

California Air Resources Board  
1001 "I" Street  
Sacramento, CA 95814  
P.O. Box 2815  
Sacramento, CA 95812

March 20, 2017

RE: Public Comments on Tier II Pathway Applications

Dear Receiver,

Based on my understanding of the current Tier I and Tier II CI calculators. It seems that there are some discrepancies between the calculators e.g. in how DGS debit for RD or BD is calculated. It also seems that the differences are not appropriate or deliberate as a switch from Tier I to Tier II, or vice versa, should not change the basic principles of DGS debit calculation.

Here are my findings:

Tier I, Corn ethanol DGS debit for RD

Sheet BioOil, Cells ES288:ES296

$=(\text{EtOH!R377}+\text{EtOH!S377}+\text{EtOH!T377})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R378}+\text{EtOH!S378}+\text{EtOH!T378})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R379}+\text{EtOH!S379}+\text{EtOH!T379})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R380}+\text{EtOH!S380}+\text{EtOH!T380})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R381}+\text{EtOH!S381}+\text{EtOH!T381})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R382}+\text{EtOH!S382}+\text{EtOH!T382})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R383}+\text{EtOH!S383}+\text{EtOH!T383})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R384}+\text{EtOH!S384}+\text{EtOH!T384})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$   
 $=(\text{EtOH!R385}+\text{EtOH!S385}+\text{EtOH!T385})*\$E\$57/\$E\$59*\$F\$61/\text{Fuel\_Specs!}\$E\$37*\text{lb2g}$

Tier II

Calculation does not seem to consider corn oil extraction rate or RD/BD yield from corn oil.  
In addition; displaced soybean meal or urea seems not be included in the calculation.

Sheet BioOil, Cells ES288:ES296

$=\text{EtOH!R377}/\text{Fuel\_Specs!}\$B\$26*\$B\$175$   
 $=\text{EtOH!R378}/\text{Fuel\_Specs!}\$B\$26*\$B\$175$   
 $=\text{EtOH!R379}/\text{Fuel\_Specs!}\$B\$26*\$B\$175$   
 $=\text{EtOH!R380}/\text{Fuel\_Specs!}\$B\$26*\$B\$175$

=EtOH!R381/Fuel\_Specs!\$B\$26\*\$B\$175  
=EtOH!R382/Fuel\_Specs!\$B\$26\*\$B\$175  
=EtOH!R383/Fuel\_Specs!\$B\$26\*\$B\$175  
=EtOH!R384/Fuel\_Specs!\$B\$26\*\$B\$175  
=EtOH!R385/Fuel\_Specs!\$B\$26\*\$B\$175

I hope that you will consider my comments and ensure that Tier I and Tier II pathways include CI calculations performed on equal terms.

Sincerely,

Timo Haatainen  
+358 500 764 723  
tkjhaatainen@gmail.com