



**QSA Global, Inc.**  
40 North Avenue  
Burlington, MA 01803  
Telephone: (781) 272-2000  
Toll Free: (800) 815-1383  
Facsimile: (781) 273-2216

11 August 2006

Mr. Stewart Brown, Senior Project Manager  
Licensing Section  
Spent Fuel Project Office  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
One White Flint  
Rockville, MD 20852

Docket No.: 71-9027  
TAC Nos. L23922, L23895 and L23896

Subject: Additional Supportive Information for the Model 741-OP Type B Container

Dear Mr. Brown:

In response to our conversation on 8 August 2006, we provide the following information and response:

- Drawing R741-OP Revision D is enclosed to correct the device referenced in Item 5 on sheet 1 of that drawing.
- Section 8.1.5 is modified to incorporate the lock assembly component test as requested by your staff.

Drawing R741-OP Rev D and page 8-2 of Revision 6 to the Model 741-OP SAR are submitted as these are the only pages that change from Revision 5 of the SAR. Changes to the text of Revision 6 of the SAR addressing items discussed in this letter are indicated by vertical lines in the right hand margin. Should you have any additional questions or wish to discuss this submission, please contact me.

Sincerely,



Lori Podolak  
Product Licensing Specialist  
Regulatory Affairs Department  
Ph: (781) 272-2000 ext 241  
Fax: (781) 359-9191  
Email: [Lori.Podolak@qsa-global.com](mailto:Lori.Podolak@qsa-global.com)

Enclosures:

- A Drawing R741-OP Rev D
- B Page 8-2 of SAR Revision 6
- C List of Affected Pages



#### **8.1.4 Leakage Tests**

The source capsules (primary containment) are wipe tested for leakage of radioactive contamination upon initial manufacture. The removable contamination must be less than 185 Bq (0.005  $\mu$ Ci). The source capsules will also be subjected to leak tests under ISO9978:1992(E) (or more recent editions). The source capsules are not used if they fail any of these tests.

#### **8.1.5 Component and Material Tests**

Component and material compliance is achieved in accordance with the requirements in QSA Global Inc.'s USNRC approved Quality Assurance Program No. 0040.

The lock assembly of the device is tested to assure that the security of the radioactive source will be maintained. Failure of this test prevents use of the device until the lock assembly is corrected and re-tested.

#### **8.1.6 Shielding Tests**

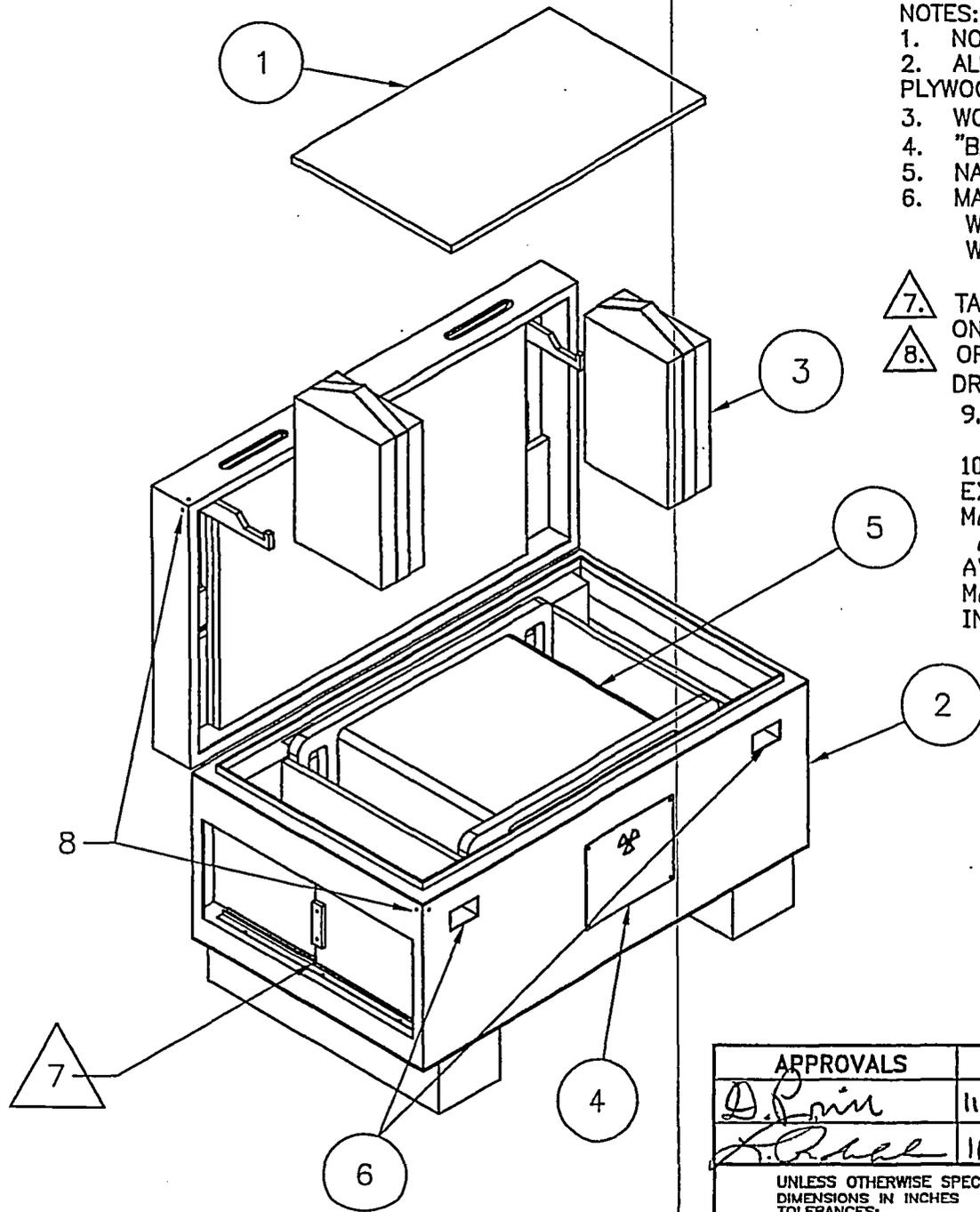
The radiation levels at the surface of the 741 inner device and at 40 inches (1m) from the surface are measured upon manufacture. These radiation levels, when extrapolated to the rated capacity of the transport package, must not exceed 200 mR/hr at the surface, nor 10 mR/hr at 1 meter from the surface of the transport package. Failure of this test will prevent use of the device. As the use of the overpack will further reduce the measured radiation levels, a separate radiation profile is not taken of the package upon initial manufacture, it is measured prior to every shipment. If the reading exceeds 200 mR/hr at the surface or 10 mR/hr at one meter, the package is not shipped.

#### **8.1.7 Thermal Tests**

Not applicable. The source content of the Model 741-OP packages has minimal effect on the package surface temperature and therefore no additional testing is necessary to evaluate thermal properties of the packaging.

#### **8.1.8 Miscellaneous Tests**

Upon initial manufacture of the source assembly and prior to first shipment of the source assembly, subject the swage coupling between the source capsule and cable to a static tensile test with a load of 100 lbs (445 N). Failure of this test will prevent use of the source in the Type B(U) transport package.



NOTES:

1. NOTES APPLY TO ALL PAGES.
2. ALL WOOD EXTERIOR GRADE C-C, GROUP 1 OR BETTER PLYWOOD.
3. WOOD TOLERANCES  $\pm 3/16"$ .
4. "BASKET" LOAD RATING OF 2000LBS. MINIMUM.
5. NAME PLATE ON FRONT.
6. MAX. PACKAGE WEIGHT 625 LBS.  
WEIGHT OF STEEL BOX 68-75 LBS.  
WEIGHT OF STEEL BOX, WOOD & FOAM 130-150 LBS.

7. TAMPER INDICATOR HOLES DRILLED AS SHOWN, ON BOTH SIDES OF DEVICE.
8. OPTIONAL TAMPER INDICATOR WIRE HOLES; DRILL 4  $\phi 1/8"$  HOLES APPROXIMATELY WHERE SHOWN.
9. ALL STEEL TO BE COLD ROLLED STEEL, COMMERCIAL QUALITY (SAE 1008)
10. ALL PERSONAL QUALIFICATIONS, WELDING & EXAMINATION PROCEDURES FOR OVERPACK BOXES MANUFACTURED ON OR AFTER 21 NOV. 05 ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AWS. WELDING ON THE OVERPACK BOXES MANUFACTURED BEFORE 21 NOV. 05 WERE INSPECTED BY AWS CERTIFIED INSPECTORS.

ITEM	QTY.	DESCRIPTION
6	2	PADLOCK
5	1	741 PROJECTOR PER R74190
4	1	NAME PLATE, STEEL, FIRE PROOF
3	2	WOOD BLOCK INSERTS (SHEET 3)
2	1	OVERPACK, 16 ga CRS FEET 13 ga CRS
1	1	WOOD SUPPORT BASE, 3/4 THICK

$\triangle D$

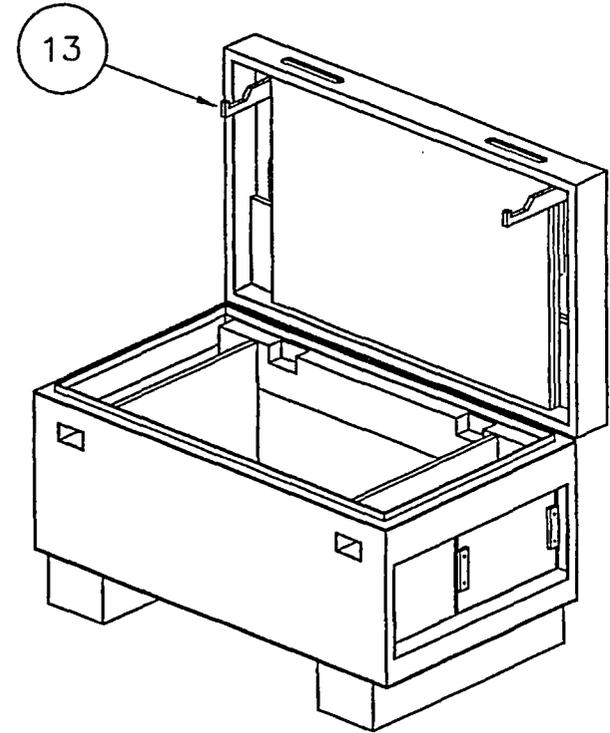
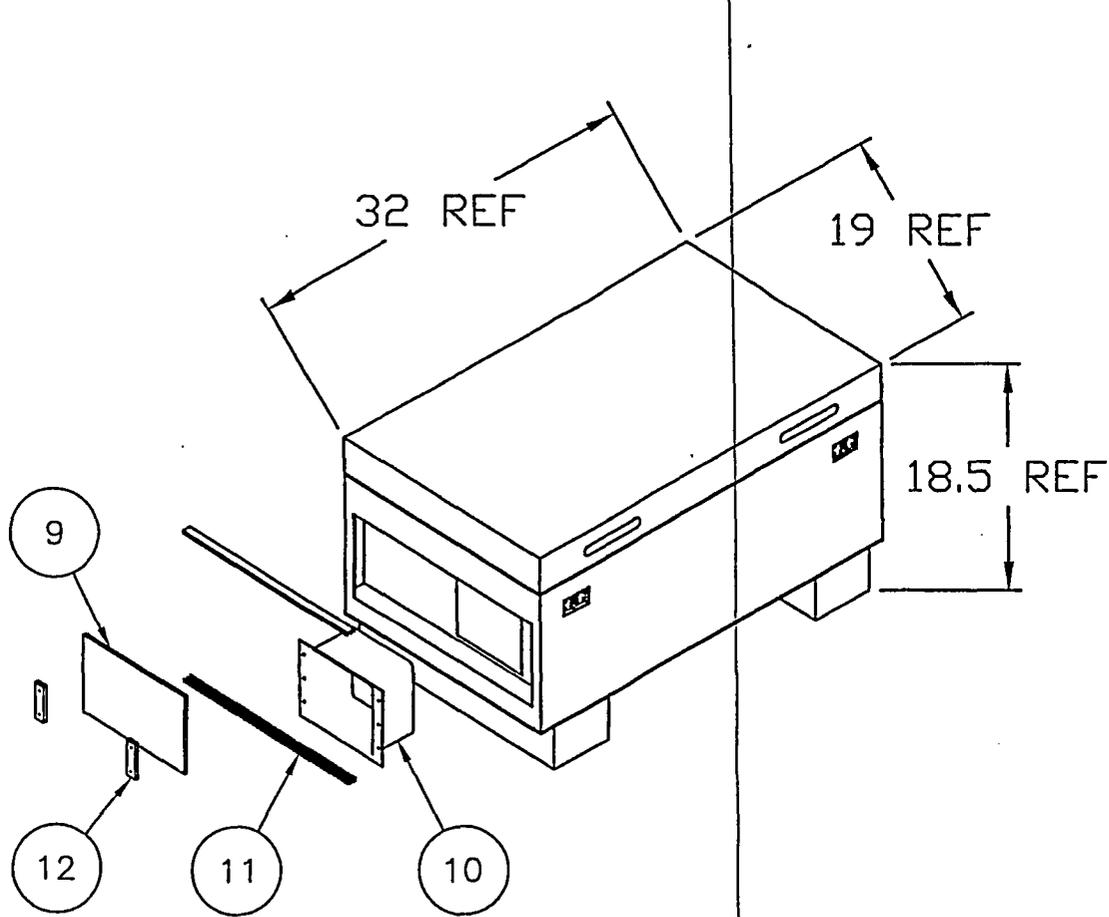
ERF # 1472

APPROVALS	DATE
<i>D. P. ...</i>	11 Aug 06
<i>A. ...</i>	11 Aug 06

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS IN INCHES  
TOLERANCES:  
FRACTIONS  $\pm 1/8$   
X.X  $\pm 0.12$   
X.XX  $\pm 0.06$   
X.XXX  $\pm 0.020$

DESCRIPTIVE  
DRAWING

TITLE		MODEL 741-OP	
SIZE	DWG. NO.	R741-OP	REV
A	SCALE: NONE	SHEET 1 OF 7	D



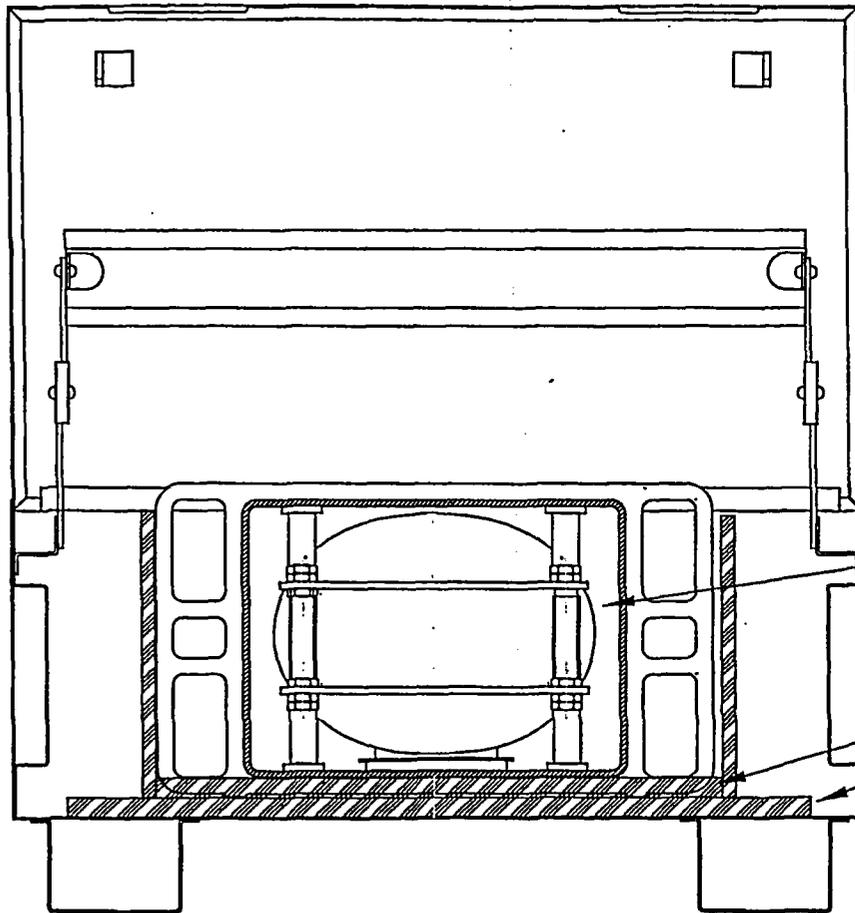
13	2	LATCH STEEL
12	4	MAGNET
11	2	DOOR TRACK, ALUMINUM
10	2	FLANGED SLEEVE, ALUMINUM
9	2	SLIDING DOOR, ALUMINUM
ITEM	QTY.	DESCRIPTION
UNLESS OTHERWISE SPECIFIED: ALL DIM.S ARE INCHES, TOL $\pm$ 1/8		
SIZE	DWG. NO.	REV
A	R741-OP	D
SCALE: NONE		SHEET 2 OF 7

FIGURE WITHHELD UNDER 10 CFR 2.390

UNLESS OTHERWISE SPECIFIED: ALL DIM.S ARE INCHES, TOL $\pm$ 1/8			
SIZE	DWG. NO.	R741-0P	REV
A	SCALE:	NONE	D
		SHEET 3	OF 7

FIGURE WITHHELD UNDER 10 CFR 2.390

UNLESS OTHERWISE SPECIFIED: ALL DIM.S ARE INCHES, TOL $\pm$ 1/8			
SIZE	DWG. NO.	R741-0P	REV
A	SCALE: NONE	SHEET 4 OF 7	D



741  
PROJECTOR

21 x 11 x 3/4 PLYWOOD

28 x 18 1/2 x 3/4 PLYWOOD

ERF # 1472

APPROVALS	DATE	 40 NORTH AVE, BURLINGTON, MA 01803	DESCRIPTIVE DRAWING		
			TITLE	MODEL 741-OP	
UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES TOLERANCES: FRACTIONS ± 1/8 X.X ± 0.12 X.XX ± 0.05 X.XXX ± 0.020		SIZE	DWG. NO.	R741-OP	REV
		A	SCALE: NONE	SHEET 5 OF 7	D

FIGURE WITHHELD UNDER 10 CFR 2.390

UNLESS OTHERWISE SPECIFIED: ALL DIM.S ARE INCHES, TOL $\pm$ 1/8			
SIZE	DWG. NO.	R741-OP	REV
A	SCALE: NONE	SHEET 6 OF 7	D

FIGURE WITHHELD UNDER 10 CFR 2.390

UNLESS OTHERWISE SPECIFIED: ALL DIM.S ARE INCHES, TOL $\pm$ 1/4			
SIZE	DWG. NO.	R741-0P	REV
A	SCALE: NONE	SHEET 7 OF 7	D