

From: Staab, Christopher
Sent: Wednesday, May 05, 2010 7:19 AM
To: 'NOSS Philip (AFS)'; 'CLARK Gary (AFS)'
Subject: Query: May we discuss the below queries WRT TRUPACT-III Friday, 5/7?

Query 1: Describe the temperature survey to verify that limits specified in 71.43(g) are not exceeded.

According to 10 CFR 71.43(g), "A package must be designed, constructed, and prepared for transport so that in still air at 38°C (100°F) and in the shade, no accessible surface of a package would have a temperature exceeding 50°C (122°F) in a nonexclusive use shipment, or 85°C (185°F) in an exclusive use shipment." A temperature survey to verify that these limits have not been exceeded has not been described in the operating procedures, e.g., in Section 7.1.7 of the SAR.

This information is required by the staff to determine compliance with 10 CFR 71.43(g) and 71.87(k).

Query 2: Clarify if note 1 in Table 3.2-3 of the SAR appropriately describes the thermal conductivity of the corrugated lid structure used in the thermal model.

It does not appear to the staff that note 1 in Table 3.2-4 of the SAR describes the anisotropic thermal conductivity of the corrugated lid structure used in the thermal model.

This information is required by the staff to determine compliance with 10 CFR 71.33(a)(5)(v).

Query 3: In the response to RAI 3-11, it was stated that the peak structural sheet temperature exceeded the temperature range of the effective thermal properties. Clarify if other component temperatures exceed the temperature ranges provided in the SAR and in the thermal models for HAC. Modify the HAC thermal models and provide updated temperatures in the SAR as necessary.

Based on the staff's review of the thermal models it appears other components exceed their material property temperature range during HAC (i.e. calcium silicate.)

This information is required by the staff to determine compliance with 10 CFR 71.33(a)(5)(v).

Query 4: Discuss the effect of the contact / contactor warnings seen during the Thermal Desktop NCT and HAC model running process and address why the warnings have been generated and why they can be disregarded.

The staff noticed numerous contact / contactor warnings while running the NCT and HAC Thermal Desktop models. The staff would like further explanation as to why these warnings have been generated and why they can be disregarded.

This information is required by the staff to determine compliance with 10 CFR 71.71 and 71.73.

Query 5: Describe how the containment boundary seal and vent port temperatures were calculated.

It appears that the vent port temperatures were calculated from a sampling of nodes on the lid. Yet the applicant did not sample the entire lid where some areas have been heated by puncture damage which could occur over the vent and drain ports seals. Justify the node sampling from the lid as being representative of the actual vent port temperatures.

This information is required by the staff to determine compliance with 10 CFR 71.73.

*Vivian Gallardy
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E-mail Properties

Mail Envelope Properties (AF843158D8D87443918BD3AA953ABF780D6069BE84)

Subject: Query: May we discuss the below queries WRT TRUPACT-III Friday, 5/7?
Sent Date: 5/5/2010 7:18:00 AM
Received Date: 5/5/2010 7:18:00 AM
From: Staab, Christopher

Created By: Christopher.Staab@nrc.gov

Recipients:
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Tracking Status: None
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Files	Size	Date & Time
MESSAGE	0	1/1/4501

Options
Expiration Date:
Priority: olImportanceNormal
ReplyRequested: False
Return Notification: False

Sensitivity: olNormal
Recipients received: