Exhibit Name: Indemnity Calculations	
Exhibit Number: P21-1, Plan 01	**Reinsurance Year:** 2016
Record Name: Acreage Claim	**Version:** Approved
Record Code: P21	**Release Date:** 12/6/2018

Insurance Plan Code	01 Yield Protection		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 1: Stage Guarantee Calculation						
Guarantee Per Acre1 = Approved Yield * Coverage Level Percent	Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Common Crop Insurance Policy 'production guarantee (per acre)'. Guarantee Per Acre1 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	
Cottonseed Endorsement Option "SE": Modified Yield = Approved Yield * Option Conversion Factor	Modified Yield	Internal		99999999.99	Round to whole number.	Information (Approved Yield and Insured Share Percent) will be obtained from Cotton P11 record.
	Approved Yield	P11	42	99999999.99	None	
	Option Conversion Factor	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".
Guarantee Per Acre1 = Modified Yield * Coverage Level Percent	Guarantee Per Acre1	Internal		99999999.99	Round to whole number.	
	Coverage Level Percent	P14	34	9.9999	None	
Guarantee Per Acre2 = $\dfrac{\text{Guarantee Per Acre1} *}{\text{Guarantee Adjustment Factor}}$	Guarantee Per Acre2	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Guarantee Per Acre2 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Guarantee Adjustment Factor	P11	69	0.999	None	
Acre Stage Guarantee Amount = Guarantee Per Acre2 * Price Election Amount	Acre Stage Guarantee Amount	P21	55	99999999.99	Round to nearest dollar and cents.	Not used in determination of Loss Guarantee Amount
	Price Election Amount	P11	45	9999.9999		Common Crop Insurance Policy 'yield protection guarantee (per acre)'.

	Exhibit Name:	Indemnity Calculations
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Insurance Plan Code	01 Yield Protection

Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 2: Loss Guarantee Calculation						
Loss Guarantee Amount = Guarantee Per Acre2 * Price Election Amount * Determined Acreage * Liability Adjustment Factor	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	
Section 3: Indemnity Calculation						
Revenue Conversion Production to Count = Production to Count Quantity * Price Election Amount	Revenue Conversion Production to Count	P21	45	99999999.99	Round to nearest dollar and cents.	
	Production to Count Quantity	P21	34	99999999.99	None	
	Price Election Amount	P11	45	9999.9999		
Unit Deficiency Quantity = Loss Guarantee Amount – Revenue Conversion Production to Count	Unit Deficiency Quantity	P21	56	S99999999.99	Round to nearest dollar and cents.	
Preliminary Indemnity Amount = Unit Deficiency Quantity * Insured Share Percent	Preliminary Indemnity Amount	P21	59	S9999999999	Round to whole number.	
	Insured Share Percent	P11	43	9.999	None	
Indemnity Amount = Preliminary Indemnity Amount * Multiple Commodity Adjustment Factor	Indemnity Amount	P21	60	S9999999999	Round to whole number.	
	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063".
Total Indemnity ∑ Indemnity Amount for the Unit	Total Indemnity	Internal		S9999999999	Round to whole number.	
Replant Payment for Yield Protection, "01"						
Section 4: Replant Payment Stage Guarantee Calculation						
When Stage Code equals Replanted, "R", Guarantee Per Acre1 = Approved Yield * Coverage Level Percent	Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Common Crop Insurance Policy 'production guarantee (per acre)'. Guarantee Per Acre1 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	

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Insurance Plan Code	01 Yield Protection		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Guarantee Per Acre2 **=** Guarantee per Acre1 * Guarantee Adjustment Factor	Guarantee Per Acre2	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Guarantee Per Acre2 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Guarantee Adjustment Factor	P11	69	0.999	None	
Commodity Code not equal Dry Beans, "0047" or Peanuts, "0075":	Acre Stage Guarantee Amount	P21	55	999999999.99	Round to nearest dollar and cents.	Not used in determination of Loss Guarantee Amount
	Price Election Amount	P11	45	99999.9999	None	
	Maximum Replant Guarantee Per Acre	ICE				Edit with SPOI ICE "D00129".
Acre Stage Guarantee Amount **=** **Lesser of:** (20% of Guarantee Per Acre2 **OR** Maximum Replant Guarantee Per Acre**)** * Price Election Amount	20% of Guarantee Per Acre2	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Result of '20% of Guarantee Per Acre2' will be used in 'Acre Stage Guarantee Amount' calculation and 'Loss Guarantee Amount' calculation. Value of '20% of Guarantee Per Acre2' should be rounded before compare to 'Maximum Replant Guarantee Per Acre'. If Unit of Measure = LBS Round(Guarantee Per Acre2 * 0.20, 0) If Unit of Measure = Tons Round(Guarantee Per Acre2 * 0.20, 2) Other Unit of Measures Round(Guarantee Per Acre2 * 0.20, 1)

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Insurance Plan Code	01 Yield Protection		

Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Commodity Code equal Dry Beans, "0047:	Acre Stage Guarantee Amount	P21	55	999999999.99	Round to nearest dollar and cents.	Not used in determination of Loss Guarantee Amount
	Price Election Amount	P11	45	99999.9999	None	
	Maximum Replant Guarantee Per Acre	ICE				Edit with SPOI ICE "D00129". If lesser of submitin AIP Acre Stage Guarantee field 36 as pounds before price.
Acre Stage Guarantee Amount = **Lesser of:** **(**Insured's Actual Cost **Or** 10% of Guarantee Per Acre2 **Or** Maximum Replant Guarantee Per Acre) * Price Election Amount	10% of Guarantee Per Acre2	Internal		99999999.99	Pounds, "LBS", Round to whole Number.	Result of '10% of Guarantee Per Acre2' will be used in 'Acre Stage Guarantee Amount' calculation and 'Loss Guarantee Amount' calculation. Value of '10% of Guarantee Per Acre2' should be rounded before compare to 'Maximum Replant Guarantee Per Acre'. If lesser of submit in AIP Acre Stage Guarantee field 36 as pounds before price. If Unit of Measure "LBS", Round(Guarantee Per Acre2 * 0.10, 0)
	Insured's Actual Cost	P21	36	99999999.99		Insured's Actual Cost will be submitted in AIP Acre Stage Guarantee field if lesser of converted to pounds per Dry Beans Loss Adjustment Handbook.
Commodity Code equal Peanuts "0075":						
Acre Stage Guarantee Amount = Maximum Replant Guarantee Per Acre	Maximum Replant Guarantee Per Acre	ICE				Edit with SPOI ICE "D00129".
Section 5: Replant Payment Loss Guarantee Calculation						
Commodity Code not equal Dry Beans, "0047" or Peanuts, "0075":	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
Loss Guarantee Amount = Lesser of ((20% of Guarantee Per Acre2) or Maximum Replant Guarantee Per Acre) * Price Election Amount * Determined Acreage * Liability Adjustment Factor	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	
Commodity Code equal Dry Beans, "0047:	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
Loss Guarantee Amount = Lesser of (Insured's Actual Cost or Round(10% of Guarantee Per Acre2, 0) or Maximum Replant Guarantee Per Acre) * Price Election Amount * Determined Acreage * Liability Adjustment Factor	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	

Exhibit Name:	Indemnity Calculations			
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Insurance Plan Code		01 Yield Protection		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Commodity Code equal Peanuts, "0075":						
Loss Guarantee Amount = Maximum Replant Guarantee Per Acre * Determined Acreage * Liability Adjustment Factor	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	
Section 6: Replant Payment Indemnity Calculation						
Indemnity Amount = Loss Guarantee Amount * Insured Share Percent	Indemnity Amount	P21	60	S9999999999	Round to whole number.	
	Insured Share Percent	P11	43	9.999	None	
Total Indemnity ∑ Indemnity Amount for the Unit	Total Indemnity	Internal		S9999999999	Round to whole number.	
Prevented Planting Payment for Yield Protection, "01".						
Section 7: Prevented Planting Payment Stage Guarantee Calculation						
When Stage Code equals: Prevented Planting Option 2, "P2", Prevented Planting Add 10 Percent, "PT", Prevented Planting Add 5 Percent, "PF" Guarantee Per Acre1 = Approved Yield * Coverage Level Percent	Guarantee Per Acre1	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Common Crop Insurance Policy 'production guarantee (per acre)'. Guarantee Per Acre1 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Approved Yield	P11	42	99999999.99	None	
	Coverage Level Percent	P14	34	9.9999	None	
Cottonseed Endorsement Option "SE": Modified Yield = Approved Yield * Option Conversion Factor	Modified Yield	Internal		99999999.99	Round to whole number.	Information (Approved Yield and Insured Share Percent) will be obtained from Cotton P11 record.
	Approved Yield	P11	42	99999999.99	None	
	Option Conversion Factor	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".
Guarantee Per Acre1 = Modified Yield * Coverage Level Percent	Guarantee Per Acre1	Internal		99999999.99	Round to whole number.	
	Coverage Level Percent	P14	34	9.9999	None	
Guarantee Per Acre2 = Guarantee per Acre1 * Guarantee Adjustment Factor	Guarantee Per Acre2	Internal		99999999.99	When Unit of Measure equals Pounds, "LBS", then Round to whole Number. When Unit of Measure equals Tons, "Tons", then Round to 2 decimals. Otherwise, Round to 1 decimal.	Guarantee Per Acre2 should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Guarantee Adjustment Factor	P11	69	0.999	None	

Exhibit Name: Indemnity Calculations						
Exhibit Number: P21-1, Plan 01			**Reinsurance Year:** 2016			
Record Name: Acreage Claim			**Version:** Approved			
Record Code: P21			**Release Date:** 12/6/2018			

Insurance Plan Code	01 Yield Protection					

| Commodity Code | 0011 Wheat 0015 Canola 0018 Rice | 0021 Cotton 0041 Corn 0043 Popcorn | | 0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas | | 0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley |

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Acre Stage Guarantee Amount = Guarantee Per Acre2 * Price Election Amount	Acre Stage Guarantee Amount	P21	55	999999999.99	Round to nearest dollar and cents.	Common Crop Insurance Policy 'yield protecton guarantee (per acre)'. Not used in determination of Loss Guarantee Amount.
	Price Election Amount	P11	45	99999.9999	None	
Section 8: Prevented Planting Payment Loss Guarantee Calculation						
Loss Guarantee Amount = Guarantee Per Acre2 * Price Election Amount * Determined Acreage * Liability Adjustment Factor	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	
Section 9: Prevented Planting Payment Indemnity Calculation						
Preliminary Indemnity Amount = Loss Guarantee Amount * Insured Share Percent	Preliminary Indemnity Amount	P21	59	S9999999999	Round to whole number.	
	Insured Share Percent	P11	43	9.999	None	
Indemnity Amount = Preliminary Indemnity Amount * Multiple Commodity Adjustment Factor	Indemnity Amount	P21	60	S9999999999	Round to whole number.	
	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063".
Total Indemnity ∑ Indemnity Amount for the Unit	Total Indemnity	Internal		S9999999999	Round to whole number.	
Malting Barley Price and Quality Endorsement (Option ME)						
Section 10: Malting Barley Stage Guarantee Calculation						
	Guarantee Per Acre1	Internal		999999999.9	Round to 1 decimal.	
Guarantee Per Acre1 = Approved Yield * Coverage Level Percent	Approved Yield	P11	42	99999999.99	None	Common Crop Insurance Policy
	Coverage Level Percent	P14	34	9.9999	None	
Guarantee Per Acre2 = Guarantee per Acre1 * Guarantee Adjustment Factor	Guarantee Per Acre2	Internal		99999999.99	Round to 1 decimal.	
	Guarantee Adjustment Factor	P11	69	0.999	None	
Price Election Amount = Contract Price * Price Election Percent	Price Election Amount	Internal		9999.9999	Round to 4 decimals.	
	Contract Price	P11	46	9999.9999	None	Contract Price that was submitted on P11 (capped with Max Contract Price from ADM).
	Price Election Percent	ICE		9.9999	None	
Acre Stage Guarantee Amount = Guarantee Per Acre2 * Price Election Amount	Acre Stage Guarantee Amount	P21	55	999999999.99	Round to dollar and Cents	Common Crop Insurance Policy 'yield protecton guarantee (per acre)'. Not used in determination of Loss Guarantee.
	Price Election Amount	P11	45	99999.9999	None	

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Exhibit Number:	P21-1, Plan 01	Reinsurance Year:	2016
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Insurance Plan Code	01 Yield Protection		
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 11: Malting Barley Loss Guarantee Calculation						
Loss Guarantee Amount = Guarantee Per Acre2 * Price Election Amount * Determined Acreage * Liability Adjustment Factor	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
	Determined Acreage	P21	18	99999999.99	None	
	Liability Adjustment Factor	P21	39	9.999999	None	
Section 12: Malting Barley Indemnity Calculation						
Revenue Conversion Production To Count = Production to Count Quantity * Price Election Amount	Revenue Conversion Production To Count	P21	45	99999999.99	Round to nearest dollar and cents.	
	Production to Count Quantity	P21	34	99999999.99	None	
	Price Election Amount	P11	45	99999.9999	None	
Unit Deficiency Quantity = Loss Guarantee Amount – Revenue Conversion Production to Count	Unit Deficiency Quantity	P21	56	S99999999.99	Round to nearest dollar and cents.	
Preliminary Indemnity Amount = Unit Deficiency Quantity * Insured Share Percent	Preliminary Indemnity Amount	P21	59	S9999999999	Round to whole number.	
	Insured Share Percent	P11	43	9.999	None	
Indemnity Amount = Preliminary Indemnity Amount * Multiple Commodity Adjustment Factor	Indemnity Amount	P21	60	S9999999999	Round to whole number	
	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063".
Total Indemnity ∑ Indemnity Amount for the Unit	Total Indemnity	Internal		S9999999999	Round to whole number.	
Downed Rice Payment, option "DC", for Yield Protection, "01", Stage Code = "DQ".						**If Determined Acreage is <= Insured Acreage10 then no payment;** **if Determined Acreage is > Insured Acreage10 and < Insured Acreage50 then payment with deductible;** **if Determined Acreage is => Insured Acreage50 then payment without deductible.**
Section 13: Downed Rice Payment Loss Guarantee Calculation						
Insured Acreage10 = Reported Acreage * 10%	Insured Acreage10	Internal		99999999.99	Round to 1 decimal.	
	Reported Acreage	P11	48	9999999.99	None	Summed P11 DRE reported acreage for the unit.
Insured Acreage50 = Reported Acreage * 50%	Insured Acreage50	Internal		99999999.99	Round to 1 decimal.	
	Reported Acreage	P11	48	9999999.99	None	Summed P11 DRE reported acreage for the unit.
Determined Acreage = Harvested Downed Rice Acreage	Determined Acreage	P21	18	99999999.99	None	Harvested Downed Rice Acreage

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Insurance Plan Code		01 Yield Protection			
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Payable Downed Rice Acreage	**With deductible:** round(Determined Acreage - Insured Acreage10,1) * 1.25 = **OR** **Without deductible:** Determined Acreage	Payable Downed Rice Acreage	Internal		99999999.99	Round to 1 decimal.	This will be the determined payable downed rice acres for the unit.
Loss Guarantee Amount =	Payable Downed Rice Acreage * Harvest Expense Amount * Price Election Percent * Liability Adjustment Factor	Loss Guarantee Amount	P21	57	99999999.99	Round to nearest dollar and cents.	
		Harvest Expense Amount	ADM		99999	None	Edit with ADM Price, "A00810", Fixed Coverage Amount with insurance option = 'DC'.
		Price Election Percent	P14	35	9.9999	None	
		Liability Adjustment Factor	P21	39	9.999999	None	
Section 14: Downed Rice Payment Indemnity Calculation							
Indemnity Amount = Loss Guarantee Amount * Insured Share Percent		Indemnity Amount	P21	60	S9999999999	Round to whole number.	
		Insured Share Percent	P11	43	9.999	None	
Total Indemnity ∑ Indemnity Amount for the Unit		Total Indemnity	Internal		S9999999999	Round to whole number.	Only Downed Rice records, no base Rice records.