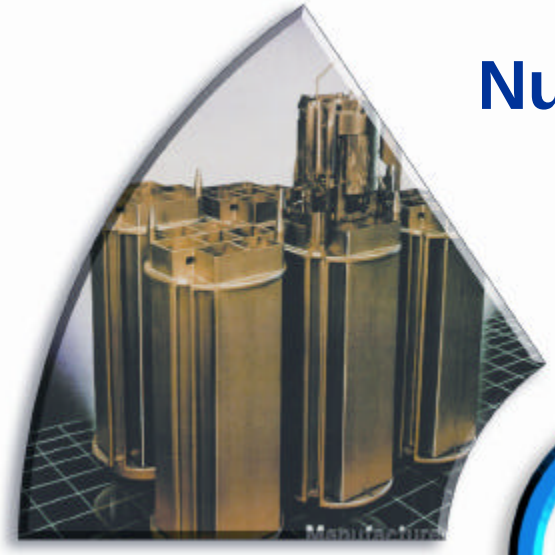
Nuclear Fuel Cycle – By Phase



The world wide Nuclear Fuel Cycle (NFC) involves the transportation and storage of exacting regulated materials in the various stages of conversion and enrichment into a high value product: Nuclear fuel. In all phases of NFC, the regulations concerning transportation and storage of nuclear materials are increasingly stringent, with emphasis on the International Atomic Energy Agency (IAEA) rules known as TSR-1 (1996 rules). Individual countries' authorities require their own approval of each transportation package and interpret the IAEA regulations independently. The storage and transportation of nuclear materials is a world wide business, with complex regulations and rigorous quality assurance requirements.

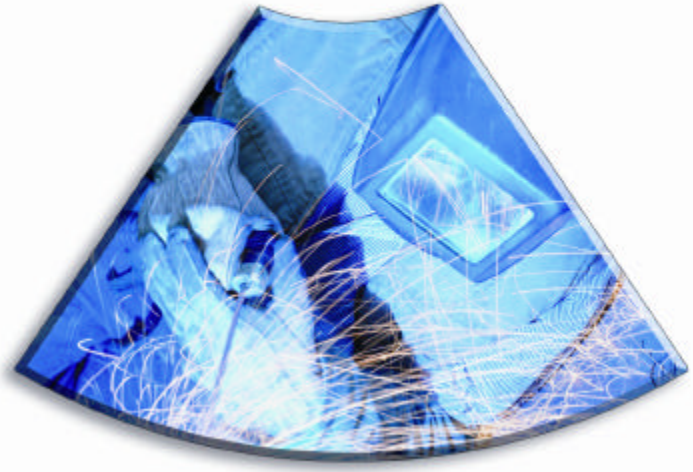
The United States, as a non-proliferation policy, does not permit the reprocessing of spent fuel, and, in this respect, differs from nuclear European countries and Japan. In the USA, spent fuel is presently stored in the reactor pool, known as wet storage, and on the reactor premises, known as dry storage, awaiting the creation of the repository in Nevada or an equivalent site. Creation of the repository is ultimately the responsibility of the US DOE.

Nuclear Fuel Cycle



Columbiana HT Hi Tech

Enrichment



UX-30

Watertight technology on enriched UF_6 cylinder

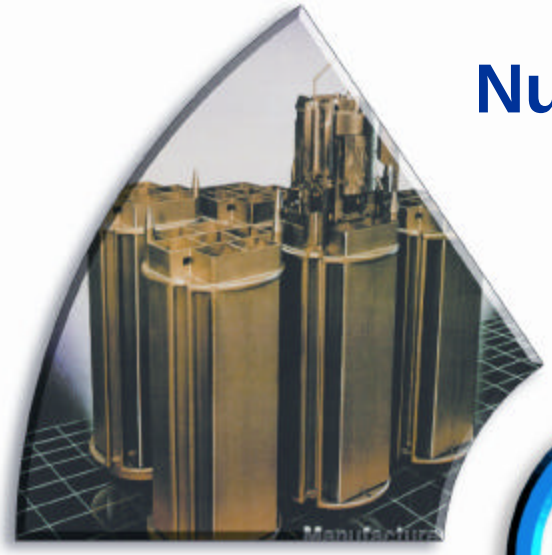
MED 2000 is for enriched UF_6 sample bottle packages

UX-30 USA/9196/AF-85 for enriched UF_6

MED 2000 1S
Sample Bottle package

MED 2000 1S
Sample Bottle packages
prior to shipment

Nuclear Fuel Cycle



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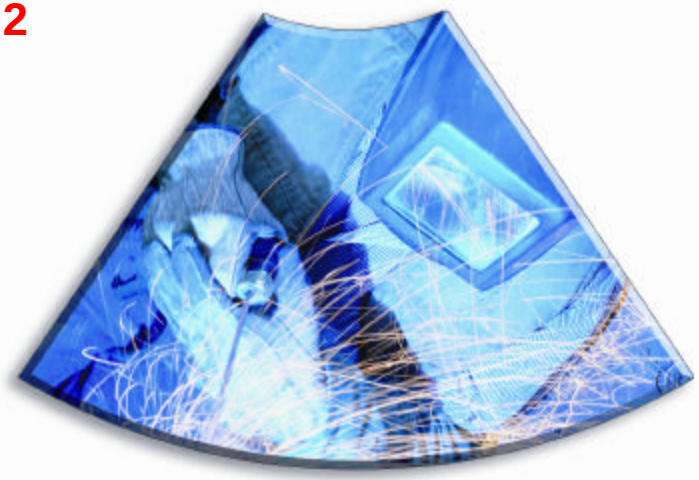
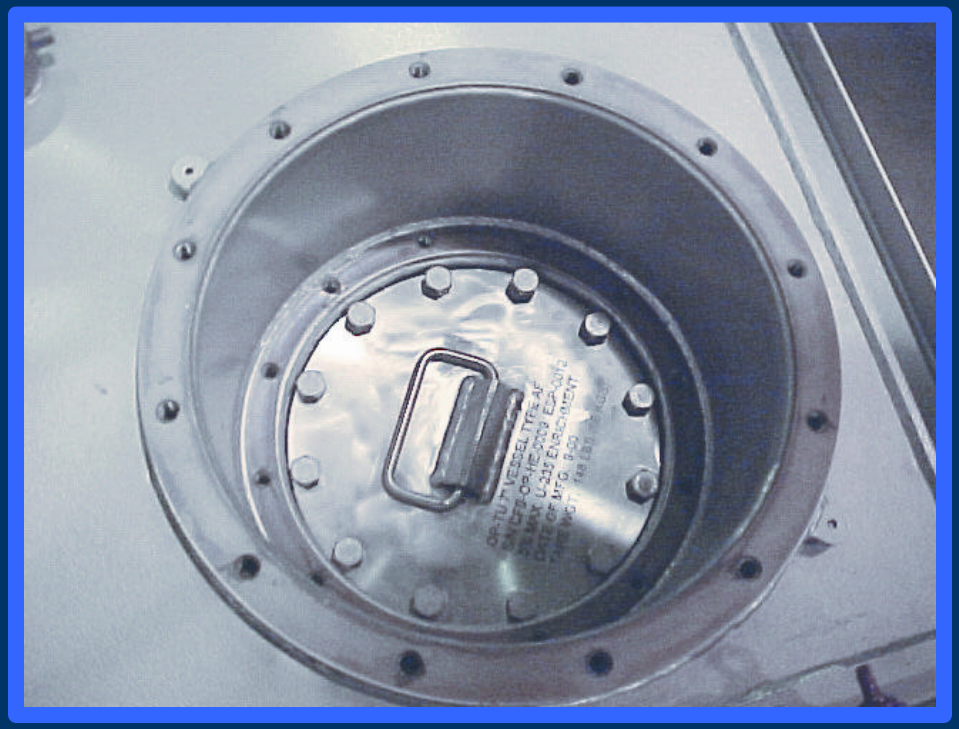
Reconversion to eUO_2





OP-TU Transport Unit with Oxide Vessel Inserted

Oxide Vessel for OP-TU

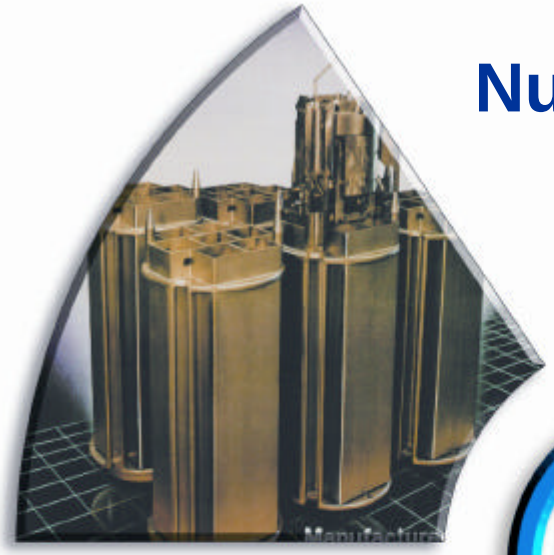
OP-TU USA/9288/B(U) F-85
(-96 pending)

ICCA with Locking Ring Inserted
into New Powder Container (NPC)

NPC with 9 ICCAs,
without Outer Lid Assembly

ICCA Vessel for NPC

Nuclear Fuel Cycle



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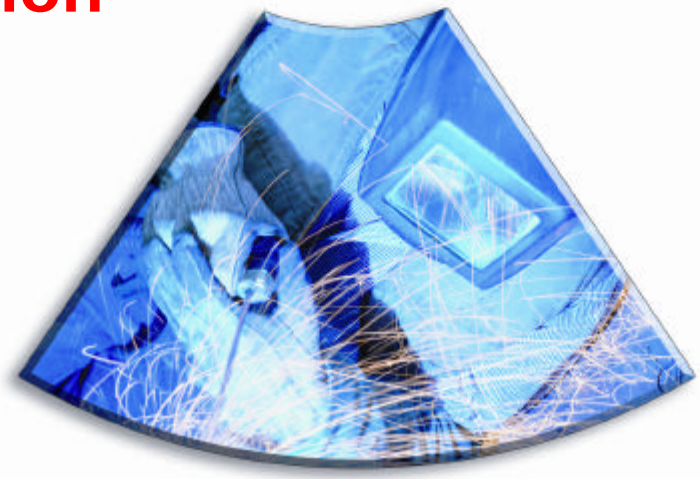
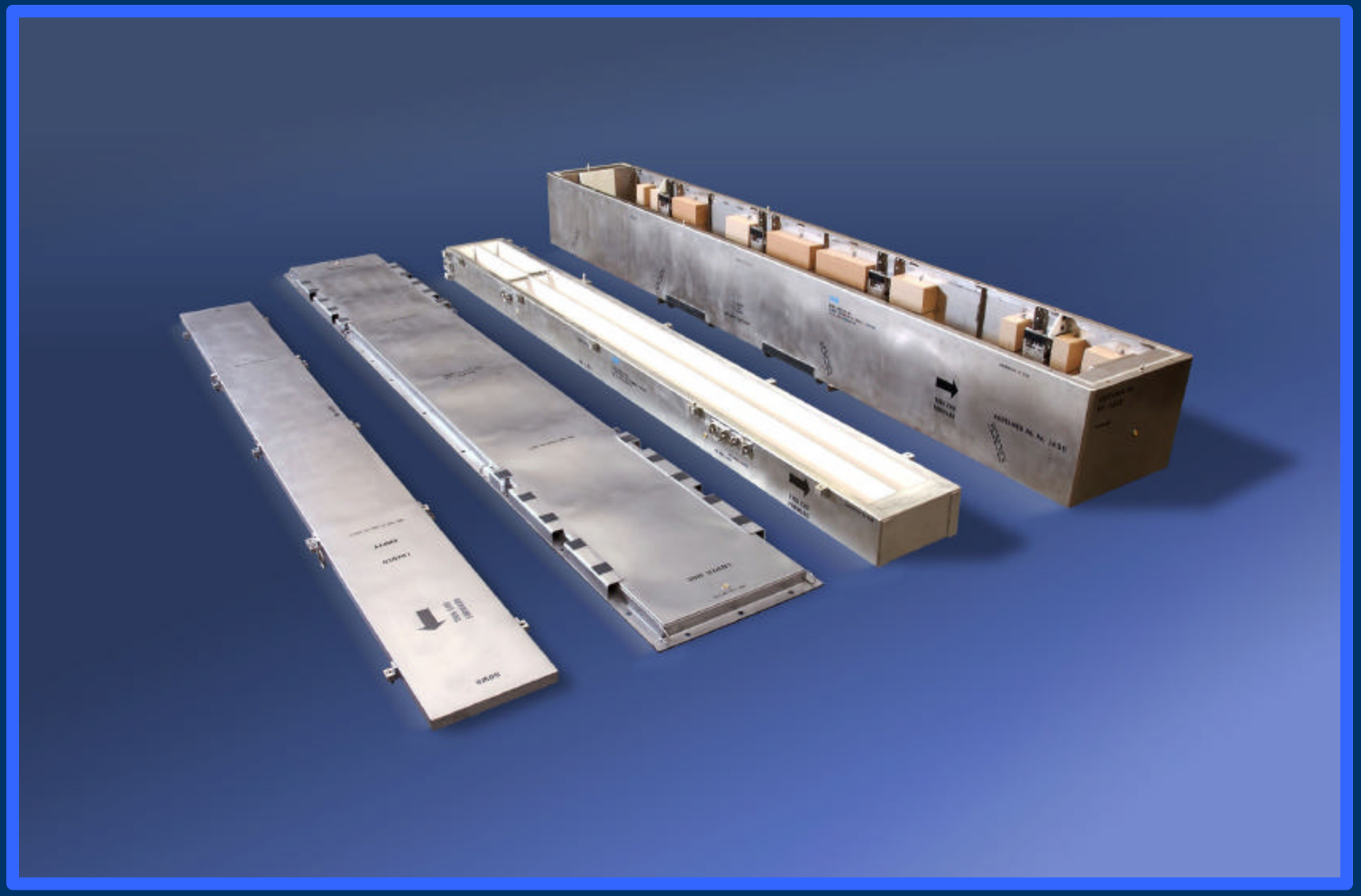
Fuel Fabrication

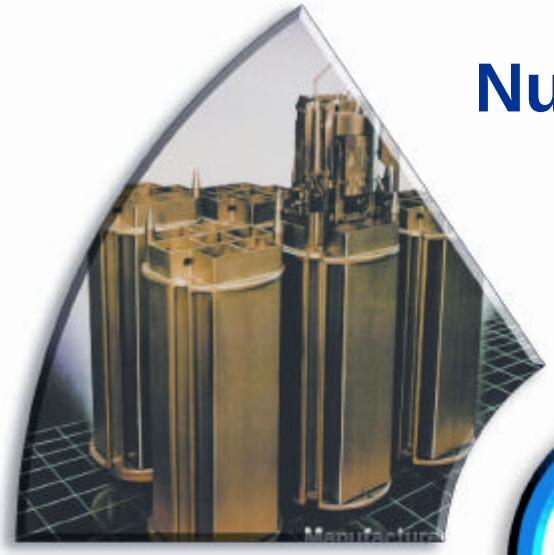


Traveller Protective Shipping Containers and Clamshell for PWR Fuel Assemblies



RAJ II BWR Fuel Assembly Package

Nuclear Fuel Cycle



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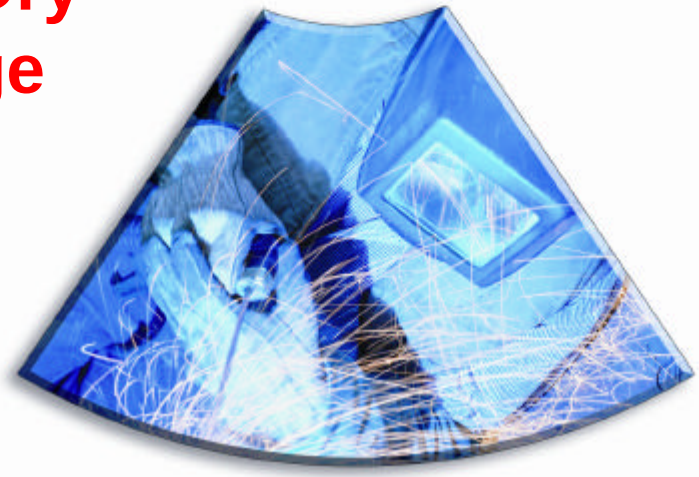
Spent Fuel: Wet & Dry Storage



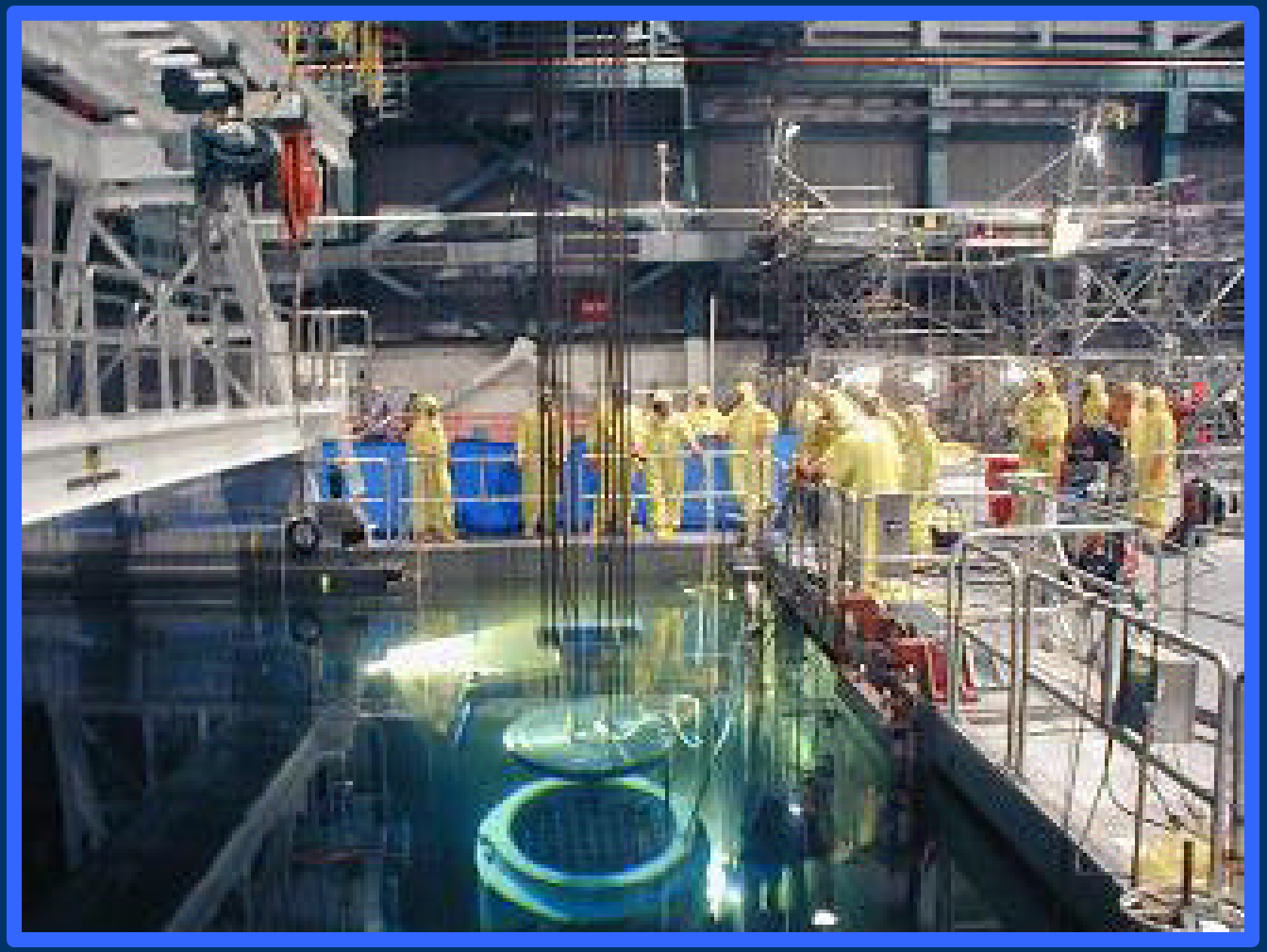
Stainless Canister Shells in manufacturing

Greater Than Class C canister shells in process

Dry storage liner in transit to reactor site

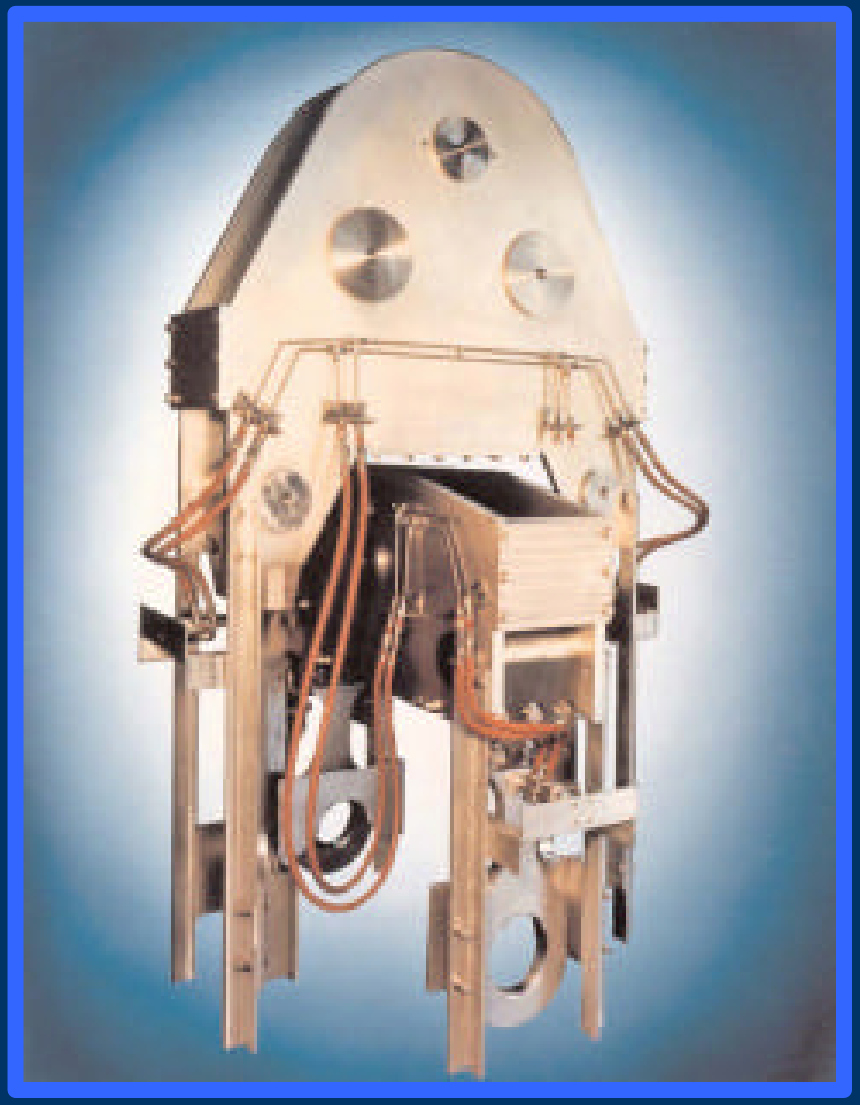
Transfer cask being loaded

Transfer cask in manufacturing
with interlocking lead brick shielding



Transfer cask pictured in Spent Fuel Pool

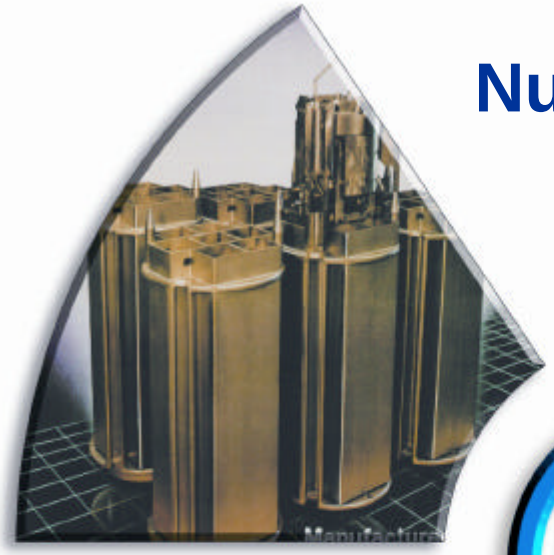
Vertical Dry Storage System at Reactor Site



Primary & Secondary Cask Lifting Yoke

Stainless Steel Spent Fuel Storage Array

Nuclear Fuel Cycle



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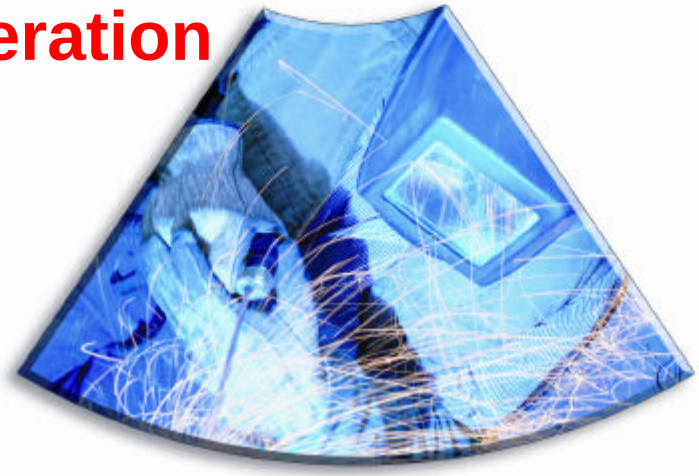
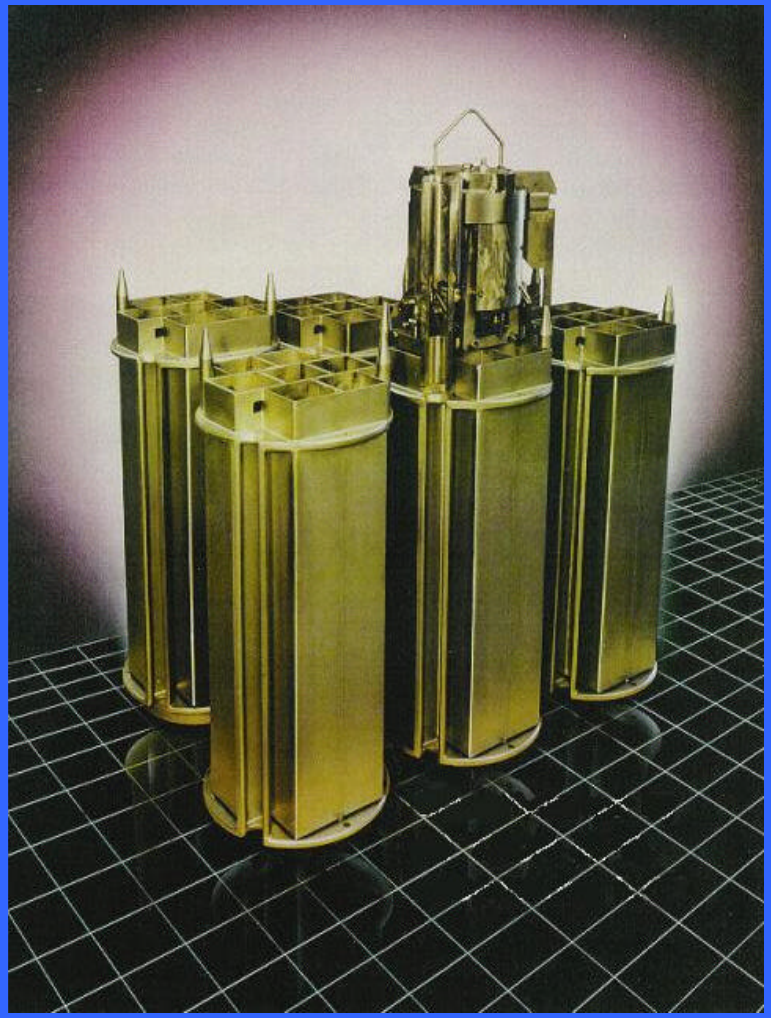
Weapons Clean-Up & Non-proliferation

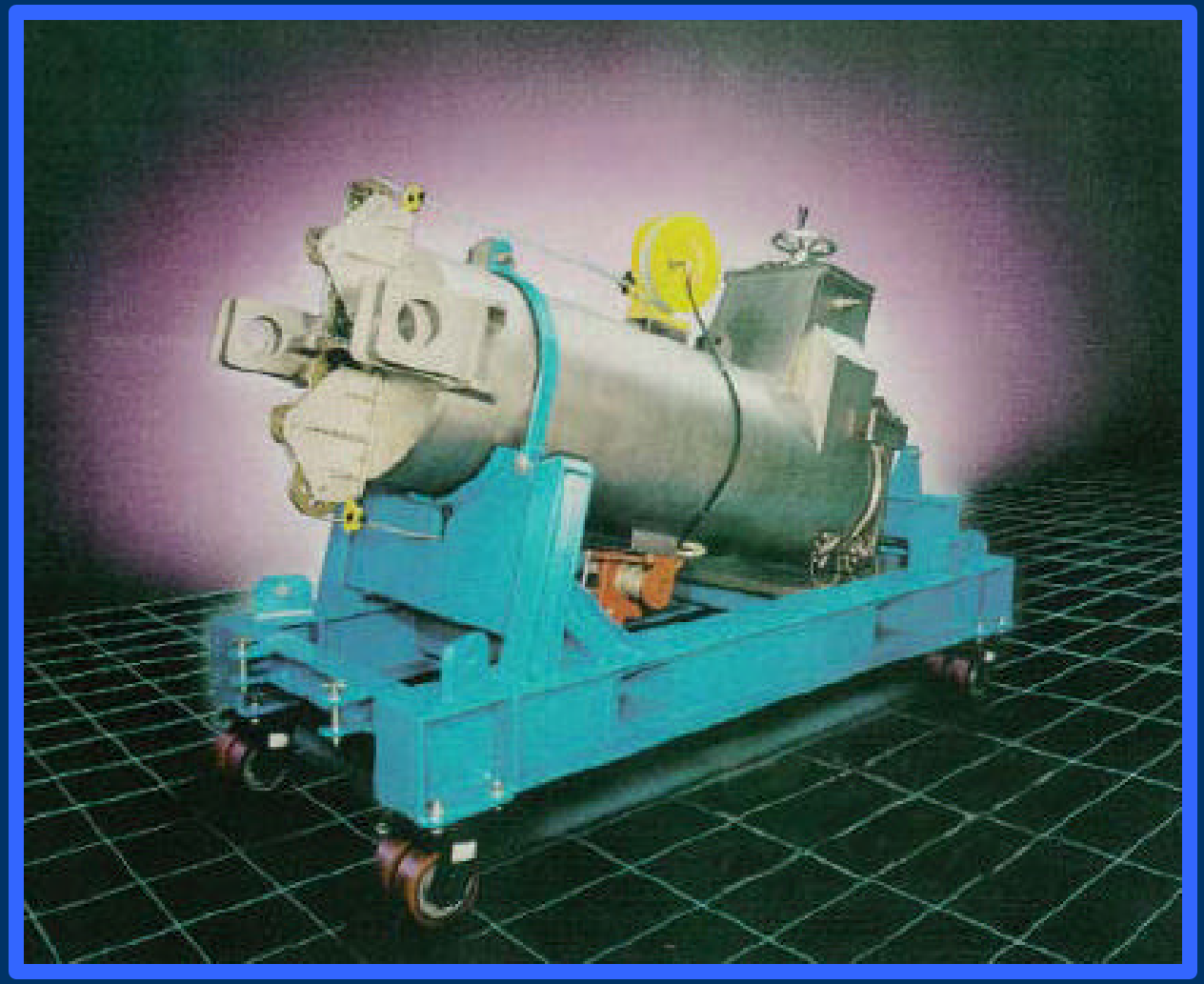


Liqui Rad Containers
installed on a trailer

Liqui Rad for Type B
Radioactive Solutions



Triga Baskets for research reactor fuel



Research Reactor Fuel Transfer System

Select Products and Services

Products:
UX-30 (Exclusive)
MED2000 (Exclusive)
LIQUI RAD (Exclusive)
OP-TU (Exclusive)
WATERTIGHT (Revenue sharing)
NPC
TRAVELLER
RAJ II
MOX FUEL ASSEMBLY PACKAGES
SPENT FUEL: Transfer Casks, Lifting Yokes, VCC Liners, Canisters, Nuhoms Bases, Impact Limiters

Services:
Quality Assurance compliant with 10 CFR 71 license
Operating lease financing
Aftermarket maintenance and regulatory compliance
Destructive testing to 10 CFR 71 requirements
Prototype manufacturing

Columbiana Hi Tech

NUCLEAR QUALITY CUSTOMERS

- Advanced Nuclear Fuels / Framatome ANP
- BNFL
- Duratek
- Edlow International Company
- GE Nuclear Energy
- GNF Global Nuclear Fuel — A Joint Venture of GE, Toshiba, & Hitachi
- Kepco Nuclear Fuel Co., Ltd. (KNFC)
- Mitsubishi
- NAC International
- NCS Nuclear Cargo + Service
- Nuclear Fuel Industries, Ltd. (NFI)
- NAC
- RSB Logistic
- TLI
- Transnuclear, Inc.
- United States of America Department of Energy
- urenco
- USEC A Global Energy Company
- Westinghouse

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NUCLEAR QUALITY CUSTOMERS

FLUOR

EURODIF

BECHTEL JACOBS

BECHTEL

Hitz
Hitachi Zosen

PAC TEC

SRS

COGEMA

Cameco

NPD
Nuclear Products Division