

**From:** Mark Whittaker [MSWHITTAKER@energysolutions.com]  
**Sent:** Monday, March 29, 2010 9:38 AM  
**To:** Saverot, Pierre  
**Subject:** RE: 3-60B issue in equations for allowable leakages with different tracer gases.

Pierre,

My calculations were updated for the increased pressure using MathCad without changing any of the equations. I have simplified the equations as a function of T and will send these along with our draft responses to your other questions this afternoon.

Thanks

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**From:** Saverot, Pierre [mailto:[Pierre.Saverot@nrc.gov](mailto:Pierre.Saverot@nrc.gov)]  
**Sent:** Monday, March 29, 2010 9:09 AM  
**To:** Mark Whittaker  
**Subject:** 3-60B issue in equations for allowable leakages with different tracer gases.  
**Importance:** High

Mark,

It appears that you changed the pressure (for leak tests) from 25 psig to 42 psig, and then derived the leak equations again.

Based on that new pressure of 42 psig, staff rederived and then simplified the equations as a function of T for confirmatory evaluations, and found out that your **final equations are not consistent with the plots** (Figs. 4.4 to 4.14).

Thus, our derivations may be wrong or your plots are incorrect. It's one of those two options....

Can you forward to me before our conference call on Wednesday how you derived and / or simplified the equations to the simplest format (as a function of T) to allow us to verify the plots.

Thanks

Pierre

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### E-mail Properties

Mail Envelope Properties (8E6A1CD683D978448E248BB291090D2C033B7649)

Subject: RE: 3-60B issue in equations for allowable leakages with different tracer gases.

Sent Date: 3/29/2010 9:37:48 AM  
Received Date: 3/29/2010 9:37:48 AM  
From: Mark Whittaker

Created By: MSWHITTAKER@energysolutions.com

Recipients:  
Pierre.Saverot@nrc.gov (Saverot, Pierre)  
Tracking Status: None

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Files	Size	Date & Time
MESSAGE	19472	3/29/2010

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

Sensitivity: olNormal

Recipients received: