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FCIC 24260  
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# **ACTUAL REVENUE HISTORY (ARH)**

## **ARH CITRUS PILOT**

### **INSURANCE STANDARDS HANDBOOK**

**2014 and Succeeding Crop Years**



**UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250**

<b>TITLE: ARH CITRUS PILOT PROGRAM INSURANCE STANDARDS HANDBOOK</b>	<b>NUMBER: 24260</b>
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<b>ARH Citrus Pilot Program Underwriting Standards for the 2014 and succeeding crop years</b>	<b>APPROVED:</b>  <i>/s/ Tim B Witt</i> <b>Deputy Administrator for Product Management</b>

**Reason for Issuance**

This handbook provides the official FCIC-approved 2012 and succeeding crop years' underwriting and administration standards for the ARH Citrus Pilot Program. All approved insurance providers electing to offer the ARH Citrus Pilot Program must utilize these standards.

This handbook is reissued with new format standards; therefore, the appearance and structure of the handbook is quite different. No items are highlighted.

This reissuance also includes clarifications or additional examples with regard to:

- alignment with the new CIH



**ARH CITRUS PILOT PROGRAM  
INSURANCE STANDARDS HANDBOOK**

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## **Part 1 General Information and Responsibilities**

### **1 General Information**

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#### **A. Purpose**

This handbook provides procedure for administering the ARH Citrus Pilot Program in accordance with the ARH Endorsement and the ARH citrus crop provisions, and supplements the CIH and the LAM via exceptions, changes, and additions. If there is a conflict between this handbook and the CIH or LAM, this handbook controls.

#### **B. Source of Authority**

The ARH Citrus Pilot Program is a RMA developed product approved by the FCIC Board of Directors on May 07, 2009, under Section 523 of the Federal Crop Insurance Act. This handbook provides the FCIC-approved procedures for administering the Pilot.

#### **C. Duration**

The ARH Citrus Pilot Program is available beginning with the 2011 crop year and is authorized until terminated or converted to a permanent program by the FCIC Board of Directors.

#### **D. Pilot Area**

See actuarial documents for the pilot area.

#### **E. Applying for ARH Citrus Pilot Program**

AIPs shall use the standard application for ARH Citrus Pilot Program. The application must indicate the insured has selected ARH Pilot Endorsement and ARH Citrus Pilot Crop Provisions along with all other required information.

## **1 General Information (Continued)**

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### **F. Related Handbooks**

The following table provides handbooks related to ARH Citrus Pilot Program.

**Important:** Not all sections of related handbooks or all procedures in a section apply to ARH Citrus Pilot Program. See Part 3 for more information.

<b>Handbook</b>	<b>Purpose</b>
CIH	General underwriting procedures.
LAM	General loss procedures.
Citrus Loss Adjustment Standards Handbook	Loss procedures for citrus.

## **2 Responsibilities**

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### **A. AIP Responsibilities**

AIPs must use standards, procedures, methods and instructions as authorized by FCIC in the sale and service of crop insurance contracts. Each AIP is responsible for using RMA approved procedure. AIP should report any pilot program issues or concerns to APDD of RMA.

### **B. Insured's Responsibilities**

To be eligible for the ARH Citrus Pilot Program, insureds must comply with all terms and conditions of the Basic Provisions, ARH Pilot Endorsement, and ARH Citrus Pilot Crop Provisions.

**3-21 (Reserved)**

## Part 2 Insurability

### **22 Insurable Types and Practices**

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#### **A. Types Insurable**

For the purpose of this pilot, all types of navel oranges are insurable under the ARH Citrus Pilot Program. See actuarial documents for type availability by county, if appropriate. Other citrus crops, if insurable in future years, will be specified in the actuarial documents. The insurance guarantee is based on the revenue derived from historic sales of marketable citrus.

#### **B. Insurable Practices**

Citrus must be produced in an orchard that is acceptable to the AIP, if inspected.

Insurable practices are listed in the actuarial documents. Generally, citrus must be irrigated to be insurable under the pilot.

Citrus inter-planted with another perennial crop are insurable unless, upon inspection of the acreage by the AIP, it is determined the requirements contained in the policy are not met.

### **23 Units and Coverage Levels**

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#### **A. Units**

Basic units are established according to the Basic Provisions. Section 34(c) of the Basic Provisions does not apply. ARH Citrus Pilot Crop Provisions, Section 3, allow basic units to be divided into optional units if each optional unit is located on non-contiguous land, unless limited in the Special Provisions. Optional units may also be established by type if type is specified in the Special Provisions.

As with other insurance plans:

- all optional units must be identified on the acreage report
- when adjusting a loss, units may be adjusted or combined to reflect the actual unit structure
- acceptable records of revenue and production by optional unit must be available for at least the most recently completed crop year
- records for each optional unit must be maintained in a manner that permits AIP to verify the information.



## **23 Units and Coverage Levels (Continued)**

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### **A. Units (continued)**

The Basic Provisions, Section 34, that allow enterprise and whole-farm units do not apply to citrus.

### **B. Coverage Levels**

Coverage is available in 5 percent (5%) increments from 50 percent (50%) to 75 percent (75%). CAT coverage is not offered, consistent with FCIC policy regarding revenue insurance plans.

## **24 Insurance Dates and Causes of Loss**

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### **A. Insurance Dates**

The cancellation, termination, and sales closing date is November 20.

The contract change date is August 31 immediately preceding the cancellation date.

The date for the end of the insurance period for physical damage for each crop year is August 31 during the calendar year in which the citrus is normally harvested.

The date for the end of the insurance period for a loss of revenue due to an inadequate harvest price year is August 31 during the calendar year in which the citrus is normally harvested. If a citrus price pool has not closed by this date the production associated with that pool will be valued using the annual price procedure. Per the annual price procedure, if none of the insured pools have closed by August 31, the annual price will be the NASS price. The NASS price is generally made available during the last half of September following harvest. If the price pool closes after August 31, but before September 30, the claim must still be settled based on the annual price procedure because the insurance period ends on August 31.

Regardless of the price used to determine the revenue to count, the notice of loss must be filed by September 30 following harvest.

The acreage reporting date is January 10 following the cancellation date:

The revenue reporting date is the acreage reporting date.

The billing date is September 15 of the calendar year that follows the calendar year that contains the cancellation date.

**B. Insurable Causes of Loss**

The following causes of physical loss are covered under the ARH Citrus Pilot Program:

- adverse weather conditions
- fire, unless undergrowth has not been controlled or pruning debris has not been removed from the orchard
- wildlife damage
- earthquake
- volcanic eruption
- failure of irrigation water supplies if caused by a cause of loss specified in subparagraph B that occurs during the insurance period
- insects and plant disease, if either of the following apply:
  - adverse weather conditions prevent application of control measures or cause control measures to be ineffective after application, and reapplication is not possible or permitted before damage occurs or worsens
  - no pesticides effective on the insect or plant disease are registered with the Environmental Protection Agency and labeled for use on the citrus crop.

**Important:** Causes of loss due to insects or plant disease are insurable causes of loss only if a natural event, such as rain, either prevents timely application of a pesticide or washes it off the trees before it has had an opportunity to be effective. Further, the insured must have been unable to reapply the control measure before damage occurs or worsens due to continuing natural events, such as adverse weather, or because the label directions limit reapplication for several days after an initial application and there are no substitutes. In addition, a pest or disease may occur for which no pesticide has been registered for use on that disease or pest or, if a pesticide is registered, it has not been labeled for use on the citrus crop. Insureds must exercise normal and routine care of the orchard to control insects and disease outbreaks, but if natural events beyond the control of the insured occur and cause a production loss, such losses may be covered if all other requirements are met.

**B. Insurable Causes of Loss (continued)**

In addition to the causes of loss due to physical damage, loss of revenue due to an inadequate market price is a covered cause of loss for citrus which are delivered and sold or for citrus that are valued using the annual price procedure.

**Important:** Unsold citrus must be appraised to determine the cartons of marketable fruit and must be valued as revenue to count using the annual price procedure in accordance with the crop provisions.

**C. Uninsurable Causes of Loss**

In addition to the uninsurable causes of loss listed in the Basic Provisions, the following are not insurable causes of loss under the ARH Citrus Pilot Program:

- failure to harvest in a timely manner for any reason, including the inability to obtain harvest labor, unless the failure to harvest is due to a physical peril(s) insurable cause of loss according to paragraph B
- mechanical damage that occurs during the insurance period
- inability to market the citrus for any reason other than actual physical damage from an insurable cause.

**Example:** An insured's inability to market production due to quarantine, boycott, or refusal of any person to accept production is not an insurable cause of loss.

Revenue reports must contain insurable acreage amounts, production, appraised production, and revenue; and must be separated in the appropriate manner to support the insurance guarantee. All information contained in the revenue report must be substantiated by verifiable records, such as AIP loss records, settlement sheets, or appraisals. Appraisals are required for direct marking acreage and must also be accompanied by sales records.

AIP appraisal of unharvested marketable production may be used in the annual revenue determination. If the grower does not have an annual price from actual sales to use for the valuation of the unharvested marketable production the NASS price shall be used according to the annual price procedure.

If a loss claim record was filed for a crop year, the revenue to count from the loss record must be used for the revenue report even if the loss was settled using the NASS price and the production was later sold.

If harvested marketable production is rejected by the packer, such production can be used in the annual revenue determination provided acceptable supporting records are provided. The acceptable supporting records must include gross production; percent of damaged fruit, grade, and document the condition of damaged fruit, such as freeze, decay, blemished, etc. The harvested marketable production which was rejected by the packer is valued using the annual price procedure.

Acceptable supporting records for delivered and sold citrus are pool statements, pool summary statements, pack statements or year-end settlement sheets that indicate by crop/type, the number of standard size cartons (#58 container – 38 pounds for oranges) packed or the net weight of the packed fruit, and the total revenue from sales of marketable citrus.

If marketable citrus from the unit was delivered to more than one buyer or handler, the records of each buyer or handler must be aggregated to determine the total revenue and total number of standard cartons for the unit.

The average revenue per acre for a crop year is the total revenue received for marketable citrus divided by the number of insurable acres in the unit.

The average production from the unit also must be reported. Citrus production for which marketing records are expressed on a basis other than standard cartons must be converted to standard cartons on the basis of 38 pounds of packed fruit for the standard packed carton. The average production is the total number of standard containers divided by the number of insurable acres in the unit.

The acreage also must be substantiated by verifiable records. However, since current acreage of bearing citrus trees can be measured, previous acreage can be determined with records of trees removed, trees planted, and so forth.

**26    Alternative Protection**

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Alternative protection as referenced in the ARH Endorsement is not available for citrus.

**27    Adjustments to Historic Revenue**

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The adjustments to historic revenues as described in Section 5(a)(1) and (2) of the ARH Endorsement do not apply to citrus.

**28-30   (Reserved)**

## **Part 3 Applicability of Handbooks**

### **31 General Overview**

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This Part identifies information specific to the applicability of the CIH, LAM, and any other issuance that may require supplemental information with regard to citrus or to the ARH plan of insurance. Unless specifically amended, supplemented, or deleted by information in this handbook, all policy and procedure issuances apply to citrus and to the ARH plan of insurance.

The ARH citrus crop provisions are designed in a similar manner to the AZ-CA APH Citrus Crop provisions. That is to say, by design the provisions are potentially applicable to a number of citrus crops in California. However, for the purpose of the ARH pilot program only navel oranges are an insurable crop and thus are the only crop with corresponding actuarial documents. Throughout the materials ARH citrus and ARH navel oranges are interchangeable from a practical standpoint.

### **32 Specific Information Regarding the Crop Insurance Handbook**

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The general rules of crop insurance, as provided in CIH, apply to the ARH Citrus Pilot Program with the EXCEPTION THAT REVENUE REPORTED BY THE INSURED PERSON MUST INCLUDE ONLY THEIR REVENUE. The reported revenue will be stated as 100 percent share equivalent revenue for record keeping purposes. This change is needed because two or more persons sharing in the same acreage may not sell at the same time or to the same buyer and may realize different amounts of revenue.

All references to yield apply to both yield and revenue, as appropriate.

The ARH Pilot Endorsement does not allow for written agreements; therefore, any references to written agreements do not apply.

The ARH Pilot Endorsement does not allow for CUPS; therefore, any references to CUPS do not apply.

The following table provides general information, changes, additions, deletions and modifications, termed supplemental instructions, regarding the CIH applicability to ARH Citrus Pilot Program. Any references in the CIH to navel oranges or citrus in California apply to the ARH insurance plan unless specifically changed in this Underwriting Guide.

## 32 Specific Information Regarding the Crop Insurance Handbook (Continued)

CIH Section Reference	Supplemental Instructions
Part 20	<p>Relevant underwriting and APH responsibilities provided in CIH, Section 20, apply to revenue. The term “yield” as used therein is replaced by the term “yield and revenue” when appropriate, and the term “APH form” is replaced by the term “ARH form.”</p> <p><b>Example:</b> In CIH, Section 20, the phrase “insureds must report on an annual basis all production, acres, and actual yields” would read “insureds must report on an annual basis all production, acres, actual yields, and actual revenues” for citrus.</p>
Part 3	Applies to ARH Citrus Pilot Program.
Part 10	<p>Producers who purchase ARH Citrus Pilot Program insurance coverage must follow the procedures of this section. The instructions provided pertain to both yield and revenue.</p> <p>AIPs are responsible for recording the appropriate acreage, yield, and revenue data using any form that meets all requirements. AIPs may elect to use two standard APH forms with the appropriate form labeled as “Revenue” or may elect to use a combined form of its design that meets the requirements stated below. An example form is provided in Exhibit 3.</p> <p>Producers are required to certify only their share of the revenue from the unit. For record keeping purposes, the certified revenue is to be recorded on a 100 percent share equivalent basis to provide continuity in the event the share may change from year to year.</p> <p>The instructions for short rated acreage apply to ARH citrus.</p> <p>The following are required for completion of the Production, Revenue, and Yield Report (ARH Form). The elements in this section are the minimum requirements for the ARH form. All of these elements are required.</p> <p><b>Producer’s Net Revenue</b> - Enter the producer’s share of the revenue from the block/unit net of all non-allowable costs, such as cooling, culling, packing, etc. If non-allowable costs are not identified by unit, such as assessed on the entire quantity sold, allocate those costs pro-rata to the revenue derived from each unit.</p> <p><b>Average Revenue</b> - Divide Producer’s Net Revenue by acres.</p> <p><b>Producer’s Share</b> - Enter the producer’s share of the production.</p> <p><b>100% Share Equivalent Revenue</b> - Divide Average Revenue by Share.</p> <p><b>Total</b> - Enter the total of the entries.</p>

## 32 Specific Information Regarding the Crop Insurance Handbook (Continued)

CIH Section Reference	Supplemental Instructions
	<p><b>Preliminary Revenue</b> - Enter N/A</p> <p><b>Prior Revenue</b> - Enter the prior approved ARH revenue, if applicable. Enter N/A if it is not applicable.</p> <p><b>Approved Revenue</b> - Completed by verifier. Enter the approved ARH revenue after all entries are verified or any applicable adjustments/reductions.</p> <p>Producers who purchase ARH Citrus Pilot Program coverage are required to follow the guidelines for acreage and production (revenue) evidence requirements in CIH, and provide records necessary to compute ARH insurance guarantees. Producers are required to certify only their share of the revenue from the unit.</p>
Part 14	Does not apply to ARH Citrus Pilot Program.
Part 15	Citrus is an eligible Category C crop. Follow the requirements for Arizona-California Citrus. Category C APH crop procedures apply to both yield and revenue for citrus with included modifications.
Par. 1551	Does not apply to ARH Citrus Pilot Program.
Par. 1556	<p>Apply the procedures to both yield and revenue, as appropriate, and with the following exceptions or clarifications:</p> <ul style="list-style-type: none"> <li>• Revenue pertains only to that paid to the insured.</li> <li>• Include the production and value of unharvested marketable production in the yield and revenue calculation for a unit if an appraisal of unharvested marketable production was completed, regardless whether an indemnity was paid. See Exhibit 5, example D, for an example using the unharvested production adjustment when completing the revenue report for next year.</li> </ul>
Par. 1558	<p>T-Revenues and T-Yields are applied on a unit basis instead of on a county crop basis.</p> <p>“T-Revenues” will be available and will be used in the same manner as T-yields are offered under the APH program, according to CIH. This includes adjusted transitional revenues in the same circumstances as an adjusted transitional yield would apply under the APH program.</p> <p>“T-Yields” will be applicable in the same manner as they are offered in the APH program. Approved yields, which may include T-yields and applicable yield adjustments, are used in the determination of unharvested production adjustments and for statistical analysis.</p>



**32 Specific Information Regarding the Crop Insurance Handbook (Continued)**

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<b>CIH Section Reference</b>	<b>Supplemental Instructions</b>
Par.1241	Apply the procedures to the revenues reported by the insured if the insured requests revenue substitution. The terms “yield” and “t-yield” are supplemented by the terms “revenue” and “t-revenue,” respectively.  Apply the yield substitution ONLY if the revenue substitution is elected AND the individual year actual yield is less than 60 percent of the T-Yield.
Part 12 Sec. 5	Applies to ARH Citrus Pilot Program.
Par.1701	Does not apply to ARH Citrus Pilot Program.

**33 Prevented Planting Loss Adjustment Standards Handbook**

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The Prevented Planting Loss Adjustment Standards Handbook is not applicable to the ARH Citrus Pilot Program. Prevented planting coverage is not available for citrus.

**34 Loss Adjustment Manual**

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The procedures identified in the LAM are adopted for the ARH Citrus Pilot Program.

**35 Citrus Loss Adjustment Standards Handbook**

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The ARH Citrus Pilot Program Loss Adjustment Standard Handbook applies to this pilot.

**36-40 (Reserved)**

## Part 4 Other Information

### **41 Determining Annual Price**

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The annual price is used to value marketable production that is appraised, unsold, partially sold, or sold at a price that is determined not reasonable.

The annual price may first be calculated on a unit basis as the average value per carton of any production sold from the unit if that price is determined to be reasonable. This is done because a particular unit may have a unique variety or specific harvesting window. If there are no sales from the unit or the price is determined not reasonable, sales from a representative unit of the same type and on the same policy may be used. If there are no sales from a unit of the same type that are determined to be reasonable, the annual price may be calculated on a whole farm basis as the average value per carton of any citrus production of the same type sold across units by the producer if that price is determined to be reasonable.

If there are no citrus sales on the insured's policy or all of the insured's citrus sales are determined not reasonable, the NASS season average price by insured type shall be the annual price.

See the Citrus Pilot Loss Adjustment Standards Handbook for Annual Price calculations and an example of the sample loss worksheets.

### **42 Unharvested Production Adjustment**

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The ARH Citrus Pilot Program adjusts the revenue to count for savings achieved by not harvesting all or a portion of the crop.

**Example:** A freeze causes the cells of the fruit to rupture and become worthless and the insured does not harvest the acreage. Because the citrus crop is not harvested for sale, the insured does not need to employ the same degree of care to remove the damaged fruit from the acreage. Recall the annual revenue is based on the income after harvest thus the insured has already incurred harvesting/picking costs.

The guarantee is based on the value of citrus entering the packing house door because it is possible that a crop could be harvested but an inadequate market price causes a loss to occur. Accordingly, to be equitable, the harvesting cost must be compensated. However, failure to recognize and account for savings from not harvesting/picking the acreage would result in a windfall for the insured.

## 42 Unharvested Production Adjustment (Continued)

The unharvested production adjustment amount is an estimated picking cost per carton and is published in the Special Provisions. The unharvested production adjustment amount is assessed to the cartons which represent a production shortfall. That is, the unharvested production adjustment amount is assessed to cartons not harvested or cartons not otherwise counted as revenue to count, such as appraised unharvested “marketable” production, when these cartons are less than the approved yield multiplied by coverage level and share.

**Important:** This procedure is to ensure producers are **not** compensated for harvest cost which they did **not** incur in the insurance year. Historical harvest costs are implicitly included in the revenue guarantee because the price valuation point is the point of first delivery.

The unharvested production adjustment amount is not assessed against marketable cartons which are not harvested because such cartons are appraised and valued at the annual price. The following table provides instructions for calculating the unharvested production adjustment amount. See Exhibit 5 for example.

Step	Action	Result/Purpose
1	Multiply the approved yield by the coverage level, share, and the number of acres damaged solely by uninsured causes.	Cartons associated with an uninsured cause of loss appraisal. The loss procedure will price these cartons at a packing house door valuation point. Therefore, the total cartons associated with such appraisals should be excluded from any unharvested production adjustment.
2	Add the result from step 1 to the sum of the insured’s share of the number of appraised and harvested cartons.	Total cartons appraised, harvested and cartons associated with uninsured cause of loss. Harvest costs are incurred on harvested cartons. Actual harvest costs are not incurred on appraised cartons; however, those cartons are valued at the annual price which is a post-harvest valuation point. As such, adding additional revenue to count to reflect harvest cost not incurred is unnecessary.
3	Multiply the approved yield by coverage level, share, and the number of insured acres.	Total number of cartons associated with the amount of insurance represented by the revenue guarantee. These cartons represent the threshold amount for when an adjustment will occur.
4	Subtract the result of step 2 from the result of step 3.	Determines whether the unharvested production adjustment will apply.
5	Multiply the result of step 4 by the unharvested production adjustment amount. If the result of step 4 is zero or negative there is no assessment for harvest cost not incurred.	Revenue to count associated with the unharvested production adjustment, if applicable.

## **43 Payment Factor**

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The payment factor is substantially the same as the price election factor available for other crop insurance coverage plans. However, it must be handled differently than the price election factor.

In the APH insurance plan, for example, the amount of any indemnity is a two step process: first, the amount of the production loss is calculated and second, the production loss is multiplied by the price election. The price election factor simply reduces the effective price election, which also reduces the liability and the premium. It does not affect the guarantee, which is a production amount. Hence, the loss inception point remains the same regardless of the level of the price election factor.

To properly calculate an indemnity in ARH, the calculations first must determine the indemnity as though the payment factor were 100 percent (100%). The 100 percent (100%) indemnity then is reduced to reflect the payment factor chosen by the insured (the default value is 1.00).

## Acronyms

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The following table provides approved acronyms used in this handbook.

Approved Acronyms	Term
AIP	Approved Insurance Provider
APDD	Actuarial and Product Design Division
APH	Actual Production History
ARH	Actual Revenue History
CAT	Catastrophic Risk protection
CAW	Crop Addendum Worksheet
CIH	Crop Insurance Handbook
DSSH	Document and Supplemental Standards Handbook
ERF	Expected Revenue Factor
FCIC	Federal Crop Insurance Corporation
LAM	Loss Adjustment Manual
NASS	National Agricultural Statistics Service
PASS	Policy Acceptance and Storage System
PAW	Producer's Pre-Acceptance Worksheet
RMA	Risk Management Agency

## **Definitions**

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The following are definitions of terms used in this handbook.

Agent has the same meaning as the term “agent” in the Standard Reinsurance Agreement.

Approved Insurance Provider has the same meaning as the term “approved insurance provider” in the Federal Crop Insurance Act. For the purposes of this handbook, Approved Insurance Provider includes managing general agents as defined in the Standard Reinsurance Agreement.

Completely Sold Production means production for which a final sale price has been determined. This price is generally documented on the producers’ final sales settlement sheet.

Pesticide means a generic term to include fungicides, herbicides, insecticides, rodenticides, etc.

**Example ARH Form**

The following is an example of an ARH form. See paragraph 32 for related procedure.

Production, Revenue, and Yield Report (ARH Form)				For Crop Year:							
(For Illustration Purposes Only!)											
Producer's Name and Address		Required Field Review <input type="checkbox"/> Required Inspection <input type="checkbox"/>		Agent Name and Address:							
Phone No:	SSN Tax No:	State: County: Policy No:		Phone No:		Agent Code:					
				Company Name and Address:							
Crop	Section	Land Other County <input type="checkbox"/> Yes <input type="checkbox"/> No		Crop Year	Total Production	Acres	Average Yield	Producer's Net Revenue	Average Revenue	Producer's Share	100% Share Equivalent Revenue
Practice	Township										
Type											
Unit No.	Range										
Other Entity(ies)		FSA Farm No.									
		Cropland Acres									
Record Type: <input type="checkbox"/> Production Sold <input type="checkbox"/> On Farm Storage <input type="checkbox"/> Livestock Feeding Records <input type="checkbox"/> FSA Loan Record		Crop Year: <input type="checkbox"/> Appraisal <input type="checkbox"/> Other									
		Area Classification					Total			Total	
		Transitional Yield		Preliminary Revenue			Approved Revenue				
		Transitional Revenue		Prior Revenue							
Processor Number		Other		Preliminary Yield			Approved Yield				
				Prior Yield							

## Examples

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This Exhibit provides examples of:

- calculating a revenue guarantee to illustrate the difference between the amount of insurance and the value per acre
- calculating an indemnity under an ARH plan of insurance.

The following data applies to examples 1-3:

- insured reports the following eight years of revenue history:

Production Year	Producer Revenue
1999	\$3,900
2000	\$3,000
2001	\$4,200
2002	\$3,900
2003	\$3,700
2004	\$4,350
2005	\$3,650
2006	\$4,000
<b>Total</b>	<b>\$30,700</b>

- insured has an approved revenue of \$3,838/acre
- insured has an approved yield of 400 cartons/acre
- insured has 10 acres of navel oranges
- RMA published ERF equals 1.00
- coverage level equals 0.75
- insured share equals 0.5000
- payment factor equals 0.80.

### A. Example 1 - Calculating Revenue Guarantee

The following is an example of calculating a revenue guarantee and is provided to illustrate the difference between the amount of insurance and the value per acre. The value per acre calculation is prior to application of the payment factor and therefore reflects the true loss inception point. The amount of insurance per acre (guarantee) is calculated as follows:

Step	Action
1	Multiply the approved revenue per acre times the ERF. $\$3,838 \times 1.00 = \$3,838$
2	Multiply the result of step 1 times the coverage level. $\$3,838 \times 0.75 = \$2,879$



**Examples (Continued)****A. Example 1 - Calculating Revenue Guarantee (continued)**

Step	Action
3	Multiply the result of step 2 times the payment factor. $\$2,879 \times 0.80 = \$2,303$
4	Multiply the result of step 3 times producer's share. $\$2,303 \times 0.500 = \$1,152$
5	Multiply the result of step 4 times the number of acres. $\$1,152 \times 10 = \$11,520$

The value per acre is calculated as follows. This amount is used in determining losses.

Step	Action
1	Multiply the approved revenue per acre times the ERF. $\$3,838 \times 1.00 = \$3,838$
2	Multiply the result of step 1 times the coverage level. $\$3,838 \times 0.75 = \$2,879$
3	Multiply the result of step 2 times the producer's share. $\$2,879 \times 0.500 = \$1,440$
4	Multiply the result of step 3 times the number of acres. $\$1,440 \times 10 = \$14,400$

**B. Example 2 - Calculating an Indemnity Based on Inadequate Market Price**

The following is an example of calculating an indemnity under ARH plan of insurance. An indemnity is owed if the producer's revenue for the insurance year is less than the guarantee. The standard calculation sequence used for crop insurance must be modified for the Citrus Pilot Program because only the revenue obtained by the insured person can be included in the revenue to count. Therefore, the producer's share must be introduced at an earlier step in the standard calculation.

The producer harvests an amount of citrus that exceeds the approved yield of 400 cartons/acre. However, the market price results in revenue to count of only \$10,000 for the insured. The indemnity is calculated as follows:

Step	Action
1	Calculate the value per acre for 10 acres, as provided in paragraph A, Example 1. $\$1,440 \times 10 \text{ acres} = \$14,400$
2	Subtract the revenue to count from the result of step 1. $\$14,400 - \$10,000 = \$4,400$ preliminary indemnity
3	Multiply the result of step 2 times the payment factor. $\$4,400 \times 0.80 = \$3,520$ indemnity payment

**Examples (Continued)****B. Example 2 - Calculating an Indemnity Based on Inadequate Market Price (continued)**

The payment factor is not applied to the revenue to count, but instead is applied to the preliminary indemnity amount. In this example, the insured would have received an indemnity of \$4,400 if the insured had elected to use the default payment factor of 1.00. Any payment factor other than 1.00 will reduce the overall producer guarantee and premium amount without altering the loss inception point.

**C. Example 3 - Calculating an Indemnity Based on Crop Damage Resulting in Unmarketable Production**

For this example, the following data applies:

- insured's share of the total harvested production was 1,000 cartons, and it was sold for \$10,000
- 125 cartons of insured's share of unharvested marketable production was appraised and valued with the annual price of \$10/carton
- herbicide drift, an uninsurable cause of loss, damaged 2 acres of citrus, making the citrus unmarketable
- unharvested production adjustment amount in the Special Provisions is \$0.70/carton.

Because there was a production shortfall, the unharvested production adjustment amount must be calculated in order to calculate the indemnity in this example. The following is the unharvested production adjustment amount calculation.

Step	Action
1	Multiply approved yield times coverage level times producer share times number of acres unharvested. $400 \times 0.75 \times 0.500 \times 2 = 300$ cartons production corresponding to the acres damaged by uninsured cause of loss
2	Add result of step 1 to sum of unharvested marketable appraised production plus harvested/sold production $300 \text{ cartons} + 125 \text{ cartons} + 1,000 \text{ cartons} = 1,425 \text{ cartons}$
3	Multiply approved yield per acre times coverage level times insured's share times number of total acres. $400 \times 0.75 \times 0.500 \times 10 = 1,500$ cartons implicit in guarantee
4	Subtract result of step 2 from result of step 3. $1,500 - 1,425 = 75$ cartons implicit in guarantee which are not harvested or otherwise account for with appraisal and valuation.

**Examples (Continued)****C. Example 3 - Calculating an Indemnity Based on Crop Damage Resulting in Unmarketable Production (continued)**

Step	Action
5	Multiply result of step 4 times the unharvested production adjustment amount in the Special Provisions. $75 \times \$0.70 = \$53$ of revenue to count representing the harvest cost not incurred due to the production shortfall.

After calculating the unharvested production adjustment amount, calculate the indemnity according to the following table.

Step	Action
1	Multiply the value per acre times the number of acres damaged by uninsured causes. $\$1,440 \times 2 = \$2,880$ appraisal for uninsured causes
2	Multiply the cartons of unharvested marketable production times the annual price. $125 \times \$10 = \$1,250$ appraisal for unharvested marketable production
3	Sum result of step 1 + result of step 2 + dollar amount received for harvested/sold production + revenue to count representing the harvest cost not incurred due to the production shortfall. $\$2,880 + \$1,250 + \$10,000 + \$53 = \$14,183$ total revenue to count
4	Subtract result of step 3 from amount of insurance. $\$14,400 - \$14,183 = \$217$ preliminary indemnity
5	Multiply result of step 4 times payment factor. $\$217 \times 0.80 = \$174$ total indemnity

**D. Example 4 - Carrying Forward a Loss Claim with the Unharvested Production Adjustment**

The following example demonstrates the loss information needed to complete the revenue report for the subsequent year when a complete loss occurred and the unharvested production adjustment procedure was applied. Assume a unit of citrus in Fresno County, CA was badly damaged by a freeze event. The appraisal determines zero production to count, a complete loss. There is no damage due to uninsurable causes. The grower does not harvest and the unharvested production adjustment is applied to the approved yield. For simplicity this example represents only one (1) acre and the producer approved amounts are identical to the county transitional values. The unharvested production adjustment amount is \$.70/carton.

**Examples (Continued)****D. Example 4 - Carrying Forward a Loss Claim with the Unharvested Production Adjustment (continued)**

The following data applies:

- insured has an approved revenue of \$2,780/acre
- insured has an approved yield of 400 lbs/acre
- RMA published ERF equals 1.00
- coverage level equals 0.75
- insured share equals 1.000
- payment factor equals 1.00
- insured's amount of insurance equals \$2,085/acre

Step	Action
1	Insured's approved yield times coverage level and share equals 300 cartons/acre – (0 cartons damaged due solely to uninsured causes + 0 cartons appraised + 0 cartons harvested) = 300 cartons subject to the unharvested production adjustment
2	Multiply result of step 1 times the unharvested production adjustment amount. 300 cartons x \$0.70/ carton unharvested production adjustment amount = \$210 of revenue to count representing the harvest costs not incurred due to the production shortfall
3	Subtract result of step 2 from amount of insurance. \$2,085 amount of insurance – \$210 revenue to count = \$1,875 indemnity

The data from the claim form must be used when determining next year's annual revenue:  
 0 cartons production to count = 0 carton actual yield;  
 \$210 revenue to count = \$210 actual revenue.

Revenue substitution (RS) and yield substitution (YA) are applied if elected by the insured:  
 60% RS = \$2,780 x 0.60 = \$1,668;  
 60% YA = 400 cartons x 0.60 = 240 cartons