



**Department of Energy**  
Washington, DC 20585

April 4, 2018

Mr. Stephen Ralls, Quality Manager  
Croft Associates Limited  
F4 Culham Science Center  
Abingdon, Oxfordshire  
United Kingdom  
OX14 3DB

Dear Mr. Ralls:

In response to your email dated February 2, 2018 to Dr. James Shuler of my staff, enclosed is Department of Energy (DOE), Quality Assurance Program Approval (QAPA), Approval Number 0009, Revision 2, for Croft Associates Limited (Croft), for renewal. This approval is based on DOE Packaging Certification Program (PCP) endorsement of the Nuclear Regulatory Commission's (NRC) Approval No. 0939, Revision 1, issued on August 28, 2015 and *Quality Assurance Program Description Manual to 10 CFR 71 Subpart H* (QAPDM), QAR-144, Issued D, submitted to NRC by Croft on July 21, 2017 in accordance with 10 CFR 71.106.

This DOE QAPA satisfies DOE Order 460.1D (Order), *Hazardous Materials Packaging and Transportation Safety*, and therefore complies with the provisions in 49 CFR 173.7(d) for the DOE to maintain packaging standards equivalent to those specified in 10 CFR Part 71.

The expiration date of DOE QAPA 0009, Revision 2, is March 31, 2023. If you wish to renew, revise, or terminate QAPA 0009, please request this action in writing. Any revisions to QAPDM, except for spelling corrections and nonsubstantive changes to punctuation or editorial items, shall be submitted and approved by the DOE PCP prior to implementation of the proposed changes.

This approval memorandum also serves as a reminder that the Order requires that for offsite transportation each Departmental element that uses a Type B or fissile package certified by DOE must register with the DOE Certifying Official prior to first use of the package. Refer to the following URL for registration instructions: <https://rampac.energy.gov/home/package-certification-information/guidance/doe-guidance>.

Furthermore, since Croft is not a DOE Management and Operating Contractor, Croft shall not consign a DOE certified package for shipment. Only Departmental elements or persons working under contract to Departmental elements shall consign a DOE certified package for shipment. However, Croft can transfer the material onsite to DOE elements or persons working under contract to DOE elements for consignment of a DOE certified package.

If you have any questions, please contact me or Dr. James M. Shuler of my staff at (301) 903-5513.

Sincerely,

A handwritten signature in cursive script that reads "Joanne D. Lorence".

Joanne D. Lorence  
Headquarters Certifying Official  
Director  
Office of Packaging and Transportation

Enclosure

cc: Bob Vaughan, Croft  
James Shuler, EM-4.24



U.S. Department of Energy  
 QUALITY ASSURANCE PROGRAM APPROVAL  
 For Type B and Fissile Radioactive Material Packages

1. APPROVAL NUMBER  
**0009**

REVISION  
**2**

Pursuant to DOE Order 460.1D, *Packaging and Transportation Safety*, subparagraph 4.a.(3), *Quality Assurance (QA)* directs that each Departmental element that participates in the use, design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, and modification of Type B or fissile materials packaging must have and maintain a quality assurance (QA) program in accordance with 10 CFR Part 71, Subpart H that is approved by the NRC or the DOE Certifying Official, prior to the performance of those operations. The Contractors Requirements Document in Attachment 1 of Paragraph 5.a. of the Order imposes the same requirement on DOE contractors. Based on the reliance on statements and representations heretofore made in Block 5 by the organization named in Block 2, the Quality Assurance Program Description identified in Block 5 is hereby approved. This approval is issued to satisfy the requirements of the Order, 49 CFR 173.7(d), and 10 CFR 71.101. This approval is subject to all applicable rules, regulations, and orders of the U.S. Department of Energy now or hereafter in effect and to any conditions specified below.

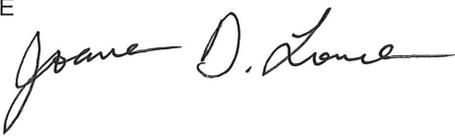
2. ORGANIZATION NAME Croft Associates Limited			3. EXPIRATION DATE March 31, 2023
STREET ADDRESS F4 Culham Science Center			4. DOCKET NUMBER  2011-009
CITY Abingdon, Oxfordshire, United Kingdom	STATE -	ZIP CODE OX14 3DB	

5. QUALITY ASSURANCE PROGRAM DESCRIPTION, REVISION, and DATE  
*Quality Assurance Program Description Manual for 10 CFR Part 71, Subpart H*, QAR 144, Issue D, July 21, 2017  
 (DOE endorses NRC Approval No. 0939, Revision 1 dated August 28, 2015)

6. CONDITIONS

- Activities conducted regarding Type B and fissile material 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.
- Records shall be maintained in accordance with the provisions of 10 CFR Part 71. Specifically:
  - Records of each shipment of licensed material shall be maintained for 3 years after that shipment [10 CFR 71.91(a)].
  - Records providing evidence of packaging quality shall be maintained for 3 years after the life of the packaging [10 CFR 71.91(d)].
  - Records describing activities affecting packaging quality shall be maintained for 3 years after this Quality Assurance Program Approval is terminated [10 CFR 71.135].
- 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.
- In addition to the requirements of Subparts G and H of 10 CFR 71, and except as specified in Section 5(d), "Conditions," of applicable Certificates of Compliance, each package must be designed, fabricated, acceptance tested, operated, and maintained in accordance with applicable Safety Analysis Report for Packaging requirements; specifically, Chapter 7, "Operating Procedures," Chapter 8, "Acceptance Tests and Maintenance Program," and Chapter 9, "Quality Assurance."

FOR THE U.S. DEPARTMENT OF ENERGY

SIGNATURE 	DATE OF ISSUANCE 04/04/2018
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Joanne D. Lorence  
 DOE Headquarters Certifying Official  
 Director, Office of Packaging and Transportation