NAC INTERNATIONAL

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June 21, 2018

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

Attn: Document Control Desk

Subject: NAC's Responses to NRC's Request for Additional Information (NAC-STC Submittal 18D)

Docket No. 71-9235

References:
1. Model No. NAC-STC Package, U.S. Nuclear Regulatory Commission (NRC) Certificate of Compliance (CoC) No. 9235, Revision 18, October 24, 2017
2. Safety Analysis Report (SAR) for the NAC Storage Transport Cask (NAC-STC), Revision 18, NAC International, March 2017
3. ED20170125, "NAC's Request for a Revision to Certificate of Compliance (CoC) No. 9235 for the NAC-STC (Submittal 17D)," December 8, 2017
4. NRC Letter, "Application for the Model No. NAC-STC – Request for Additional Information," May 31, 2018
5. ED20180061, NAC's Responses to NRC's Request for Additional Information (NAC-STC Submittal 17D), June 5, 2018

NAC International (NAC) hereby submits the remaining responses to NRC's Request for Additional Information (RAI) (Reference 4). Previously, via Reference 5, NAC submitted responses to the Materials Evaluation Questions #1 – 4. In response to materials Question #5, NAC has revised drawing 423-927 to clarify information contained on the drawing. With this response package and Reference 5, NAC has provided all of the of the necessary responses to Reference 4.

Since submitting the RAI 2.1 (i.e., the Reference 4 Materials Evaluation Question #1) response from Reference 5, the Parker Hannifin Corporation has informed NAC the polymer used to manufacture the VM835 O-ring is in limited supply and has provided NAC with a recommended alternative (Attachment 2). The compound recommended is the VM125-75 which meets the same AMS-R-83485 material specification as well as the more recent AMS7287. Both compounds offer similar temperature capabilities and fluid resistance. NAC is adding this recommended alternative to SAR License Drawings 423-800, -803, -805, -806 and, -807, and has updated SAR Chapter 4, Section 4.5.2. This section has been revised to refer to VM125-75 as an alternative to VM835 and the product data sheets are included at the end of the section. The two materials have similar properties and thus, adding this alternative material does not change our response submitted via Reference 5. The Parker Hannifin graph provide in the response to RAI 2.1 showing the Fluoroelastomer having a seal life of almost 100 hours at 418°F is still applicable.

This submittal package contains one hard copy of both the proprietary and non-proprietary versions, which includes the Revision STC-18D changed pages (Enclosure 5) to the Reference 2 SAR pages. Enclosure 2 contains a detailed list of drawing changes. NAC is requesting the CoC list of drawings be revised to reference the current revision levels within this submittal (Enclosure 3). Enclosure 4 contains a brief summary of the changes to the SAR for Revision STC-18D. The proprietary version of this submittal is contained in a separate sealed envelope marked as "NAC Proprietary Information." An Affidavit pursuant to 10 CFR 2.390 is provided via Attachment 1 to this letter.

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Consistent with NAC administrative practice, this proposed SAR revision is numbered to uniquely identify the applicable changed pages. Revision bars mark the SAR text changes on the Revision STC-18D pages. In accordance with NAC's administrative practices, upon final acceptance of this application, the STC-17D, and -18D changed pages will be reformatted and incorporated into the next revision of the NAC-STC SAR.

If you have any comments or questions, please contact me on my direct line at 678-328-1236.

Sincerely,

Wren Fowler
Director, Licensing
Engineering

Attachments:
Attachment 1 – NAC International Affidavit Pursuant 10 CFR 2.390
Attachment 2 – Parker Hannifin Corporation Letter

Enclosures:
Enclosure 1 – Partial RAI Responses, Revision 18D
Enclosure 2 – List of Drawing Changes, NAC-STC SAR, Revision 18D
Enclosure 3 – Proposed CoC Changes, Revision 18D
Enclosure 4 – List of SAR Changes, NAC-STC SAR, Revision 18D
Enclosure 5 – SAR Page Changes and LOEP, NAC-STC SAR, Revision 18D

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AFFIDAVIT PURSUANT TO 10 CFR 2.390

George Carver (Affiant), Vice President, Engineering and Licensing, of NAC International, hereinafter referred to as NAC, at 3930 East Jones Bridge Road, Norcross, Georgia 30092, being duly sworn, deposes and says that:

1. Affiant has reviewed the information described in Item 2 and is personally familiar with the trade secrets and privileged information contained therein, and is authorized to request its withholding.

2. The information to be withheld includes the following NAC Proprietary Information that is being provided in this submittal.

   - Enclosure 5, NAC-STC SAR Rev. 18D, Proprietary Version

   NAC is the owner of the information contained in the aforementioned pages/document, so they are considered NAC Proprietary Information.

3. NAC makes this application for withholding of proprietary information based upon the exemption from disclosure set forth in: the Freedom of Information Act ("FOIA"); 5 USC Sec. 552(b)(4) and the Trade Secrets Act; 18 USC Sec. 1905; and NRC Regulations 10 CFR Part 9.17(a)(4), 2.390(a)(4), and 2.390(b)(1) for "trade secrets and commercial financial information obtained from a person, and privileged or confidential" (Exemption 4). The information for which exemption from disclosure is herein sought is all "confidential commercial information," and some portions may also qualify under the narrower definition of "trade secret," within the meanings assigned to those terms for purposes of FOIA Exemption 4.

4. Examples of categories of information that fit into the definition of proprietary information are:

   a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by competitors of NAC, without license from NAC, constitutes a competitive economic advantage over other companies.

   b. Information that, if used by a competitor, would reduce their expenditure of resources or improve their competitive position in the design, manufacture, shipment, installation, assurance of quality or licensing of a similar product.

   c. Information that reveals cost or price information, production capacities, budget levels or commercial strategies of NAC, its customers, or its suppliers.

   d. Information that reveals aspects of past, present or future NAC customer-funded development plans and programs of potential commercial value to NAC.

e. Information that discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information that is sought to be withheld is considered to be proprietary for the reasons set forth in Items 4.a, 4.b, and 4.d.

5. The information to be withheld is being transmitted to the NRC in confidence.

6. The information sought to be withheld, including that compiled from many sources, is of a sort customarily held in confidence by NAC, and is, in fact, so held. This information has, to the best of my knowledge and belief, consistently been held in confidence by NAC. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements, which provide for maintenance of the information in confidence. Its initial designation as proprietary information and the subsequent steps taken to prevent its unauthorized disclosure are as set forth in Items 7 and 8 following.

7. Initial approval of proprietary treatment of a document/information is made by the Vice President, Engineering, the Project Manager, the Licensing Engineer, or the Director, Licensing – the persons most likely to know the value and sensitivity of the information in relation to industry knowledge. Access to proprietary documents within NAC is limited via "controlled distribution" to individuals on a "need to know" basis. The procedure for external release of NAC proprietary documents typically requires the approval of the Project Manager based on a review of the documents for technical content, competitive effect and accuracy of the proprietary designation. Disclosures of proprietary documents outside of NAC are limited to regulatory agencies, customers and potential customers and their agents, suppliers, licensees and contractors with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.

8. NAC has invested a significant amount of time and money in the research, development, engineering and analytical costs to develop the information that is sought to be withheld as proprietary. This information is considered to be proprietary because it contains detailed descriptions of analytical approaches, methodologies, technical data and/or evaluation results not available elsewhere. The precise value of the expertise required to develop the proprietary information is difficult to quantify, but it is clearly substantial.

   Public disclosure of the information to be withheld is likely to cause substantial harm to the competitive position of NAC, as the owner of the information, and reduce or eliminate the availability of profit-making opportunities. The proprietary information is part of NAC's comprehensive spent fuel storage and transport technology base, and its commercial value extends beyond the original development cost to include the development of the expertise to determine and apply the appropriate evaluation process. The value of this proprietary information and the competitive advantage that it provides to NAC would be lost if the information were disclosed to the public. Making such information available to other parties, including competitors, without their having to make similar investments of time, labor and money would provide competitors with an unfair advantage and deprive NAC of the opportunity to seek an adequate return on its large investment.

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Attachment 2

Parker Hannifin Corporation
O-Ring & Engineered Seals Division
2360 Palumbo Drive
Lexington, KY 40509

Office 859 269 2351
Fax 859 335 5128

Dear Valued customer,

We want to inform you of a supply issue affecting Parker compound VM835-75. The polymer used in VM835-75 to produce O-rings is currently on allocation by the manufacturer and in very short supply. The allocation we have been given will not allow us to service our customers at the current order levels. In order to protect you, we are recommending an alternative compound, VM125-75, to meet your needs.

Compound VM125-75 is a recommended alternative to VM835-75 and meets the same AMS-R-83485 material specification as well as the more recent AMS7287. Both compounds offer similar temperature capabilities and fluid resistance. We recommend the transition from VM835-75 to VM125-75 be made to ensure a continuous supply of Parker O-rings.

We regret the inconvenience this transition may cause, due to the supply issue. We appreciate your business and will strive to assist in making the O-ring transition as seamless as possible.

Sincerely,

Nathan Sowder
Business Development Engineer
(859) 269-2351

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AFFIDAVIT PURSUANT TO 10 CFR 2.390 (continued)

STATE OF GEORGIA, COUNTY OF GWINNETT

Mr. George Carver, being duly sworn, deposes and says:

That he has read the foregoing affidavit and the matters stated herein are true and correct to the best of his knowledge, information and belief.

Executed at Norcross, Georgia, this 21st day of June, 2018.

George Carver
Vice President, Engineering and Licensing
NAC International

Subscribed and sworn before me this 21st day of June, 2018.

Deborah R Chapman
Notary Public

DEBORAH R CHAPMAN NOTARY PUBLIC GWINNETT COUNTY, GEORGIA My Commission Expires 02-27-2021