

March 29, 2010

U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

Attn: Document Control Desk
Director, Division of Spent Fuel Storage and Transportation,
Office of Nuclear Material Safety and Safeguards

Subject: Follow-up to 10 CFR 71.95 Report for Instances Where the Conditions of Approval
in the Certificate of Compliance Were Not Observed During a Shipment
Docket No. 71-9225, NAC-LWT Package

Reference: 10 CFR 71.95 Report for Instances Where the Conditions of Approval in the
Certificate of Compliance Were Not Observed During a Shipment, Docket No.
71-9225, NAC-LWT Package, NAC International, September 9, 2009

Dear Ms. Ordaz:

Abstract:

On September 9, 2009, NAC International (NAC) submitted the above-referenced report to the U. S. Nuclear Regulatory Commission (NRC) in accordance with the requirements of 10 CFR 71.95(a)(3). The report described an instance where during routine annual maintenance of NAC-LWT cask Unit No. 3, qualified welders attempted to perform a weld repair on one of the aluminum upper impact limiter gusset-to-shell welds that contained a crack. When the affected weld was ground to remove the defective weld material, it was discovered that the structural gusset was not one solid piece as shown on the license drawing and had apparently been reattached with a partial penetration fillet weld at some indeterminate previous time. Repair was stopped on this structural member and the noncomplying condition was documented in a NAC Nonconformance Report.

Normal wear and tear of the NAC-LWT cask aluminum impact limiters necessitates periodic repair of gusset-to-shell weld cracks. The primary purpose of the gusset-to-shell welds is to provide a seal for the shell of the honeycomb structure, thereby preventing water and other materials from entering the impact limiter. Therefore, the gusset-to-shell welds are nonstructural.

The gusset tab and its base were examined and determined to have contained a base metal repair. However, no known NAC record documenting this repair has been located. The as-found condition of the gusset tab was not in compliance with the applicable license drawing.

Since the time and place of the damaging event and the subsequent repair remain indeterminate, NAC concluded that LWT Unit No. 3 was used in some past shipments in the described nonconforming condition, hence the report to the NRC under 10 CFR 71.95(a)(3).

No component or systems failed due to the noted condition. The condition did not have any safety consequences. No individuals were exposed to radiation or radioactive material due to the condition. Since all shipments made with NAC LWT Unit No. 3 have been completed without any incidents, NAC has not continued investigating past shipments.



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NAC has addressed the condition of the repaired gusset tab via a Corrective Action Report (CAR 09-01) under its Quality Assurance Program.

NAC has obtained NRC approval for the repair of the affected gusset tab via amendment to the Model NAC-LWT Cask Certificate of Compliance 9225, subsequently performed the required repair and returned the affected unit to service.

The report included a narrative description of the condition discovered; the extent of the impact on past shipments; the results of an assessment of safety consequences and implications; a description of the corrective actions taken to date and additional actions to be taken; and an assessment of radiological consequences.

Extent of Condition:

NAC has implemented a comprehensive Nondestructive Examination (NDE) program pursuant to NAC CAR 09-01 to verify the compliance of all gussets on all LWT impact limiters to the requirements of the applicable license drawings.

The number of shipments made using the affected NAC-LWT cask Unit No. 3 has remained indeterminate. However, since the condition did not have an impact on the safe performance of the packaging, and all shipments were completed without any incident caused by the condition, NAC's further investigation focused on determining the extent of condition and defining corrective actions and actions to prevent recurrence.

The comprehensive NDE program (ultrasonic examination) performed concurrently with the annual maintenance of the rest of the NAC-LWT cask fleet revealed no other instance of a similar condition as reported in the referenced 10 CFR 71.95 Report. Since the affected hardware was repaired and brought to full compliance with the as-licensed configuration, the CAR has been closed and no further action is required.

The incident appears to be unique to the NAC-LWT cask and is considered to be an isolated case with no applicability to other NAC transport systems that are licensed by the NRC.

Should the Commission require further details regarding the content of this follow-up communication, please contact me on my direct line at 678/328-1274.

Sincerely,



Anthony L. Patko
Director, Licensing
Engineering