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MARGIN PROTECTION PLAN OF INSURANCE STANDARDS HANDBOOK

2018 and Succeeding Crop Years

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

TITLE: MARGIN PROTECTION PLAN INSURANCE STANDARDS HANDBOOK	NUMBER: FCIC-20260U
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SUBJECT: Provides the procedures and instructions for administering the Margin Protection Plan of Insurance	OPI: Product Administration & Standards Division
	APPROVED: <i>/s/ Richard H. Flourney</i> Deputy Administrator for Product Management

Reason for Issuance

This handbook provides FCIC-approved standards for administering the Margin Protection Plan of Insurance (MP) for the 2018 and succeeding crop years.

This handbook has been revised as indicated below. Minor changes and corrections are not included in this listing. See changes or additions in text which have been highlighted. Three stars (***) identify where information has been removed.

Changes for Crop year 2018 (FCIC-20260U):

1. Added MP-HPO as an additional insurance plan.
2. Paragraph 1D – Additional states added to the pilot area.
3. Paragraph 21B – Changed yields to be based on NASS data only and in certain cases RMA data, removed SCO reference and removed lag year.
4. Paragraph 21C – Removed use of Approved Yield and example to calculate Dollar Amount of Insurance.
5. Paragraph 26 - Removed “negative margin” language.
6. Paragraph 26 – Increased coverage level to 95 percent.
7. Paragraph 40 – Revised deductible calculations.
8. Paragraph 41 – Added example to show “negative Expected Margin”.
9. Paragraph 48 – Add “Protection Factor” in calculations.
10. Paragraph 48 – Added example 3 to show MP-HPO calculation.

**MARGIN PROTECTION PLAN OF
INSURANCE STANDARDS HANDBOOK**

CONTROL CHART

Control Chart For: Margin Protection Insurance Standards Handbook							
	TP Page(s)	TC Page(s)	Text Page(s)	Exhibit Numbers	Exhibit Page(s)	Date	Directive Number
Insert	Entire Handbook						
Current Index	1-2	1-2	1-20	1-2	21-24	05-2017	20260U

FILING INSTRUCTIONS

This handbook is effective for the 2018 and succeeding crop years.

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PART 1 GENERAL INFORMATION AND RESPONSIBILITIES

1 General Information

A. Purpose

This handbook provides procedure for administering the MP plan of insurance in accordance with the Common Crop Insurance Policy Basic Provisions (Basic Provisions), the MP Policy Provisions, the MP Crop Provisions and the Margin Price Provisions.

If there is a conflict between this handbook and the CIH or other FCIC approved handbook, this handbook controls. If there is a conflict between this handbook and the policy, the policy controls.

B. Source of Authority

The MP is a privately-developed product submitted and approved by the FCIC Board of Directors in accordance with section 508(h) of the Federal Crop Insurance Act.

C. Duration

MP was available beginning with the 2016 crop year.

D. Approved Insurance Provider (AIP) Option to Offer

In accordance with Section II. (a) (3) of the Standard Reinsurance Agreement (SRA), AIPs are not required to offer MP to producers. Accordingly, each AIP must determine whether it will offer the MP in the approved pilot area. AIPs that elect to offer the MP must offer it to all eligible producers in the approved pilot area, and must administer the program according to the policies approved and issued by FCIC, procedures in this handbook and the provisions of Section II. (a) (3) of the SRA.

1 General Information (Continued)

E. Approved Area

MP is available in select counties for corn, rice, soybeans, and wheat in the following states:

Rice (select counties)	Corn (all counties)	Soybeans (all counties)	Wheat (select counties)
Arkansas	Iowa	Iowa	Minnesota
California	Illinois	Illinois	Montana
Louisiana	Indiana	Indiana	North Dakota
Mississippi	Kansas	Kansas	South Dakota
Missouri	Michigan	Michigan	
Texas	Minnesota	Minnesota	
	Missouri	Missouri	
	Nebraska	Nebraska	
	North Dakota	North Dakota	
	Ohio	Ohio	
	South Dakota	South Dakota	
	Wisconsin	Wisconsin	

F. Applying for MP Coverage

AIPs shall use the standard application for MP. The application must indicate the insured has selected MP or MP-HPO along with other required information. Use the standard application or policy change form to add MP coverage to a base policy or to transfer the MP policy from another AIP.

MP or MP-HPO coverage can be purchased in one of two forms.

- (1) One form includes the Basic Provisions, a base policy, MP Policy Provisions, and the applicable MP Crop Provisions.

All policies must be insured with the same AIP. On or before the MP SCD, the insured and the AIP must confirm the base policy is transferred if the base policy is currently with another AIP. The insured must complete and submit to the assuming AIP (with the MP application) a Policy Transfer/Application, or the assuming AIP must complete and sign, and have the insured sign, a Request to Transfer a Policy with the ceding AIP's policy number(s) for the base policy being transferred.

- (2) The other form is a stand-alone policy that includes the Basic Provisions, MP Policy Provisions, and the applicable MP Crop Provisions.

No base policy may be in effect on the MP insured crop if this option is elected.

2 Responsibilities

A. AIP's 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. AIPs should report any program issues or concerns to the Product Administration and Standards Division (PASD) of RMA.

B. Insured's Responsibilities

To be eligible for MP, the insured must comply with all terms and conditions of the Basic Provisions, MP Policy Provisions, and the applicable MP Crop Provisions.

3-20 (Reserved)

PART 2 INSURABILITY

21 MP Insurability Requirements

A. Base Policy

MP can be purchased by itself, or in conjunction with a Yield Protection or Revenue Protection base policy. The base policy, if purchased, must be purchased from the same AIP as the issuer of MP policy. On or before the MP SCD, the insured and the AIP must confirm the base policy is transferred if the base policy is currently with another AIP.

There is no restriction with regards to the agent or agency. One agency can have the base policy and a different agency may carry the MP coverage if they are both with the same AIP.

Purchase of any other MPCCI insurance policy will render the MP policy void and the producer may be subject to the consequences authorized under the Basic Provisions, the Act, or any other applicable statute. These provisions do not preclude purchase of any crop insurance policy that is not reinsured by the FCIC (crop-hail, a non-reinsured supplemental policy, or similar).

An insured who elects SCO and/or the High-Risk Alternate Coverage Endorsement on the base policy is not eligible for MP. However, the base policy may include other available endorsements. For example, for rice the base policy could include the Downed Rice Endorsement.

The beginning farmer or rancher subsidy applies for additional coverage policies (buy-up) that have premium subsidy including MP. The native sod subsidy decrease also applies to MP.

A base policy issued under the Basic Provisions provides the producer with coverage for individual losses, replanting payments and prevented planting payments as authorized by the various crop provisions, and coverage for quality losses. Individual losses under the base policy are paid near the time the loss occurred whereas losses under MP are similar to Area Risk Protection Insurance (ARPI) where indemnities are not paid until final area yields are available.

If there is a loss paid under the insured's base policy, the indemnity amount from that policy will be subtracted from any loss under the MP policy. The indemnity to be included for this purpose will not include any payment received for replanting or prevented planting from the base policy. If the MP indemnity is larger than the base policy indemnity, the amount of indemnity paid will be the difference between the total base policy indemnity and the total MP indemnity as long as the difference is less than the total Liability. If the MP indemnity is smaller, no indemnity is due under MP.

21 MP Insurability Requirements (Continued)

B. County Yields

Expected County Yield is the yield, established for each insured crop, type, and practice, used to determine the Expected Revenue. The Expected County Yield will be the same as the Expected County Yield for ARPI. **If ARPI is not available in the county, the yield will be based on available data and determined by FCIC.** The Expected County Yield is also used for standalone policies by type and practice for the purpose of determining the Dollar Amount of Insurance and the Liability under MP.

Final County Yield is the yield established for each insured crop, type, and practice, used to determine the final revenue (per acre). The Final County Yield will be the same as that released for ARPI for the crop year. **If ARPI is not available in the county, the yield will be based on available data** and determined by FCIC.

The data source used for the county yields will be based on the best available data and will be specified in the actuarial documents. The data source used to establish the Expected County Yield will be the data source used to establish the Final County Yield, except as otherwise provided in the MP Policy Provisions.

C. Production Reporting and Approved Yields

(1) Insureds with a Base Policy

An insured that has a base policy under the Basic Provisions is not required to file a separate production report for MP. The production report for the base policy will be used as the production report for MP. The AIP will accept the approved yield(s) for that policy by unit, type and practice as the approved yields for the purpose of calculating the Dollar Amount of Insurance and the Liability under MP.

(2) Standalone Policies – Insureds without a Base Policy

An insured that does not have a base policy is required to file a Margin Production Report for MP in accordance with the terms of section 6(e)(1) of the MP Provisions. The Margin Production Reporting date for standalone policies will be on the dates tab in the actuarial documents.

If the insured fails to submit a Margin Production Report by the production reporting date specified in the actuarial documents, they will be limited to the lowest Margin Coverage Level available for the next crop year. Since the production reporting date for corn, soybeans and wheat is after the sales closing

21 MP Insurability Requirements (Continued)

date for the next crop year, this determination will be retroactive to the sales closing date for the next crop year.

D. Acreage Insured and Acreage Reporting

All acreage in the county planted to a crop type and practice that is insurable under the MP Crop Provisions must be insured. Acreage must be planted to the insured crop on or before the final planting date shown in the actuarial documents and must be reported to the AIP by the acreage reporting date to be insurable acreage. Acreage initially planted after the MP final planting date must be reported as uninsurable. The late planting provisions of the Basic Provisions are not applicable to MP. The final planting dates for MP shown in the actuarial documents take into account the late planting period under the base policy.

If the AIP denies Liability for unreported acreage, no premium will be due on such acreage and no indemnity will be paid.

If the insured has a base policy, the insurable planted acres of each insurable unit, type and practice reported for that policy will be used as the acreage report for MP. If the insured does not have a base policy, all insurable planted acres must be reported in accordance with the terms of section 6 of the Basic Provisions.

Insurance is not provided by MP on acreage that is or would be eligible for a prevented planting payment under a base policy issued under the Basic Provisions whether or not the insured elects a base policy on the crop.

E. Eligibility Requirements

To be eligible for the MP, the insured must comply with all terms and conditions of MP and the MP Crop Provisions in addition to the terms of the Basic Provisions (if applicable) that are not in conflict with MP. If a conflict exists the MP Policy and MP Crop Provisions are applied. See the insurance documents for other terms and conditions for an insured crop and insured acreage.

F. MP Program Dates

The applicable sales closing, cancellation, termination and contract change dates are depicted in the applicable MP Crop Provisions.

Important: The Sales Closing Date (SCD) for Corn, Soybeans, and Spring Wheat is September 30 of the calendar year preceding the crop year, which is well ahead of the

base policy SCD. The SCD for rice is January 31 of the crop year followed by SCD on February 28 (the same as plan codes 01, 02, and 03).

22 Insurable Types and Practices

Insurable types and practices are identified in the actuarial documents.

23 Units

The provisions of the Basic Provisions (section 34) regarding units and unit division are applicable to MP with the exception of whole farm units. The base policy may be under a whole farm unit but separate records of acreage and production for the MP crop must be maintained by practice and type in accordance with the CIH and the LAM. In the case of a loss under the whole farm unit base policy, the amount of the indemnity associated with the base policy crop must be identified and subtracted from any MP indemnity in accordance with para. 48.

24 Causes of Loss

Any natural event that causes the Harvest Margin to be less than the Trigger Margin will result in an insurable cause of loss unless FCIC can prove that the reason for any price change was due to an uninsurable cause of loss. This could result from a Final County Yield that differs from the Expected County Yield, a Margin Harvest Price that differs from the Margin Projected Price, or one or more harvest prices for inputs subject to price change differ from the applicable projected prices for those inputs, or any combination of these events.

The MP portion of the coverage protects against increases in production costs, decreases in the national price of the insured commodity, or reductions in yield at the county level. Failure to follow good farming practices, or planting or producing a crop using a practice that has not been widely recognized as used to establish the Expected County Yield, is not an insurable cause of loss.

25 Premiums and Administrative Fees

The base rate (dollar amount of premium per acre) will be included in the actuarial documents once price discovery is completed. The premium amount for MP coverage will be determined for each margin unit by multiplying the reported acres by the base rate (per acre) and by the insured's share at the time coverage begins. Those premium amounts apply to MP as stand-alone coverage; a credit will be given if the producer elects a base policy. The amount of the credit is based on the expected reduction in MP indemnities that instead will be paid under the base policy. The insured will owe a separate administrative fee for MP even if they have a base policy.

26 MP Coverage and Trigger Margin

Coverage is based on the Expected Margin which is calculated by subtracting the Expected Cost (per acre) from the Expected Revenue (per acre) by crop, unit, practice and type. The MP Trigger Margin is the Expected Margin less the deductible implied by the Margin Coverage Level and the Expected Revenue.

Margin Coverage Levels are available in five percent (5%) increments from 70 percent to 95 percent unless specified otherwise on the actuarial documents. The catastrophic (CAT) level of coverage is not available under MP but may be chosen in accordance with the Basic Provisions for a base policy. The insured may select any Margin Coverage Level shown on the actuarial documents for each crop, type, and practice.

27 Margin Projected Prices and Margin Harvest Prices

In addition to the Trigger Margin, MP incorporates a defined Liability which establishes an upper limit on the MP indemnity and is used to calculate premium. See Para. 41 for the details and procedures for determining the Liability.

Three sets of projected and harvest prices are used under MP. All applicable prices will be available through the MP link on RMA's website.

- (1) Margin Projected Price and Margin Harvest Price for the insured crop.

Similar to the CEPP, the Margin Price Provisions specifies how and when the Margin Projected Price and the Margin Harvest Price will be determined by crop.

The price discovery periods for the Margin Projected Prices for corn, rice, soybeans, and spring wheat, together with the Margin Projected Price discovery periods established under the Basic Provisions, are shown in the following table:

Commodity	Discovery Period (Margin Price Provisions)	Basic Provisions (CEPP)
Corn	August 15 – September 14	February 1 – February 28
Rice	Varies by State; same as CEPP	Varies by State
Soybeans	August 15 – September 14	February 1 – February 28
Spring Wheat	August 15 – September 14	February 1 – February 28

Most price discovery periods for Margin Projected Prices for MP occur earlier than under the CEPP because producers are making production plans and arranging for the purchase of inputs late in the preceding calendar year and early in the year the crops will be planted. Changes in prices during this period can affect profitability. MP allows the producer to “lock” a margin based on current expectations of commodity and input prices.

27 Margin Projected Prices and Margin Harvest Prices (continued)

The Margin Harvest Price discovery periods for the commodities are the same as those specified in the CEPP. The Margin Harvest Price will not be greater than the Margin Projected Price multiplied by 2.00.

- (2) Projected Input Price and the Harvest Input Price for inputs subject to price change.

The Margin Price Provisions specify how the Projected Input Price and Harvest Input Price for the inputs subject to price change will be determined by crop.

The price discovery periods for projected prices of inputs subject to price change are the same as the margin price discovery periods for the commodities. This allows the Expected Margin to be calculated on the basis of current market expectations for both the commodity prices and the input prices.

The price discovery periods for harvest prices of inputs subject to price change occur earlier than the Margin Harvest Price discovery periods for the commodities because a high percentage of the quantity of inputs needed to produce a crop are associated with planting and the few weeks immediately following.

- (3) Projected Input Price s and the Harvest Input Price s for inputs not subject to price changes.

Inputs not subject to price change are identified as a specific dollar amount per acre.

The Margin Price Provisions are a part of the policy for all crops for which margin protection is available. The Margin Price Provisions do not apply to a base policy if the insured has one.

The insured must elect 100 percent of all prices under MP.

28 Quality Adjustment

As is the case with all area plans of insurance, no quality adjustment is offered.

29 Transfer of Policy

If the policy is transferred to a different AIP, the MP policy and MP Crop Provisions must be included on the Policy Transfer/Application or Application form submitted to the AIP to which the transfer is effective on or before the applicable SCD.

30 Production Inputs

Production inputs are defined in the MP Provisions as Allowed Inputs. These resources, found on the MP link on RMA's website, are those typically used to produce the insured crop in the county where the insured acreage is located. Two types of production inputs are specified: those subject to price change and those that are not subject to price change. Inputs subject to price change are, for example, diesel fuel, interest, and fertilizers, and other inputs for which projected and harvest prices can be obtained from markets.

Inputs not subject to price change are, for example, seed, machinery operating costs (other than fuel), and similar expenses.

Inputs subject to price change are identified with an average quantity used per acre. Inputs not subject to price change are identified as a specific dollar amount per acre and are not specifically identified. Only the dollar amount for all such inputs is specified.

31 Replanting and Prevented Planting Payments

Replanting payments and prevented planting payments are not available under MP. A base policy must be purchased if a producer wishes to obtain this coverage.

32 Written Agreements

Written agreements are not allowed under MP.

33-39 (Reserved)

40 Trigger Margin Calculation

The Trigger Margin (per acre) is the Expected Margin (per acre) less the deductible implied by the Expected Revenue and the Margin Coverage Level.

Trigger Margin (calculated on a per acre basis) is:

Trigger Margin = Expected Margin – (Expected Revenue x (1.00 – Coverage Level));
where:

Expected Revenue (per acre) is the Expected County Yield multiplied by the Margin Projected Price.

The Expected Margin is the result of subtracting the Expected Costs from the Expected Revenue. This same calculation is used when the Final County Yield s and harvest prices are known to determine the Harvest Margin.

The Expected Revenue is the Expected County Yield multiplied by the Margin Projected Price by crop, practice and type. The Harvest Revenue is the Final County Yield multiplied by the harvest price by crop, practice and type, the same as ARPI. The only changes from ARPI are there is no upside price protection and there is a different discovery period for the projected price for most commodities.

The Expected Margin (calculated on a per acre basis) is:

Expected Margin = Expected Revenue – Expected Costs; where:

Expected Revenue (per acre) is the Expected County Yield multiplied by the Margin Projected Price.

If the insured elects MP-HPO, the Expected Revenue (per acre) is the Expected County Yield multiplied by the greater of the Margin Projected Price and the margin harvest price.

Expected Revenue = Expected County Yield x max(Margin Projected Price,
Margin Harvest Price)

The Expected County Yield is the area yield for each insured crop, type, and practice, contained in the actuarial documents for the purpose of determining the Expected Revenue. The Margin Projected Price and Margin Harvest Price are established as determined by the Margin Price Provisions.

Expected Cost (per acre) is the dollar amount determined by multiplying the quantity of each Allowed Input (subject to price change) by the Projected Input Price for that input.

This amount is added to the dollar amount for approved inputs not subject to price change to determine the Expected Costs.

40 Trigger Margin Calculation (continued)

Example

Assume a crop has two inputs subject to price change specified on the actuarial table, as follows:

Diesel Fuel	7.5 gallon/acre
Nitrogen	150.0 lbs/acre

These data indicate that each acre requires an average of 7.5 gallons of diesel fuel and 150.0 pound of nitrogen to produce the expected yield. These estimates are applicable to very large areas and will not be precise for any particular farming operation. The actuarial table will specify a dollar amount per acre to represent inputs not subject to price change (seed, farmer labor, others). Assume this amount is \$300 per acre.

The first step to calculating the Expected Margin is to determine the Expected Revenue. Assume the Expected County Yield is 150 bushels per acre and the Margin Projected Price for corn is \$4.00 per bushel and the Margin Harvest Price is \$4.25 per bushel.

The Expected Revenue per acre is:

$$150 \text{ bu.} \times \$4.00 = \$600.00 \text{ per acre}$$

The second step to calculating the Expected Margin is calculating the Expected Costs. Margin Projected Input Prices are \$3.50 per gallon for diesel fuel and \$1.00 per pound for nitrogen. Estimated input requirements are 7.5 gallons of diesel and 150 pounds of nitrogen.

The Expected Costs per acre are:

$$\begin{aligned} & \text{Diesel (7.5 gallon} \times \$3.50 = \$26.25) + \text{Nitrogen (150 pounds} \times \$1.00 = \$150.00) \\ + & \\ & \text{Other inputs (\$300.00)} = \text{Expected Costs of } \$476.25 \text{ per acre.} \end{aligned}$$

The Expected Margin per acre is:

$$\$600.00 - \$476.25 = \$123.75$$

The Expected Margin is expressed on an area level, not an individual producer level. All acres in a county have the same Expected Margin for a type and practice (i.e., same Expected County Yield). MP then incorporates the Margin Coverage Level to determine the Trigger Margin. Assuming a 90 percent Margin Coverage Level:

$$\text{Expected Margin} - \{\text{Expected Revenue} \times (1.00 - \text{Margin Coverage Level})\} = \text{Trigger Margin}$$

$$\$123.75 - \{\$600 \times (1.00 - 0.90)\} = \$63.75 \text{ per acre}$$

41 Dollar Amount of Insurance (per acre) and Liability Calculations

Unexpectedly high costs or unexpectedly low revenue can result in a drastically impaired margin. For example, assume a total crop loss. The financial impact on the producer would be equal to the foregone income from crop sales plus the costs incurred to date to produce the crop. The above amount, \$63.75 per acre represents only a portion of the potential loss of expected net revenue.

To account for this possibility for policies with a base policy, MP establishes a maximum possible indemnity payment, designated as the Liability, which is calculated as follows:

MP: (County Expected Yield x Projected Price) x Coverage Level x Protection Factor = Dollar Amount of Insurance (per acre).

MP-HPO: County Expected Yield x max (the Margin Projected Price or Margin Harvest Price) x Coverage Level x Protection Factor = Dollar Amount of Insurance (per acre).

Dollar Amount of Insurance (per acre) x acres x share = Liability

The MP indemnity payment is limited to the Liability amount regardless of the outcome of the county yield, commodity price change, and input price change.

Assume a 500 acre unit with an Expected County Yield of 150 bushels per acre, a Margin Projected Price of \$4.00/bu, at 90% coverage level and 1.00 Protection Factor at a 100 percent share without MP-HPO. The Liability is (for this example)

150 bu. x \$4.00 x 90% x 1.00 = \$540 Dollar Amount of Insurance (per acre)

\$540 x 500 acres x 1.00 share = \$270,000 Liability

Example (Negative Expected Margin)

Margin Protection offers may be extended when the Expected Margin is negative. Assume all of the same variables used in the previous example, except the Margin Projected Price is \$3.00/bu.

The Expected Revenue per acre is:

150 bu. x \$3.00 = \$450.00 per acre

Expected Margin per acre is:

\$450.00 - \$476.25 = -26.25/ac

Trigger Margin is:

-\$26.25 - {\$450 x (1.00 - 0.90)} = -71.25/ac

41 Dollar Amount of Insurance (per acre) and Liability Calculations (continued)

MP Dollar Amount of Insurance is:

$150 \text{ bu.} \times \$3.00 \times 90\% \times 1.00 = \$405 \text{ Dollar Amount of Insurance (per acre)}$

$\$405 \times 500 \text{ acres} \times 1.00 \text{ share} = \$202,500 \text{ Liability}$

42-43 (Reserved)

44 Premium Calculation

MP Premium = Reported acres x Premium Amount (per acre) x Protection Factor x Share.

Assume that the premium amount for MP as a stand-alone policy for the 90 percent Margin Coverage Level selected by the producer is \$30.00 per acre.¹ There are 500.0 reported acres and the producer elects a 1.00 Protection Factor.

Continuing the above example, the premium for MP as a stand-alone policy would be:

$$500.0 \text{ acres} \times \$30 \times 1.00 \text{ share} \times 1.00 \text{ Protection Factor} = \$15,000$$

The subsidy rate for MP is the same as the rate established for ARPI policies. The subsidy factor for a 90 percent ARPI policy is 44 percent. Hence, the producer in this example would have an out-of-pocket premium equal to:

$$\$15,000 \times (1.00 - 0.44) = \$8,400 \text{ } (\$16.80 \text{ per acre})$$

An insured who elects a base policy will receive a premium credit to recognize the potential losses that are estimated to be paid by that policy (i.e., deducted from the MP indemnity).

The credit on the MP premium when a producer purchases a base policy is based on the reduction in expected MP indemnity due to the base policy purchase decision. The amount of the credit for the base policy will depend on the producer's approved yield and the coverage level elected for the base policy. The premium credit will be determined when all information needed to establish Liability under the base policy is known.

Assume that the amount of the credit is equivalent to \$5.00 per acre. In this case, the MP premium would be reduced to:

$$\$15,000 - (500.0 \text{ acres} \times \$5.00) \times 1.000 \text{ share} = \$12,500$$

The subsidized premium with the premium credit would be:

$$\$12,500 \times (1.00 - 0.44) = \$7,000$$

45-47 (Reserved)

¹ Premium rates are intended to be illustrative and not indicative of the actual level of the premium rate for any crop or county.

48 Indemnity Calculations

In the event of loss covered by MP, the indemnity is calculated by subtracting the Harvest Margin (per acre) from the Trigger Margin (per acre) and then multiplying this difference by the insured acres, and the share.

$$\text{Harvest Margin (per acre)} = \text{Harvest Revenue (per acre)} - \text{Harvest Cost (per acre)}$$

Harvest Revenue (per acre) is determined by multiplying the Final County Yield by the Margin Harvest Price. This functions the same as ARPI.

Harvest Cost (per acre) is a Dollar Amount determined by multiplying the quantity of each Allowed Input (subject to price change) by its Harvest Input Price and adding to this amount the dollar amount of approved inputs (not subject to price change). This final result is the Harvest Cost.

If there is no base policy, the indemnity, not to exceed the Liability, equals
(Trigger Margin – Harvest Margin) x Protection Factor x insured acres x share

If there is a base policy, the amount of any indemnity (note: this does not include replanting payments or prevented planting payment) received from the base policy is subtracted from the MP indemnity. If that result is positive, the lesser of that result or the total Liability will be the indemnity.

Example 1:

Assume the following outcomes occur for the crop year:

Acres Planted	=	500
Final County Yield	=	130 bu.
Margin Harvest Price	=	\$4.25 per bushel
Diesel fuel price	=	\$4.00 per gallon
Nitrogen price	=	\$1.25 per pound
Other inputs	=	\$300.00
Base policy loss	=	\$11,000
Protection Factor	=	1.00
MP-HPO:	=	No

The **Harvest Revenue** is 130 bu. (Final County Yield) x \$4.25 per bushel = \$552.50 per acre

The **Harvest Cost** is

7.5 gallon x \$4.00	=	\$ 30.00 (subject to price change)
150 pounds x \$1.25	=	\$ 187.50 (subject to price change)
Other inputs	=	\$ 300.00 (not subject to price change)
Harvest Costs	=	\$ 517.50 total Harvest Cost (total Allowed Inputs subject and not subject to price change)

48 Indemnity Calculations (continued)

The **Harvest Margin** is

$$\$552.50 - \$517.50 = \$35.00 \text{ per acre}$$

The indemnity is calculated as follows (see MP Provisions):

Trigger Margin – Harvest Margin	=	\$63.75	–	\$35.00	=	\$28.75
(a) Result (a) x insured acres					=	\$ 28.75 x 500.0
					=	\$14,375.00
(b) Result (b) x share (assume 1.000)					=	\$14,375
(c) Result (c) x Protection Factor (assume 1.00)					=	\$14,375
(d) Assume no base policy, MP indemnity					=	\$14,375
(e) <u>Assume base policy indemnity</u>					=	\$11,000
(f) MP Indemnity after base policy applied					=	\$ 3,375

The total Liability for the MP coverage is \$270,000. The indemnity calculated with or without a base policy is less than this amount; hence, the calculated amount is payable. If the calculated amount were to be greater than \$270,000, the indemnity would be limited to that amount.

Example 2:

Assume the following outcomes occur for the crop year:

Final County Yield	=	120 bu.
Margin Harvest Price	=	\$4.25 per bushel
Diesel fuel price	=	\$4.00 per gallon
Nitrogen price	=	\$1.25 per pound
Other inputs	=	\$300.00
Protection Factor	=	1.00
MP-HPO:		No

The **Harvest Revenue** is 120 bu. (Final County Yield) x \$4.25 per bushel = \$510 per acre

The **Harvest Cost** is

7.5 gallon x \$4.00	=	\$ 30.00 (subject to price change)
150 pounds x \$1.25	=	\$ 187.50 (subject to price change)
Other inputs	=	\$ 300.00 (not subject to price change)
Harvest Costs	=	\$ 517.50 total Harvest Cost (total Allowed Inputs subject and not subject to price change)

48 Indemnity Calculations (continued)

The **Harvest Margin** is

$$\$510.00 - \$517.50 = - \$ 7.50 \text{ per acre (margin per acre is negative)}$$

The indemnity is calculated as follows (see MP Provisions):

(a) Trigger Margin – Harvest Margin	= \$63.75 – (-\$7.50) = \$71.25
(b) Result (a) x insured acres	= \$71.25 x 500.0 = \$35,625
(c) Result (b) x share (assume 1.000)	= \$35,625
(d) Result of (c) x Protection Factor (1.00)	= \$35,625
(e) Assume no base policy, MP indemnity	= \$35,625
(f) Assume base policy indemnity,	= \$11,000
(g) MP Indemnity after base policy applied	= \$24,625

The Liability is \$270,000. The indemnity calculated with or without a base policy is less than this amount so the calculated amount is payable. If the calculated amount was greater than \$270,000, the indemnity would be limited to that amount. Note: a negative margin is expected to be a rare event. This example is intended to illustrate the possibility, not to suggest it could be a common occurrence.

Example 3:

Assume the following outcomes occur for the crop year:

Acres Planted	= 500
Expected County Yield	= 150 bu
Final County Yield	= 140 bu.
Margin Projected Price	= \$4.00 per bushel
Margin Harvest Price	= \$4.25 per bushel
Diesel fuel price	= \$4.00 per gallon
Nitrogen price	= \$1.25 per pound
Other inputs	= \$300.00
Base policy loss	= \$11,000
Protection Factor	= 1.00
MP-HPO:	Yes

The Margin Harvest Price is greater than the Margin Projected Price, so the Trigger Margin is re-calculated

The Expected Revenue per acre is:

$$150 \text{ bu.} \times \max(\$4.00, \$4.25) = \$637.50 \text{ per acre}$$

Expected Costs remain at \$476.25 per acre.

The Expected Margin per acre is:

48 Indemnity Calculations (continued)

$$\$637.50 - \$476.25 = \$161.25$$

Expected Margin – {Expected Revenue x (1.000 - coverage level)} = Trigger Margin

$$\$161.25 - \{637.50 (1.000 - 0.90)\} = \$97.50 \text{ per acre}$$

The **Harvest Revenue** is 140 bu. (Final County Yield) x \$4.25 per bushel = \$595 per acre

The **Harvest Cost** is

$$7.5 \text{ gallon} \times \$4.00 = \$ 30.00 \text{ (subject to price change)}$$

$$150 \text{ pounds} \times \$1.25 = \$ 187.50 \text{ (subject to price change)}$$

$$\text{Other inputs} = \$ 300.00 \text{ (not subject to price change)}$$

$$\text{Harvest Costs} = \$ \mathbf{517.50} \text{ total Harvest Cost (total of Allowed Inputs subject and not subject to price change)}$$

The **Harvest Margin** is

$$\$595.00 - \$517.50 = \$77.50 \text{ per acre}$$

The indemnity is calculated as follows (see MP Provisions):

(a) Trigger Margin – Harvest Margin	= \$97.50 – \$77.50 = \$20.00
(b) Result (a) x insured acres	= \$ 20.00 x 500.0 = \$10,000
(c) Result (b) x share (assume 1.000)	= \$10,000
(d) Result (c) x Protection Factor (1.00)	= \$10,000
(e) Assume no base policy, MP indemnity	= \$10,000
(f) Assume base policy indemnity	= \$ 0,000
(g) MP Indemnity after base policy applied	= \$10,000

49-50 (Reserved)

PART 3 APPLICABILITY OF HANDBOOKS

51 General Overview

This part identifies information specific to the applicability of the CIH, LAM and any other procedural issuance that may require supplemental information with regard to a crop insured under the MP.

52 Specific Information – CIH

The duties and responsibilities identified in Parts 12, 13, 14, 15, and 17 of the CIH apply only when the insured has NOT elected a base policy.

53 Loss Adjustment Manual (LAM)

The duties and responsibilities identified in the LAM DO NOT apply to MP.

54 Loss Adjustment Standards Handbook (LASH)

The Loss Adjustment Standards Handbooks for the crops included under the MP DO NOT APPLY to MP loss determinations.

Since all information needed to calculate a MP indemnity is available from the records maintained by the AIP or from the Actuarial Documents Master, an indemnity can be calculated without requiring information from the insured.

55-99 (Reserved)

Acronyms

- The following table provides approved acronyms used in this handbook.

Approved Acronym/Abbreviation	Term
AIP	Approved Insurance Provider
APH	Actual Production History
ARPI	Area Risk Protection Insurance
CAT	Catastrophic Risk protection
CEPP	Commodity Exchange Price Provisions
CIH	Crop Insurance Handbook
FCIC	Federal Crop Insurance Corporation
HPO	Harvest Price Option
LASH	Loss Adjustment Standards Handbook
LAM	Loss Adjustment Manual
MP	Margin Protection
MPCI	Multiple Peril Crop Insurance
PASD	Product Administration and Standards Division
RMA	Risk Management Agency
SCD	Sales Closing Date
SCO	Supplemental Coverage Option
SRA	Standard Reinsurance Agreement

Definitions

The following are definitions of terms used in this handbook.

Allowed Input means a resource identified in the Special Provisions as typically used to produce the insured crop in the county where the insured acreage is located. Certain Allowed Inputs will be specified in dollars per acre and are not subject to price change; others will be specified in a quantity per acre and are subject to price change.

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 is the same as defined in the Standard Reinsurance Agreement.

Base policy means a policy of insurance issued under the Basic Provisions that includes any of the following: the Coarse Grains Crop Provisions (7 C.F.R. § 457.113), the Rice Crop Provisions (7 C.F.R. § 457.141), and the Small Grains Crop Provisions (7 C.F.R. § 457.101) or other Crop Provision or plan of insurance designated in the Special Provisions, as applicable.

Dollar Amount of Insurance (per acre) is the amount we determine for a crop, type, and practice insured under MP by multiplying the Expected Revenue by the coverage level and Protection Factor. Following release of the margin harvest price, the Dollar Amount of Insurance may increase if the insured elected MP-HPO and the Margin Harvest Price is greater than the Margin Projected Price.

Expected Cost (per acre) is the dollar amount determined by multiplying the quantity of each Allowed Input subject to price change by the Projected Input Price for that input, summing the dollar values so determined, and adding to this amount the dollar amount for Allowed Inputs not subject to price change.

Expected County Yield is the yield, established in accordance with section 14, for each insured crop, type, and practice, contained in the actuarial documents for the purpose of determining the Expected Revenue.

Expected Margin (per acre) is the result obtained by subtracting the Expected Cost (per acre) from the Expected Revenue (per acre). Following release of the margin harvest price, the Expected Margin may increase if the insured elected MP-HPO and the Margin Harvest Price is greater than the Margin Projected Price.

Expected Revenue (per acre) is the value determined by multiplying the Expected County Yield by the Margin Projected Price. Following release of the Margin Harvest Price, the Expected Revenue may increase if the insured elected MP-HPO and the Margin Harvest Price is greater than the Margin Projected Price.

Final County Yield is the yield, established in accordance with section 14 of the MP, for each insured crop, type, and practice, used to determine the Harvest Revenue (per acre), and released

by RMA at a time specified in the actuarial documents.

Harvest Cost (per acre) is the dollar amount determined by multiplying the quantity of each Allowed Input subject to price change by the Harvest Input Price for that input, summing the dollar values so determined, adding to this amount the sum of the dollar per acre amounts of Allowed Inputs not subject to price change.

Harvest Input Price is a dollar amount per unit of an Allowed Input subject to price change, determined as specified in the Margin Price Provisions, used to determine the Harvest Cost.

Harvest Margin (per acre) is the result of subtracting the Harvest Cost (per acre) from the Harvest Revenue (per acre).

Harvest Price Option refers to MP with Harvest Price Option, an insurance plan which uses the harvest price when determining the insured's Expected Revenue, Expected Margin, and the Trigger Margin.

Harvest Revenue (per acre) is the result obtained by multiplying the Final County Yield by the margin harvest price.

Liability is the amount we determine by multiplying the Dollar Amount of Insurance per acre by the number of acres of the insured crop, unit, type and practice; and, multiplying the result by the insured's share. The Liability establishes the upper limit on the MP indemnity regardless of the outcome of the county yield, commodity price change, and input price change. Following release of the margin harvest price, the Liability may increase if the insured elected MP-HPO and the Margin Harvest Price is greater than the Margin Projected Price.

Margin Harvest Price is a price determined in accordance with the Margin Price Provisions and used to determine the Harvest Revenue of the insured crop.

Margin Price Provisions means the part of the policy that contains the information needed to determine the Margin Projected Price and the Margin Harvest Price for the insured commodity and to determine the Projected Input Prices and the Harvest Input Prices.

Margin Projected Price is the price for each crop determined in accordance with the Margin Price Provisions and used to determine the Expected Revenue of the insured crop.

Margin Protection Price Provisions are MP policy materials containing specific terms of insurance for individual crops.

Margin Coverage Level means a percentage factor the insured elects from among those offered in the actuarial documents that is multiplied by the insured's Expected Margin to determine the Trigger Margin (per acre).

Margin Production Report means a written record showing your annual production in accordance with section 6. The report contains yield information for the current year, including acreage and

production. This report must be supported by written verifiable records from a warehouseman or buyer of the insured crop, by measurement of farm-stored production, or by other records of production approved by us in accordance with FCIC approved procedures.

Margin Unit is the structure we use to determine the amount of Liability and indemnity, as follows:

- (a) For MP with no base policy, all the planted acreage in the county in which you have a share of each unit, type and practice identified as insurable in the actuarial documents; and
- (b) For Margin Protection with a base policy, all the planted acreage in the county in which you have a share of each unit identified on your acreage report.

Projected Input Price is a dollar amount per unit of an Allowed Input subject to price change, determined as specified in the Margin Price Provisions, used to determine the expected value of an Allowed Input.

RMA means the Risk Management Agency, a USDA agency that manages insurance programs for FCIC.

Trigger Margin (per acre) is the Expected Margin (per acre) less the deductible implied by the Expected Revenue multiplied by (one minus the coverage level). Following release of the margin harvest price, the Trigger Margin may increase if the insured elected the MP-HPO and the Margin Harvest Price is greater than the Margin Projected Price.