

August 7, 2012

U.S. Nuclear Regulatory Commission Document Control Desk 11555 Rockville Pike Rockville, MD 20852

Ref: Docket# 71-9316 TAC No. L24353

Alpha-Omega Services, Inc. (AOS) hereby submits the following:

1. Hard copies consisting of one each of the following: SAR Rev. G, Certificate Drawings and a letter sent to Mr. Saverot.

AOS considers the drawings to be proprietary and request the drawings be withheld from the Public Document Room. We have also attached an affidavit for withholding this information as required by 10 CFR 2.390.

A hard and digital copy of the SAR rev. G, Certificate Drawings, the Affidavit and a copy of this letter will be sent to Mr. Saverot.

Please contact us if you need additional information or have comments regarding this submittal.

Sincerely,

Troy Hedger, CEO

Alpha-Omega Services, Inc.



August 7, 2012

U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards
Division of Spent Fuel Storage and Transportation
Mail Stop EBB-3D-02M, Pierre Saverot, Project Manager
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Ref: Docket # 71-9316 TAC No. L24353

Dear Mr. Saverot:

Alpha-Omega Services, Inc. (AOS) hereby requests an amendment to its Certificate of Compliance (CofC) No. 71-9316, Revision 0, for the AOS Transport Packaging System. This amendment request is required to: (1) correct some of the information provided in the Safety Analysis Report, Revision F, submitted on February 1, 2012; (2) identify changes to the hardware due to manufacturing constraints; and, (3) clarify Paragraph 8 of the CofC.

The main changes in the SAR are caused by the inclusion of the cask lid elastomeric seal as an alternative cask lid seal (Chapters 2, 3, 4, and 7) and the correction of the Impact Limiter foam density in Table 8-5, Chapter 8, as well as clarify the test to be performed on the foam formulation. The attached table, "AOS FM9054, Rev G Updates" listed theses changes in detail.

The inclusion of the cask lid elastomeric seal also affected the Cask component Certification drawings. Also, the Certification drawings show the addition of a different metal alloy for certain components due to the procurement limitation of the originally selected alloys; minor dimension changes; and the reconfiguration of the Central Plug of the Axial Shielding Plate, AOS-100 Model, 183C8491, Rev F. This drawing also shows an alternative "Central Plug," to accommodate one of the shoring devices that produced better operation results at the receiving facility.

The current Paragraph 8 of the Certificate of Compliance, Rev. 0, read as follow: "Prior to the first use of the package, and prior to each subsequent use, the package must be leak tested to 10^{-7} std cm³/sec." This requirement is based on ANSI N14.5, "for Radioactive Materials – Leakage Test on Packages for Shipment," every time that a new seal is installed, such as in the case of the cask lid metallic seal usage. However with the approval of the cask lid elastomeric seal, this is no longer the case. AOS requests that this paragraph be changed to read as follows:



Alpha-Omega Services, Inc.

"8. Prior to each shipment (except for contents meeting the requirement of *Special Form* radioactive material), the transport package must be leak tested.

- (i) Use of the cask lid elastomeric seal must be tested to 1 x 10⁻³ std cm³/sec. Prior to first use, after the third use, and at least once before the 12-month period prior to each subsequent use, the cask lid elastomeric seal must be leak tested to 1 x 10⁻⁷ std cm³/sec.
- (ii) Use of the cask lid metallic seal must be tested to 1×10^{-7} std cm/sec prior to the first use of the package, and prior to each subsequent use."

Along with this letter AOS submits the following:

- 1) Two (2) USB Flash Drives containing a digital copy of the SAR Rev. G and Certificate Drawings.
- 2) One (1) Hard copy of the SAR Rev. G.
- 3) One (1) Set of Certificate Drawings, Along with the Affidavit to withhold the drawings from the Public Document Room as required by 10 CFR 2.390.

A hard copy of the SAR Rev. G, Certificate Drawings, the affidavit and this letter will be sent directly to the US Nuclear Regulatory Commission Attn: Document Control Desk.

Please contact us if you need additional information or have comments regarding this submittal.

Sincerely,

Troy Hedger, CEO

Alpha-Omega Services, Inc.

AOS FM9054, Rev G Updates – Tracking page number, heading level, paragraph number, line number; what it was, what it is

| Pg | Heading/ | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|--------------|----------------------------|---------|----------|---|--|
| FrontM | | rtein | iteiti . | | |
| i | - | - | _ | "Rev. F, February 1, 2012" | "Rev. G, July 27, 2012" (Note: Automatically applied to all footers. Due to software constraints, SAR page footers might/might not include a revision bar indicating this change. Additionally, the revion bar might span both lines of the footer.) |
| i | _ | _ | _ | "with GE Hitachi Nuclear Energy Sunol, CA" | <deleted></deleted> |
| ii | _ | 1 | 1 | "Alpha-Omega Services, Inc. and its contractor GE Hitachi Nuclear Energy ("Contractor") solely" | "Alpha-Omega Services, Inc., solely" |
| ii | _ | 1 | 1-3 | "System") prepared" | "System"), prepared" |
| iii | Revision History | 1 | 1 | - | <added a="" g="" history="" revision="" table,="" through=""></added> |
| Chapte | r 1 | | | | |
| 1-3 – 1-5 | Figures 1-1 through 1-3 | _ | _ | "Cask Lid Metallic Seal" label | "Cask Lid Seal" label |
| 1-7 | 1.2.1 | 3 | 1 | "use a double "C" cross-section seal within the cask lid joint" | Inserted "double elastomeric O-Ring capture within two SS300 series flat rings or a" before "double "C" cross-section seal within the cask lid seal joint" |
| 1-7 | 1.2.1.1 | 5 | 3 | "cask lid metallic seal" | "cask lid seal" |

| Pg | Heading/ Item | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|------|------------------|-----------|------------------------|--|--|
| 1-9 | 1.2.1.3 | 1 | 1 | _ | Inserted new 1st paragraph/bullets: "Two (2) types of cask lid seals are used. One consists of two (2) elastomeric O-Rings, a cross-section capture between two (2) flat metal retainer rings to form a unit. The other is a metallic, double "C" cross-section arrangement. The elastomeric seal is comprised of two (2) components: O-Rings – Silicone, Parker Compound S1224-70, ASTM D2000 Retainer Rings – ASME SA-240 / ASTM A240, |
| 1-9 | 1.2.1.3 | 1 (now 2) | 1 | "The cask lid metallic seal consists of several components" | Type 304 or 316 Stainless Steel" "The metallic seal is comprised of three (3) components" |
| 1-9 | 1.2.1.3 | 1 (now 2) | 1 st bullet | "Silver;" | "Silver," |
| 1-9 | 1.2.1.3 | 1 (now 2) | 2 nd bullet | "Alloy" | "Nickel-chromium alloy" |
| 1-9 | 1.2.1.3 | 2 (now 3) | 2 (now 1) | "leak testing between the two (2) "C" cross-sections" | "leak testing between the two (2) O-Rings (elastomeric seal) or double "C" cross-sections (metallic seal)" |
| 1-9 | 1.2.1.3 | 2 (now 3) | 1 | "These components are arranged in a double "C" cross-section." | <deleted></deleted> |
| 1-9 | 1.2.1.3 | 1 | Cross- reference | "Garlock Helicoflex Cask Seal Drawings" | "AOS Cask Lid Elastomeric Seal and Garlock Helicoflex Cask Lid Metallic Seal Drawings" |
| 1-16 | Table 1-4 | Line 13 | Item column | "cask lid joint" | "cask lid seal joint" |
| 1-17 | Table 1-5 | All rows | Drawing Revisions | Assembly drawings, Rev "F" Impact Limiter drawings, Rev "E" Cask drawings, Rev "E" Axial Shielding Plates drawings, Model AOS -100 only, Rev "E" | Assembly drawings, Rev "G" Impact Limiter drawings, Rev "F" Cask drawings, Rev "F" Axial Shielding Plates drawings, Model AOS -100 only, Rev "F" |

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| Pg | Heading/ | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|-------------------|----------------------------|------------------------|---------|---|--|
| , | ltem | Item | Item | | |
| Chapter | . 2 | | | | |
| 2-2 | 2.1.1 | 2 | 2 | "cask lid metallic seal" | "cask lid elastomeric or metallic seal" |
| 2-2 | 2.1.1 | 3 rd bullet | 1, 4 | "Cask Lid Metallic Seal" title and cross- reference | "Cask Lid Seal" |
| 2-2 | 2.1.1 | 3 rd bullet | 1 | "use a metallic, double "C" cross-section seal" | "use either a double elastomeric O-Rings capture by SS300 series flat rings metallic, double "C" cross-section seal" |
| 2-3 – 2-5 | Figures 2-1 through 2-3 | _ | _ | "Cask Lid Metallic Seal" label | "Cask Lid Seal" label |
| 2-6 | Figure 2-4 | _ | - | "Metallic Seal" label | "Cask Lid Seal" label |
| 2-37 | 2.2.3 | 3 rd bullet | 1 | "nickel chromium" | "nickel-chromium alloy" |
| 2-37 | 2.2.3 | 4 th bullet | 1 | "port cover O-Rings" | "O-Rings used in the cask lid elastomeric seal and port cover" |
| 2-43 | 2.4.3 | 1 | 2, 4 | "cask lid joint" | "cask lid seal joint" |
| Z- 4 3 | 2.4.3 | | 4 | "cask lid metallic seal" | "cask lid seal" |
| 2-73 | Table 2-30 | 3 rd row | _ | "Cask Seal Area" | "Cask Lid Seal Area" |
| 2-89 | 2.7 | 3 | 1 | "General Electric, Vallecitos" | "General Electric ("GE Hitachi Nuclear Energy" at the time of this publication), Vallecitos" |
| 2-89 | 2.7 | 3 | 4, 5 | "GE Nuclear Energy also contracted" | "GE Nuclear Hitachi Energy contracted" |
| 2-90 | 2.7.1 | Note | 3 | "cask lid metallic seal" | "cask lid seal" |
| 2-120 | Note after Figure 2-54 | Note | 1 | "manufacture" | "manufacturer" |
| 2-120 | Note after Figure 2-54 | Note | _ | "Notes: Dimensions are in inches." (appears after the illustration in the note) | "The dimensions provided are in inches." (text appended to the end of the text that precedes the illustration in the note) |
| 2-141 | 2.7.3 | 1 | 5 | "cask lid joint" | "cask lid seal joint" |
| 2-144 | Table 2-53 | 3 rd row | _ | "Cask Seal Area" | "Cask Lid Seal Area" |

| Pg | Heading/ Item | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|---------------------------------|--|----------------------------|------------------------|---|---|
| 2-747 | 2.12.5 | 6 th bullet | 1 | "Port Seal" | "Cask Lid Elastomeric Seal and Port Seal" |
| 2-795 | Bolded text | 1 | 1 | "Port Seal" | "Cask Lid Elastomeric Seal and Port Seal" |
| Chapte | • 3 | -1 | | | |
| 3-1 | 3.1.1 | 1 | 4 | "selected silver/nickel-chromium" | "selected silicone/SS300 series for the cask lid elastomeric seal and silver/nickel-chromium" |
| 3-3 – 3-10 | 3.1.3 | 7 th row | Table 3-3 Table 3-4 | "Cask Seal Area" line items, per model, Regulatory Component Criteria (Temperature Range) column "-40 to 300 -40 to 572°" | "Cask Lid Seal Area" line items, per model, Regulatory Component Criteria (Temperature Range) column "Elastomeric: -40 to 232 -40 to 450 Metallic: -40 to 300 -40 to 572 ^c " |
| 3-18 | 3.2.2 | 1 | 2 | "used in the port plug" | "used in the cask lid elastomeric seal and port plug" |
| 3-18 | 3.2.2 | 1 st bullet | 1 | "Silver;" "Spring: Alloy" | "Silver," "Spring: Nickel-chromium alloy" |
| 3-50 | - | _ | - | _ | Inserted: "THIS PAGE INTENTIONALLY LEFT BLANK" |
| 3-51 | 3.5 | Last two bullets | 1 | "Analytical Model" "Temperature Limit" | "Analytical Model (with Cask Lid Metallic Seal)" "Temperature Limit – Cask Lid Metallic Seal" |
| 3-82 3-137 3-191 3-241 | Figure 3-19 Figure 3-46 Figure 3-73 Figure 3-98 | Callout and caption (2 pl) | _ | "Cask Seal Area" | "Cask Lid Seal Area" |

| Pg | Heading/ Item | Para #/ Item | Line #/ | What it was (Rev F) | What it is (Rev G) |
|---------------------|---------------------------------|------------------------|---------|--|--|
| 3-305 - 3-306 | Table 3-85 through 3-88 | 10 th row | _ | "Cask Seal Area" | "Cask Lid Seal Area" |
| 3-380 - 3-387 | Table 3-121 through 3-132 | 10 th row | - | "Cask Seal Area" | "Cask Lid Seal Area" |
| 3-389 3-391 | Table 3-134 Table 3-136 | 10 th row | _ | "Cask Seal Area" | "Cask Lid Seal Area" |
| 3-865 | 3.5.9 | Heading | _ | "Analytical Model" | "Analytical Model (with Cask Lid Metallic Seal)" (Note: any cross-references automatically update, and might not include a revision bar, indicating a change) |
| 3-869 | 3.5.10 | Heading | _ | "Temperature Limit" | "Temperature Limit – Cask Lid Metallic Seal" (Note: any cross-references automatically update, and might not include a revision bar, indicating a change) |
| 3-869 | 3.5.10 | Note | _ | _ | <added: "garlock="" "helicoflex"="" "note:="" "technetics="" also="" and="" are="" as="" columbia"."="" group="" helicoflex"="" or="" referred="" sar,="" this="" throughout="" to="" used="" –=""></added:> |
| Chapte | r 4 | | | | |
| 4-1 | 4.1.1 | 3 rd bullet | 1 | "Cask lid metallic seal" | "Cask lid elastomeric and metallic seal" |
| 4-1 | 4.1.1 | 2 | 3 | "cask lid metallic seal joint between each of the seal cross-sections" | "cask lid seal joint between the two (2) retainer rings (elastomeric seal) or "C" cross-sections (metallic seal)" |
| 4-1 | 4.1.1 | 4 | 1 | "cask lid metallic seals use a double "C"" | "cask lid seals use either a two (2) elastomeric O-Rings capture by metallic flat rings, or a metallic double "C"" |
| 4-1 | 4.1.1 | 4 | 3 | "double "C" cross-section seals" | "cask lid seals" |
| 4-2 | Figure 4-1 | Caption | 1 | "Containment Boundary" | "Containment Boundary (Cask Lid Metallic Seal Shown)" |
| 4-3 | 4.1.1 | 5 5 6 | 1 4 2 | "cask lid metallic seal" | "cask lid seal" |

| Pg | Heading/ | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|-----|----------|------------------------------|-----------|--|---|
| | Item | Item | Item | | : |
| 4-5 | 4.1.3 | Heading | 1 | "Cask Lid Metallic Seal" | "Cask Lid Seal" (Note: any cross-references automatically update, and might not include a revision bar, indicating a change) |
| 4-5 | 4.1.3 | 1 | 1-2 | "The AOS Transport Packaging System's Helicoflex metallic (silver, nickel chromium, and stainless steel) cask lid joint design includes a seal between the cask lid and cask cavity body." | "The AOS Transport Packaging System provides two cask lid seal designs: • Elastomeric O-Rings capture by two (2) flat metal retainer rings to form a unit, —or— • Helicoflex metallic (silver, nickel-chromium alloy, and stainless steel) cask lid seal joint design, which includes a seal between the cask lid and cask cavity body" |
| 4-5 | 4.1.3 | 1 (now 2) | 2 (now 1) | "The sealing principle of the Helicoflex family of cask lid metallic seals is based upon plastic deformation of a jacket" | "The sealing principle of these seal options is based upon the deformation of the elastomeric O-Ring or, in the case of the metallic seal of the jacket" |
| 4-5 | 4.1.3 | 1 (now 2) | 2 (now 2) | "This occurs between the sealing face of a flange and an elastic core composed of a close-wound helical spring." | "This occurs between the sealing faces of the lid/cask body and O-Rings, for the elastomeric seal; and the elastic core comprised of a close-wound helical spring for the metallic seal." |
| 4-5 | 4.1.3 | 2 (now 3) | 1 | "cask lid metallic seal's double "C" cross-section arrangement, for" | "cask lid elastomeric and metallic seals for" |
| 4-5 | 4.1.3 | 2 (now 3) | 3 | "cask lid metallic seals" | "cask lid seals" |
| 4-5 | 4.1.3 | Figure 4-4 | image | metallic seal | <added (elastomeric,="" an="" and="" elastomeric="" illustration,="" included="" indicate="" is="" labels="" metallic)="" seal="" side="" to="" which=""></added> |
| 4-5 | 4.1.3 | Figure 4-4 | caption | "Cask Lid Seal – Metallic – (Silver, Nickel Chromium, and Stainless Steel), Double "C" Cross-Section Arrangement" | "Cask Lid Seals" |
| 4-5 | 4.1.3 | Notes under Figure 4-4 | 1 | "The spring's compression resistance maintains" | "The compression resistance of the elastomeric O-Ring or metallic double "C" cross-section's spring maintains" |

| Pg | Heading/ | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|------|-----------|------------------------|---------|---|---|
| | Item | Item | Item | | |
| 4-6 | 4.1.3 | 1-2 | ALL | "Figure 4-5 illustrates how the seal is attached to the cask lid by four (4) small screws. Located between the seal's two (2) "C" cross-sections, the screws are sized and installed in such a way as to prevent the screwsfrom interfering with the deformation of the "C" cross-sections when the cask lid attachment bolts are being tightened. A callout for" | "Located between the cask lid seal's two (2) elastomeric O-Rings (elastomeric seal) or double "C" cross-sections (metallic seal), the seal attachment screws are sized and installed in such a way as to prevent the screws from interfering with the deformation of the elastomeric O-Rings or double "C" cross-sections when the cask lid attachment bolts are being tightened. Figure 4-5 illustrates how the cask lid metallic seal is attached to the cask lid by four (4) small seal attachment screws. A callout for" |
| 4-6 | 4.1.3 | Figure 4-5 | Caption | "Cask Lid Metallic Seal" | "Cask Lid Showing the Cask Lid Metallic Seal Installed" |
| 4-7 | 4.1.4 | 1 | 1 | "lid metallic seal assembly" | "lid elastomeric or metallic seal assembly" |
| 4-15 | Table 4-1 | Footnote d | 2 - 3 | _ | Appended "Only the cask lid metallic seal was considered in the analysis, because it requires a higher gasket factor than the cask lid elastomeric seal." |
| 4-15 | Table 4-1 | Footnote j | 1 | "Helicoflex spring seal, per" | "Helicoflex spring seal (cask lid metallic seal), per" |
| 4-28 | 4.2.2 | 3 | 3 | "cask seal" | "cask lid seal" |
| 4-30 | 4.3 | 1 | 4 | "cask lid metallic seal" | "cask lid seal" |
| 4-30 | 4.3 | 2 . | 3 | "cask lid metallic seal" | "cask lid elastomeric or metallic seal" |
| 4-31 | 4.5 | 1 st bullet | 1 | "Garlock Helicoflex Cask Seal Drawings" | "AOS Cask Lid Elastomeric Seal and Garlock Helicoflex Cask Lid Metallic Seal Drawings" |
| 4-33 | 4.5.1 | 1 | 1 | "Garlock Helicoflex Cask Seal Drawings" | "AOS Cask Lid Elastomeric Seal and Garlock Helicoflex Cask Lid Metallic Seal Drawings" (all cross-references to this heading are automatically changed/not tracked elsewhere in this list) |

| Pg | Heading/ | .Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|-----------------------|----------------------------|-------------------|-------------|--|--|
| | Item | ltem [.] | Item | | |
| | | | , | · | <added:< td=""></added:<> |
| 4-33 | 4.5.1 | Note | _ | | "Notes: The Garlock Helicoflex cask lid metallic seal drawings are included in this appendix. The AOS cask lid elastomeric seal drawings, however, are provided in Chapter 1 – listed in Table 1-5, "AOS Transport Packaging System Certification Drawing List – All Models," as "Cask drawings," and included in Appendix 1.3.1, "AOS Transport Packaging System, Certification Drawings. |
| | ,• | | | | As used throughout this SAR, "Garlock Helicoflex" and/or "Helicoflex" are also referred to as "Technetics Group – Columbia" ."> |
| 4-35 – 4-37 | 4.5.1 | - | 2 | "Cask Seal" | "Cask Lid Metallic Seal" |
| Chapte | rs 5 and 6 – No | changes | | | |
| Chapte | r 7 | | | | |
| 7-2 7-3 7-4 | Figures 7-1 through 7-3 | _ | _ | "Cask Lid Metallic Seal" label | "Cask Lid Seal" label |
| 7-6 | 7.1.2.1 | h | 3 | "metallic seal" | "elastomeric or metallic seal" |
| 7-7 | Table 7-1 | Row 2 | Rev. column | Axial Shielding Plates drawings, Rev "E" | Axial Shielding Plates drawings, Rev "F" |
| 7-8 | 7.1.3.1 | a.1 | 2 | "even seal compression" | "even seal compression after the elastomeric seal has been visually inspected and installed, —or— a new metallic seal has been installed" |
| 7-8 | 7.1.3.1 | a.2.e | 1 | "Install a new cask lid metallic seal" | "Install the cask lid elastomeric seal after it has been visually inspected, -or- a new cask lid metallic seal" |
| 7-10 | 7.1.3.3 | С | 1 | "1 x 10 ⁻⁵ cm ³ /sec (helium)" | "1 x 10^{-5} cm ³ /sec if the cask lid elastomeric seal is used, $-or-1 \times 10^{-9}$ cm ³ /sec if the cask lid metallic seal is used (helium)" |

| Pg | Heading/ Item | Para #/ | Line #/ | What it was (Rev F) | What it is (Rev G) |
|----------------|------------------|-----------------------|---|---|--|
| 7-10 | 7.1.3.3 | С | 3 | "seal cross-sections" | "seal O-Rings and retainer rings (elastomeric seal) or double "C" cross-sections (metallic seal)" |
| 7-10 | 7.1.3.3 | d | 1 | "1 x 10 ⁻³ atm cm ³ /sec" | "1 x 10^{-3} atm cm ³ /sec for the elastomeric seal or 1 x 10^{-7} cm ³ /sec for the metallic seal" |
| Chapte | r 8 | | L | | |
| 8-4 | 8.1.4 | 2 | 1 | "cask lid metallic seal" | "cask lid seal" |
| 8-4 | 8.1.5.2 | 2 | 2 | "values are assumed to include" | "values include" |
| 8-10 – 8-11 | Table 8-5 | Density, pcf | Formulation, Batch, and Pour test types (3x) | Nominal value "20" | Nominal value "18, 8, and 11" with new footnote b, "Density nominal values of 18, 8, and 11 pcf are associated with the Model AOS-025, AOS-050, and AOS-100, respectively." |
| 8-10 | Table 8-5 | col 2 – 3 | row 2 | "Dynamic Crush Strength psi ^b " "ASTM D1596-97" | "Static Crush Strength, psi ^c " "General Plastics Manufacturing Company, TM-9704, Rev. K" |
| 8-11 | Table 8-5 | footnote b (now c) | 1 | "Strain Rate Value for this test is approximately 60 in/sec." | "The foam manufacturer will perform the Static Crush Strength test. In addition, a dynamic test will be performed by an independent testing laboratory as part of the Dedication Process toward a safety "Category A." The dynamic test shall be per ASTM D1621-10." |
| 8-17 | 8.2.2 | 1 | 1 | "cask seal" | "cask lid seal" |
| 8-17 | 8.2.2 | 1 | 5 . | "in Figure 8-2, which" | "in Figure 8-2 for the cask lid metallic seal, which" |
| 8-18 | 8.2.2 | Figure 8-2 | Caption | "Cask Lid Metallic Seal" | "Cask Lid Showing the Cask Lid Metallic Seal Installed" |

- I, Troy Hedger, being duly sworn, depose and state as follows:
 - 1. I am the CEO of Alpha-Omega Services, Inc. and have been delegated the function of reviewing the information described in paragraph 2, which is sought to be withheld, and have been authorized to apply for its withholding.
 - 2. The information sought to be withheld consists of:
 - Alpha-Omega Services, Inc.'s drawing numbers: 105E9722, 166D8143, 166D8137, 166D8138, 105E9712, 105E9713 and 105E9719;
 - 3. In designating material as proprietary, Alpha-Omega Services, Inc. utilizes the definition of proprietary information and trade secrets set forth in the American Law Institute's Restatement of Torts, Section 757. This definition provides:

"A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business and which gives him an opportunity to obtain an advantage over competitors who do not know or use it... A substantial element of secrecy must exist, so that, except by the use of improper means, there would be difficulty in acquiring information... Some factors to be considered in determining whether given information is one's trade secret are: (1) the extent to which the information is known outside of his business; (2) the extent to which it is known by his employees and others involved in this business; (3) the extent of measures taken by him to guard the secrecy of the Information; (4) the value of the information to him and his competitors; (5) the amount of effort or money expended by him in developing the information; (6) the ease or difficulty with which the information could be properly acquired or duplicated by others."

- 4. Some examples of categories of information which fit into the definition of proprietary information are:
 - Information that discloses an apparatus where prevention of its use by Alpha-Omega Services' competitors without license from Alpha-Omega Services constitutes a competitive economic advantage over other companies;
 - b. Information which, if used by a competitor, would reduce his expenditure on resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality or licensing of a similar product;
 - c. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection;
- 5. Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within the

- company is limited on a "need to know" basis, and such documents at all times are clearly identified as proprietary.
- 6. The procedure for approval of external release of such a document is reviewed by higher level management, Project Manager, or other equivalent authority for technical content, competitive effect and determination of the accuracy of the proprietary designation in accordance with the standards enumerated above. Disclosures outside of Alpha-Omega Services, Inc. are generally limited to regulatory bodies, customers and potential customers and their agents, suppliers and licensees only in accordance with appropriate regulatory provisions or proprietary agreements.
- 7. The documentation mentioned in paragraph 2 above has been evaluated in accordance with the above criteria and procedures and has been found to contain information which is proprietary and which customarily held in confidence by Alpha-Omega Services, Inc.
- 8. The information mentioned in paragraph 2 provides information in support of the licensing of the AOS Transport Packaging System.
- 9. The information to the best of my knowledge and belief has consistently been held in confidence by Alpha-Omega Services, Inc., no public disclosure has been made, and it is not available in public sources. All disclosures to third parties have been made pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence.
- 10. Public disclosure of information sought to be withheld is likely to cause substantial harm to the competitive position of Alpha-Omega Services, Inc. and deprive or reduce the availability of profit-making opportunities because:
 - a. It was developed with the expenditure of resources exceeding \$4,000,000.
 - b. Public availability of this information would deprive Alpha-Omega Services, Inc. of the ability to seek reimbursement and would permit competitors to utilize this information to Alpha-Omega Services, Inc.'s detriment.
 - c. Public availability of the information would allow competitors to obtain information at no cost which Alpha-Omega Services, Inc. developed at substantial cost. Use of this information by competitors would give them a competitive advantage over Alpha-Omega Services, Inc. by allowing competitors to design Type B packages at lower cost than Alpha-Omega Services, Inc.

The above initial evidential justification requesting that the information contained in the proprietary document be withheld from public disclosure is further supplemented by the additional following information.

Drawings 105E9722, 166D8143, 166D8137, 166D8138, 105E9712, 105E9713, and 105E9719 contain sufficiently detailed information to permit a competitor to copy the AOS Transport Packaging System design. For example, drawing 105E9722, 166D8143, 166D8137, 166D8138, 105E9712, 105E9713 and 105E9719 contain construction details for the package cask and impact limiters.

Alpha-Omega Services, Inc. feels that the information sought to be withheld is truly proprietary in nature. Public disclosure of this information, sought to be withheld, would permit Alpha-Omega Services, Inc.'s competitors in need of similar Type B packaging to construct such packaging without incurring significant development cost. This would place Alpha-Omega Services, Inc. at a competitive disadvantage in making these Type B containers available to the industry.

State of California)ss: County of Los Angeles)

Troy Hedger, being duly sworn, deposes and says:

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

Executed at Bellflower, California, this 7th day of August 2012

Troy Hedger

Alpha-Omega Services, Inc.

Subscribed and sworn before me this 7th day of August 2012

Notary Public, State of California

