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October 7, 1996

Mr. Carl J. Paperiello  
Director Office of Nuclear Material Safety and Safeguards  
United States Nuclear Regulatory Commission  
Washington, DC 20555

**RE: NAC International Response to Confirmatory Action Letter NMSS 96-01**

Dear Mr. Paperiello:

NAC International Inc. is pleased to submit this Action Plan response to the referenced Confirmatory Action Letter.

NAC management is committed to the highest levels of safety, quality and compliance in all our activities, products and services. To that end, we welcomed the inspection your staff conducted in our offices from September 23 through September 26. The results of your inspection confirmed and reinforced the findings from our own internal quality and management audits. Our understanding of the actions required is consistent with those identified in your letter.

Prior to notification of your inspection, I had requested the NAC Director, Quality Assurance, Howard Smith, to conduct a comprehensive evaluation and assessment of our Quality Assurance program. Consequently, significant program enhancement activities were underway at the time of the inspection. We are now integrating the findings of your team into an overall plan to ensure full program compliance both in structure and implementation.

NAC has developed a comprehensive set of actions addressing three broad areas for quality program enhancement. As identified in the subject Confirmatory Action Letter, those areas are as follows: the adequacy of Transportation Packaging Maintenance; the accuracy and completeness of cask related Design Analyses and Documentation; and Quality Assurance Program Compliance. For each of these areas, we have developed action plans which identify objectives, actions and milestones. The action plans are included with this letter for your information.

In summary, NAC plans to:

1. Reconfirm the adequacy of the maintenance for each transportation cask prior to its next use. This effort will be accomplished on a prioritized basis with initial efforts placed on the NAC LWT casks.

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Mr. Carl J. Paperiello

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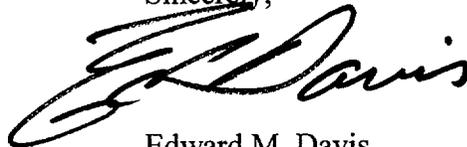
2. Verify, and upgrade as necessary, the accuracy and completeness of the analytical documentation used as the basis to support basic designs and changes for all transportation packagings and dry storage systems as specified in the Certificates of Compliance (COCs) and Topical Safety Analysis Reports (TSARs) for the time period 1990 to present.
3. Strengthen the NAC Quality Assurance program and implementing procedures, and provide additional personnel training and awareness of the Quality Assurance program requirements. This includes corrective actions of all NAC Audit Findings.

NAC Quality Assurance will monitor schedule compliance and conduct its own verification of the completion of these actions. As you requested, I will notify you in writing upon completion of the actions identified in the Confirmatory Action Letter. I will also notify you if, for any reason, it becomes necessary to modify our schedule.

In addition to the three action plans included in this letter, NAC has documented the preliminary inspection findings identified in your exit meeting on September 26, 1996. These items have been included in our internal corrective action tracking system to ensure proper tracking and closure.

Please contact me or Howard Smith at the same number should you desire any additional information.

Sincerely,



Edward M. Davis

EMD/jd

cc: W. Travers  
C. Haughney  
S. Shankman



**Transportation Packaging (Casks) Maintenance**

<b>No.</b>	<b>Action Description</b>	<b>Target Date</b>
2	Cask maintenance procedures will be reviewed and revised prior to performance of the next maintenance. This revision will include a method to track open item commitments, require lid helium leak testing, and clarify the responsibilities for qualified operator signatures on the maintenance checklists.	See Note 1 & LWT procedure revised 9/25/96
3	Verify and provide documentation (on the maintenance checklist) that Measuring and Test Equipment (M&TE) used during cask maintenance activities and for which calibration is required, such as helium leak testing equipment and torque wrenches, are currently calibrated by an appropriately approved supplier prior to use.	See Note 1 & contracted with an approved supplier for calibrated M&TE
4	Provide and document a special training session for NAC International personnel involved in the maintenance operation. This training shall be conducted prior to, or in conjunction with, the next maintenance performance and will instruct qualified operators as well as other personnel who are in the process of being certified as to the significance of adhering to the approved procedures as well as the proper method for recording maintenance results.	11/01/96
5	Verify that NAC International or subcontractor personnel performing helium leak testing for NAC are properly trained, certified and are provided with approved helium leak test procedures prior to performance of the next maintenance of each respective cask type.	See Note 1
6	A shipping release document will be developed which includes each NAC International shipping cask serial number and includes provision to require that both the NAC International Site Transportation Services Senior Vice President and the Director, Quality Assurance sign prior to authorizing any cask to be placed back into service. The signatures shall verify that all above actions are completed for each cask.	11/01/96

Note 1: The schedule for completion of the above is prior to placing the individual shipping casks back into service and will be accomplished on a prioritized basis beginning with the NAC LWT casks. No cask will be used until both operational and quality management personnel concur with the effective completion of the above actions.

Design Analyses And Documentation

**OBJECTIVES:**

Documentation of the analytical design and licensing basis for NAC transportation and storage casks confirms the acceptability of the cask design. Our objective is to ensure the accuracy and completeness of the NAC analytical documents used as the basis to support basic designs and changes for all transportation packagings and dry storage systems for the time period 1990 to present. This broad approach and thorough review described below will ensure the adequacy of the basis for licensing and Certificates Of Compliance for each of the packaging systems.

**GENERAL:**

The review is initially focusing on the LWT packaging modifications since that system has been and will be more frequently in use. Following conclusions from that review, the S/T storage cask design bases will be examined. The Topical Safety Analyses Report for this cask was approved by the NRC prior to 1990. There are only two casks of this type currently in use. Since these casks have been loaded with spent fuel, there have been no modifications to the casks with the exception that a tip-over impact limiter was installed on each cask. At the conclusion of the S/T review, the NLI 1/2 packagings design will be examined. Lastly, the STC dual purpose cask design will be examined. This cask received NRC final approval in mid 1995. As of now none of this cask model is in operation or under construction.

**ACTION PLAN:**

No.	Action Description	Target Date
1	NAC will assemble a dedicated review team of qualified and competent engineers, highly experienced in nuclear analyses (criticality and shielding), structural analyses (structural and thermal), and project management to review NAC analytical documents used as the basis to support basic designs and changes for all transportation packagings and dry storage systems as specified in the COCs and Topical Safety Analysis Reports for the time period 1990 to present.	Completed 9/27/96
2	The NAC review team will attend special training sessions conducted by the Director, Quality Assurance to describe acceptable methods for design preparation & documentation, checking, verification, change reconciliation, records development and correction.	Completed 9/27/96
3	NAC Engineering staff will attend special training sessions conducted by the Director, Quality Assurance to describe acceptable methods for design preparation & documentation, checking, verification, change reconciliation, records development and correction.	Completed 10/1/96

**Design Analyses And Documentation**

<b>No.</b>	<b>Action Description</b>	<b>Target Date</b>
4	The NAC review team will develop (A) a procedure and (B) a checklist for review and verification activities to ensure that design documentation is consistent with the commitments contained within the NAC International Quality Assurance Program and the related regulations.	A Completed 9/29/96  B Completed 10/03/96
5	Transportation packagings will be reviewed on a prioritized basis beginning with the NAC LWT casks. Each transportation cask system will in turn be reviewed and the adequacy and completeness of its documentation verified prior to placing the individual casks in service.	See Note 1
6	Nonconformances identified during the review activities will be processed in accordance with the NAC International Quality Assurance Program and reconciled with existing licensing documents. Licensing reconciliation (if required) will be coordinated with the NRC Spent Fuel Project Office.	See Note 1

Note 1: The schedule for completion of the above is prior to placing the individual casks back into service and will be accomplished on a prioritized basis beginning with the NAC LWT casks. No cask will be used until both engineering and quality management personnel concur with the effective completion of the above actions.

Quality Assurance Program Compliance

**OBJECTIVES:**

NAC International is committed to the highest levels of safety and quality in all its activities and products. Our objective is to establish and implement a comprehensive Quality Assurance Program, including implementing procedures, that fully meets NAC management expectations and NRC requirements. To accomplish this objective, NAC has conducted a thorough review and upgrade of the Quality Assurance Manual and is now developing revised and enhanced implementing procedures. In addition, Quality Assurance staffing will be evaluated and supplemented as necessary to ensure full effectiveness of the organization. The actions as described below will ensure the adequacy of NAC Quality Assurance Program compliance.

**GENERAL:**

As noted by the NRC Confirmatory Action Letter, NAC International has recently conducted a comprehensive internal assessment to objectively evaluate the implementation status of our approved Quality Assurance Program. Two internal audits and one management audit were conducted during the period of July 24, 1996 to August 21, 1996. One audit report was issued on 9-3-96 and two on 9-6-96. Together they contained a total of 10 grouped audit findings. The findings were grouped to include all deficiencies related to a specific program element. The deficiencies noted by the various audits are being tracked by the Quality Assurance Department using both formal and informal means to assure timely responses and compliance with the committed corrective actions. A computerized tracking log has been created which identifies the source of the finding, the finding description, the proposed corrective action, the responsible party, the scheduled completion date (with provision for maintaining any rescheduling actions), and indication of close out. Quality Assurance has received responses for all Audit Finding Reports from those audits which have become due to date.

**ACTION PLAN:**

<b>No.</b>	<b>Action Description</b>	<b>Target Date</b>
1	Revise the NAC Quality Assurance Manual to more clearly state the NAC International quality programmatic commitments.	Completed 9/13/96
2	Develop a revised Quality Program description, to more clearly state how NAC complies with the applicable regulatory requirements and submit to the NRC for approval.	Completed 10/4/96

**Quality Assurance Program Compliance**

<b>No.</b>	<b>Action Description</b>	<b>Target Date</b>
3	Establish a program to completely revise and reissue the NAC International Quality Procedures (QP's) used to implement the requirements of our Quality Assurance Manual. The revised QP's will provide significantly enhanced implementation instruction. Milestones include: A. Issuance of revised Quality Procedures B. Training of personnel in new Quality Procedures C. Revise Project Planning documents to reflect new QP requirements D. Implement new Quality Procedures (Effective Date)	A. 10/31/96 B. 11/15/96 C. 11/15/96 D. 11/15/96
4	Increase Quality Assurance staff by two persons. A. Authorize additional personnel - Additional Quality Engineer for Project QA Engineer Assignment - Records Coordinator - Review/Accept completed records prior to committal to archives - Maintain appropriate records indices B. Hire additional personnel as soon as acceptable candidates are identified	A. Completed 9/27/96  B. ASAP
5	Add additional persons from other NAC departments to assist with status and tracking of identified corrective actions.	Completed 9/27/96

**FINAL COMPLETION** of all the above activities is targeted for 11-15-96 with the exception of item 4.B.