



United States  
Department of  
Agriculture



Federal Crop  
Insurance  
Corporation

FCIC-24440 (08-2024)

# **FIRE INSURANCE PROTECTION - SMOKE INDEX STANDARDS HANDBOOK**

## **2025 and Succeeding Crop Years**

**UNITED STATES DEPARTMENT OF AGRICULTURE  
FARM PRODUCTION AND CONSERVATION  
RISK MANAGEMENT AGENCY**

<b>TITLE: FIRE INSURANCE PROTECTION - SMOKE INDEX STANDARDS HANDBOOK</b>	<b>NUMBER: FCIC-24440 OPI: Product Management</b>
<b>EFFECTIVE DATE: 2025 and Succeeding Crop Years</b>	<b>ISSUE DATE: August 12, 2024</b>
<b>SUBJECT:</b>  <b>Provides the procedures and instructions for administering the Fire Insurance Protection - Smoke Index Endorsement</b>	<b>APPROVED:</b>  <i>/s/ John W. Underwood for</i>  <b>Deputy Administrator for Product Management</b>

**REASON FOR ISSUANCE**

This handbook provides the official FCIC-approved standards for administering the Fire Insurance Protection - Smoke Index Endorsement for the 2025 and succeeding crop years for Grapes insured under the Grape APH plan of insurance.

# FIRE INSURANCE PROTECTION - SMOKE INDEX STANDARDS HANDBOOK

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## PART 1: GENERAL INFORMATION AND RESPONSIBILITIES

### 1 General Information

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#### A. Purpose and Objective

This handbook provides the FCIC-approved procedures for administering the FIP-SI Endorsement. FIP-SI attaches to and is made part of the CCIP and the Grape CP. FIP-SI provides coverage for a portion of the deductible of the underlying policy that is not otherwise covered, when the county meets the county loss trigger due to the required minimum number of smoke events within its boundaries according to the NOAA and determined by FCIC.

#### B. Source of Authority

Federal programs enacted by Congress and the regulations and policies developed by RMA, USDA, and other Federal agencies provide the authority for program and administrative operations, and basis for RMA directives (see CIH Para 1B).

#### C. Title VI of the Civil Rights Act of 1964

The USDA prohibits discrimination against its customers. Title VI of the Civil Rights Act of 1964 provides that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Therefore, programs and activities that receive Federal financial assistance must operate in a non-discriminatory manner. Also, a recipient of RMA funding may not retaliate against any person because they opposed an unlawful practice or policy, or made charges, testified or participated in a complaint under Title VI.

It is the AIPs’ responsibility to ensure that standards, procedures, methods, and instructions, as authorized by FCIC in the sale and service of crop insurance contracts, are implemented in a manner compliant with Title VI. Information regarding Title VI of the Civil Rights Act of 1964 and the program discrimination complaint process is available on the USDA public website at [www.usda.gov/oascr](http://www.usda.gov/oascr). For more information on the RMA Non-Discrimination Statement, see the DSSH.

## 1 General Information (Continued)

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### D. Related Handbooks

The following table provides handbooks related to this handbook.

Handbook	Relation/Purpose
DSSH	This handbook provides the official FCIC-approved form standards for use in the sale and service of any eligible Federal crop insurance policy; required statements and disclosures; and the standards for submission and review of non-reinsured supplemental policies in accordance with the Standard Reinsurance Agreement.
CIH	This handbook provides the official FCIC-approved underwriting standards for policies administered by AIPs for the General Administrative Regulations, Common Crop Insurance Policy, Basic Provisions, and Area Risk Protection Regulations.
GSH	This handbook provides the official FCIC-approved standards for policies administered by AIPs under the General Administrative Regulations, Common Crop Insurance Policy, Basic Provisions, including the Catastrophic Risk Protection Endorsement; the Area Risk Protection Insurance, Basic Provisions; the Stacked Income Protection Plan of Insurance; the Rainfall Index Plan; and the Whole-Farm Revenue Protection Pilot Policy.

### E. Area of Applicability

The FIP-SI Endorsement is available for CAT and additional coverage policies when provided in the AD.

## 2 Responsibilities

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### A. RMA Responsibilities

RMA will maintain and update this handbook as needed and provide guidance and clarifications to the AIP as requested.

### B. AIP Responsibilities

AIPs will utilize this handbook and other standards, procedures, and instructions as authorized by RMA for the purpose of selling and servicing the FIP-SI Endorsement. AIPs should report program issues or concerns to RMA.

## 3-10 (Reserved)

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## PART 2: REQUIREMENTS AND INFORMATION

### 11 Eligibility Requirements

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To be eligible for the FIP-SI Endorsement, the insured must:

- (1) have an insurance policy under the CCIP and the Grape CP with the same AIP;
- (2) elect the FIP-SI Endorsement on or before the FIP-SI SCD;
- (3) elect a FIP-SI coverage percentage; and
- (4) comply with all terms and conditions of the FIP-SI Endorsement.

### 12 FIP-SI Plan of Insurance Code

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When elected, the FIP-SI Endorsement establishes a separate plan of insurance code of 38 for the FIP-SI Endorsement coverage for IT processing purposes only. Although the FIP-SI Endorsement creates an insurance plan for IT processing, the AD will identify FIP-SI Endorsement availability as additional tabs for the underlying policy's plan of insurance.

### 13 Continuous Endorsement

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The FIP-SI is a continuous Endorsement and will remain in effect until canceled by the insured or the AIP on or before the cancellation date.

### 14 Cancellation or Policy Change

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If the insured's underlying policy for the crop is canceled, voided, or terminated, coverage under the FIP-SI Endorsement is automatically canceled, voided, or terminated.

Other changes made to the underlying policy do not cancel the FIP-SI Endorsement provided the new coverage (plan of insurance, etc.) also allows FIP-SI. The FIP-SI Endorsement will provide FIP-SI coverage based on the changes to the coverage level or plan of insurance of the underlying policy.

**Example:** The insured changes their coverage level on their underlying policy from 80 percent to 70 percent. Their FIP-SI Endorsement coverage will change from covering 80 to 95 percent to covering 70 to 95 percent, increasing FIP-SI coverage from 15 percent to 25 percent.

The FIP-SI Endorsement will remain in effect when an insured adds, modifies, or removes any SCO coverage associated with the underlying policy. However, such changes may impact the amount of FIP-SI coverage ([see Para. 18](#)).

**A. Administrative Fees**

An administrative fee and premium for each insured crop, per county covered by the FIP-SI Endorsement will be due in addition to any administrative fee(s) and/or premium(s) of the underlying policy (GSH Para. 807–809) for the crop year in which the FIP-SI Endorsement attaches to the underlying policy. The administrative fee for FIP-SI coverage is on a policy basis and only attaches to the underlying policy. However, the FIP-SI administrative fee may be waived for insureds who qualify as a limited resource farmer, a BFR or a VFR (see GSH Para. 809).

**Note:** The FIP-SI Endorsement attaches only to the underlying policy and not to an endorsement. Therefore, only one administrative fee is charged for FIP-SI coverage on each underlying policy. In California, an insured may elect which grape varieties in the county to insure and each variety is considered to be a separate crop (underlying policy). Therefore, an insured may elect which insured grape varieties have FIP-SI coverage.

**Example:** An insured in California has a grape APH policy with three variety/types, elects the FIP-SI Endorsement on two of the insured varieties and elects the SCO Endorsement on two of the insured varieties. The insured would pay seven administrative fees, based on these elections, as follows:

- (1) Three separate administrative fees for each variety insured under the grape APH plan of insurance (three underlying policies);
- (2) Two separate administrative fees for the FIP-SI Endorsement on two of the insured varieties (attached to two of the underlying policies); and
- (3) Two separate administrative fees for the SCO Endorsement on two of the insured varieties (attached to two of the underlying policies).

**B. Premium**

Premium for FIP-SI is calculated by multiplying the SPA by the premium rate and any premium adjustment percentages that may apply. All information needed to calculate the premium is contained in the AD.

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16 Written Agreements

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- (1) WAs are not authorized to add the FIP-SI Endorsement to an underlying policy when the FIP-SI Endorsement is not provided on the AD for the crop, practice, and type in the county.

**Example 1:** The insured has a WA to for grapes in County A, which allows a crop to be insured in a county when the AD do not include that crop in the county. The XC WA references County Z which offers the FIP-SI Endorsement. The County A grape policy cannot have FIP-SI coverage because FIP-SI is not provided for grapes in the AD in County A. A crop in a county can only have FIP-SI coverage if the FIP-SI plan of insurance is specifically listed in the AD for that state, crop, and county.

## 16 Written Agreements (Continued)

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**Example 2:** The insured has a TP WA to insure NPS grapes in County A which is an IRR only county. The TP WA references County Z which is an IRR only county. The County A grape policy cannot have FIP-SI coverage on the NPS grapes because the FIP-SI Endorsement is not provided for NPS grapes in the AD in County A. A crop in a county can only have FIP-SI coverage if the FIP-SI plan of insurance is specifically listed in the AD for that state, crop, and county.

- (2) If the FIP-SI Endorsement is available in the AD for the crop, practice, and type in the county where the crop is physically located, the FIP-SI Endorsement may be elected when a WA applies to the underlying policy.

**Example:** The insured has a PE WA on their underlying policy for IRR Malbec Grapes and the FIP-SI Endorsement is available for IRR Malbec Grapes. Since the FIP-SI Endorsement is available for the crop/county/P/T, the insured may elect FIP-SI for the policy even though the PE WA is applicable.

## 17 Underlying Policy Requirements

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The FIP-SI Endorsement can only be elected if the insured has an underlying policy insured under the CCIP. Both the underlying policy and FIP-SI must be with the same AIP.

**Example:** The FIP-SI Endorsement requires a CCIP underlying or companion policy. FIP-SI is not available with WFRP.

## 18 Supplemental Coverage Option

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The insured may elect both the FIP-SI Endorsement and SCO if they meet the eligibility requirements of both programs.

## 19 Duplicate Policy Exceptions

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The FIP-SI Endorsement is not considered a duplicate policy with an underlying policy when available in the AD.

## 20 Insurable Acreage

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Only acreage insurable under the Grape CP can be insured under the FIP-SI Endorsement. You may elect FIP-SI for eligible acreage of the crop insured by the underlying crop policy. Any crop acreage not insured by the underlying policy is not covered by FIP-SI.

**Note:** In California, an insured may elect which grape varieties in the county to insure and each variety is considered to be a separate crop (underlying policy). Therefore, an insured may elect which insured grape varieties have FIP-SI coverage.



## **21 Attachment of Coverage**

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### **A. Insurance Period**

Insurance begins on the insurance attachment date of June 1 and ends on the end of insurance date of the underlying policy specified in the AD.

### **B. Subsequent Years**

For subsequent years, FIP-SI coverage may be adjusted (e.g., lowering coverage on underlying policy, increasing FIP-SI coverage percentage, etc.) on or before the SCD.

## **23 Units**

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In lieu of the provisions regarding units and unit division in the underlying policy, FIP-SI will be based on all eligible acreage, in the county insured by the underlying policy, regardless of whether such acreage is owned, rented for cash, or rented for a share of the crop, including acres on which the insured is insuring the share of the landlord/tenant.

## **24 Summary of Coverage/Schedule of Insurance**

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The Summary of Coverage/Schedule of Insurance must provide the protection, premium, and administrative fee(s) for the FIP-SI.

## **25 Insurable Cause of Loss**

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Smoke Events are the only cause of loss for FIP-SI and will be identified in the AD. Qualifying Smoke Events may trigger the county during the FIP-SI insurance period, but such events will not be published by RMA until after the EOIP for the underlying policy.

- (1) To be eligible to receive an indemnity payment, the county loss trigger must have occurred in the county, within the insurance period.
  - (a) RMA will identify counties with a county loss trigger on the AD.
  - (b) For an insured crop under the FIP-SI Endorsement, only one indemnity payment per insurance period is allowed.
  - (c) The minimum number of Smoke Events necessary to trigger an indemnity will be determined by FCIC and located in the AD.
  - (d) Triggered counties will be determined after the end of the insurance period.
- (2) Individual vineyard yields are not considered under FIP-SI. It is possible that an insured's vineyard may experience reduced yields and not receive an indemnity FIP-SI.
- (3) Insureds are not required to file notices of loss.
- (4) Once published, FCIC's determination in (1) above is final and is a matter of general applicability, presumed to be accurate, and will not be changed.

**26 Exclusions and Other coverages**

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The coverage provided by FIP-SI may be combined with SCO or CAT.

**27-30 (Reserved)**

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## PART 3: ACREAGE REPORTING

### 31 Acreage Reporting Requirements for FIP-SI

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Insureds are not required to submit an additional acreage report for FIP-SI. The number of eligible acres for FIP-SI will be the number of insurable acres specified on the acreage report filed and accepted by the AIP on or before the ARD of the underlying policy.

### 32 Acreage Adjustments to the Underlying Policy

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Any adjustments to the acreage report on the underlying policy will automatically apply to the FIP-SI Endorsement.

**Example 1:** If the underlying policy acreage report is revised from what was initially reported due to overreported acreage by reducing the number of insurable acres, such reductions will also apply to the FIP-SI Endorsement automatically since FIP-SI uses the underlying policy's acreage report.

**Example 2:** When an acreage report is revised from what was initially reported due to underreported acreage, assuming the underreported acreage does not meet the qualifications to be added as insurable acreage on a revised acreage report, the underreported acreage is included on the revised acreage report as unreported acreage or an unreported unit, when units are applicable. Liability for both the underlying policy and the FIP-SI Endorsement will not increase. Unreported acreage is not considered insurable (see CIH Para. 1232A(3)).

### 33-40 (Reserved)

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## PART 4: DETERMINING SMOKE PROTECTION AND INDEMNITY

### 41 Smoke Protection Amount

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The AIP must determine protection provided under FIP-SI for each insured variety the insured elects to cover under the endorsement.

#### A. Calculate SPA for Underlying Policies Containing Acres

To calculate the SPA for all eligible acreage of the crop in the county:

- (1) Calculate SPA separately for all insurable acres of the crop in the county with the same coverage level, type, and practice:
  - (a) Determine the insured's smoke coverage range by subtracting from 95 percent the higher of the coverage level of the underlying policy, or the upper end of the insured's SCO coverage range, if SCO coverage applies;
  - (b) Determine the expected crop value by dividing the liability of the underlying policy for those acres of the same coverage level, type, and practice by the underlying policy coverage level for the same eligible acres and then divide by the percentage of the price election or percentage of projected price, as applicable, of the underlying policy;

**Note:** When SCO coverage is in effect with the underlying policy, use only the liability and coverage level for the underlying policy, not the SCO liability or coverage level.

**Note:** Any adjustment to liability to the underlying crop policy will apply to the FIP-SI Endorsement.
  - (c) Multiply the expected crop value by the smoke coverage range; and
  - (d) Multiply the result of (c) by the smoke coverage percentage elected by the insured. This is the SPA.
- (2) Sum the results of (1) for each coverage level, type, and practice (if applicable) combination to determine the SPA for all eligible acreage of the crop in the county, if applicable.

#### B. SPA Adjustments to the Underlying Policy

Any liability and/or premium adjustments made on the underlying policy will apply to the FIP-SI Endorsement.

**A. Notice of Loss Requirements**

Insureds are not required to file a notice of loss for FIP-SI.

**B. Indemnity Due**

- (1) An indemnity will be due under FIP-SI if the county loss trigger is identified for a county.
- (2) Only one indemnity per insurance period is allowed under the FIP-SI Endorsement.

**C. Indemnity Calculation**

The indemnity for all eligible acreage for the crop in the county when a qualifying smoke event triggers the county (see [Para. 41A](#)) will be the lesser of the:

- (1) SPA; or
- (2) the SPA multiplied by the Payment Factor.

**Note:** FIP-SI indemnities are not based on the underlying policy's claim for indemnity; therefore, any LAF that may apply to the underlying policy does not apply to the FIP-SI indemnity.

**D. Timing of Indemnities**

Indemnities will be paid within 30 days after the later of the date:

- (1) RMA releases the eligible FIP-SI counties that met the County Loss Trigger; or
- (2) The conditions in the Basic Provisions sections 14(f)(2) – (4) are met.

## EXHIBITS

### Exhibit 1 Acronyms and Abbreviations

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Common acronyms and abbreviations (e.g., lbs., min, max, etc.) are not listed below unless they are being used in a manner different than otherwise commonly used. The listing below are program/crop specific acronyms for this handbook. Other acronyms that are not defined can be found in the GSH.

<b>Approved Acronyms/Abbreviations</b>	<b>Term</b>
FIP-SI	Fire Insurance Protection - Smoke Index
HMS	Hazard Mapping System
NOAA	National Oceanic and Atmospheric Administration
NESDIS	National Environmental Satellite, Data, and Information Service
OPI	Office of Primary Interest
PE WA	Policy Exception Written Agreement
SIDP	Smoke Index Data Provisions
SPA	Smoke Protection Amount
TP WA	Type Practice Written Agreement
XC WA	County Without Actuarial Documents Written Agreement

## Exhibit 2 Definitions

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**County:** In addition to the definition in the BP, county boundaries may be modified within the actuarial documents for purposes of determining coverage and County Loss Trigger.

**County Loss Trigger:** The minimum number of cumulative Smoke Events that must occur during the Insurance Period to trigger an indemnity payment.

**Expected Crop Value:** The value of the crop based upon the underlying policy and determined by dividing the underlying policy liability for the eligible acreage with the same coverage level, type, and practice by the underlying policy coverage level, as applicable, and then again by the percentage of price election or percentage of projected price, as applicable, of the underlying policy. When SCO coverage is in effect with the underlying policy, use only the liability and coverage level for the underlying policy, not the SCO liability or coverage level. Any adjustment in liability on the underlying crop policy will apply.

**Insurance Period:** In lieu of section 11 of the Basic Provisions, the period

- (a) beginning on the insurance attachment date of June 1; and
- (b) ending on the end of insurance date provided in the underlying policy AD.

**National Environmental Satellite, Data, and Information Service (NESDIS):** An office within NOAA that manages NOAA's HMS data.

**National Oceanic and Atmospheric Administration (NOAA):** An agency within the United States Department of Commerce, or its successor.

**National Oceanic and Atmospheric Administration Hazard Mapping System Data:** NOAA/NESDIS Satellite Analysis Branch's daily analysis of near real-time polar and geostationary satellite observations, combined with expert knowledge, to provide active fire and smoke information for North America.

**Payment Factor:** The Smoke Loss Factor divided by the Smoke Coverage Range, not to exceed 1.000 (100%). The payment factor is used to calculate the indemnity.

**Smoke Coverage Percentage:** A factor elected, between 1 and 100 percent in whole percent increments, used to determine the Smoke Protection Amount.

**Smoke Coverage Range:** The amount of difference between 95 percent and the higher of the coverage level of your underlying policy or the upper end of your SCO coverage range, if SCO coverage applies. The Smoke Coverage Range is expressed as a whole percentage applies to all Smoke Events covered by this Endorsement.

**Smoke Index Data Provisions:** A document that describes the methodology utilized by FCIC, incorporating NOAA HMS data, that identifies a county subjected to a Smoke Event.

**Smoke Event:** A day with heavy smoke density in a county, as determined by FCIC in accordance with the SIDP and identified in the AD. A Smoke Event will be measured in 24-hour intervals and will be determined using NOAA's HMS data. FCIC will use Coordinated Universal Time, not the local time zone, to determine the measurement of a heavy smoke day under this Endorsement. The SIDP establish procedures in the event of gaps in HMS smoke data.

**Smoke Loss Factor:** A factor determined by FCIC based on the number of Smoke Events and located in the AD.

**Smoke Protection Amount:** The maximum dollar amount of insurance as determined by Section 6 of this Endorsement. The SPA applies to all Smoke Events covered under this Endorsement.

**Supplemental Coverage Option:** A county level crop insurance option that provides additional coverage for a portion of an insured's underlying policy deductible.

**Underlying Policy:** The Basic Provisions published at 7 C.F.R. part 457 and the Grape Crop Provisions, to which this Endorsement is attached. A crop covered by any plan of insurance not under the Basic Provisions will not qualify as an Underlying Policy for this Endorsement.



Insureds who wish to insure under the FIP-SI Endorsement may amend their policy by signing and submitting the FIP-SI Endorsement Application, developed according to these standards on or before the SCD for the first crop year for which the insured wishes to elect the FIP-SI Endorsement. The AIP may combine the FIP-SI Endorsement Application with another form contained in the DSSH, if the combined form meets the applicable standards in place for each individual form. All items within quotation marks in the subparagraphs below are substantive unless otherwise noted.

**A. Applicant/Insured Information**

- (1) "Applicant/Insured's Name"
- (2) "Underlying Policy Number"
- (3) "Street and/or Mailing Address"
- (4) "City, State and Zip Code"
- (5) "Identification Number"
- (6) "Identification Number Type"

**B. Crop Information**

- (1) "County Name"
- (2) "Crop(s)"
- (3) "Crop Year"
- (4) "Underlying Plan of Insurance"
- (5) "FIP-SI Smoke Coverage Percentage"
- (6) "FIP-SI Plan of Insurance"
- (7) "Option Codes"

**C. Terms and Conditions**

"In addition to Section 3(b)(2) of the Basic Provisions, I hereby elect this Fire Insurance Protection - Smoke Index (FIP-SI) Endorsement, and by this election I understand:

- (1) I must have purchased an underlying policy consisting of the Common Crop Insurance Policy, Basic Provisions and Grape Crop Provisions to elect this Endorsement and must also purchase this Endorsement with the same Approved Insurance Provider as my Common Crop Insurance Policy.
- (2) If at any time my underlying policy for the crop is canceled or terminated, coverage under this Endorsement is automatically canceled or terminated.

**C. Terms and Conditions (Continued)**

- (3) That by electing this Endorsement, it will continue from year to year unless I or you cancel or change my election by written notice on or before the cancellation date or my coverage is otherwise canceled or terminated under the terms of my underlying policy.
- (4) The Fire Insurance Protection - Smoke Index (FIP-SI) Endorsement is not an endorsement against a loss of actual production. The terms and conditions of the FIP-SI Endorsement are different from those of an Actual Production History plan of insurance. The FIP-SI Endorsement does **not** measure, capture, or utilize the actual crop production of any producer or any of the actual crop production within the county or state. It is based upon National Oceanic and Atmospheric Administration (NOAA) Hazard Mapping System (HMS) data not individual vineyard yields. It is possible for you to have low crop production or receive smoke events on the acreage you insure and still not receive an indemnity payment under this plan.
- (5) Separate Administrative Fees will be assessed for each crop insured under this Endorsement.”

**D. Required Signatures**

- (1) “Applicant/Insured’s Printed Name, Signature, and Date”
- (2) “Agent’s Printed Name, Signature, Date, and Code Number”

**E. Required Statements**

- (1) “Certification Statement” (see DSSH Para. 502)
- (2) “Privacy Act Statement” (see DSSH Para. 501)
- (3) “Nondiscrimination Statement” (see DSSH Para. 503)

## Exhibit 4 FIP-SI Endorsement Calculation Examples

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The following example will be used for purposes of this Exhibit.

Producer A farms 100 acres of Chardonnay grapes in County X and has an approved yield of 11.6 tons per acre, with a 100 percent share. The established price is \$411 per ton, as published on the AD in County X. The producer elects FIP-SI smoke coverage percentage of 90 percent. (This information, with some changing variables, applies to the following examples, except when indicated otherwise.)

### A. Examples for Underlying Policy with CAT Coverage

(1) The following calculations are based on the underlying policy's liability of \$131,109 and a total of 21 Smoke Events during the insurance period:

(a) Determine the SPA.

Step 1: Determine the smoke coverage range:

Formula: 95 percent minus the maximum coverage from the underlying policy.

$$0.95 - 0.50 = 0.45 \text{ (smoke coverage range)}$$

Step 2: Determine the expected crop value of the underlying policy:

Formula: Divide the liability of the underlying policy by the coverage level of the underlying policy and then by the percentage of price election of the underlying policy.

$$\$131,109 \div 0.50 \div 0.55 = \$476,760 \text{ (expected crop value)}$$

Step 3: Calculate the SPA:

Formula: Multiply the expected crop value by the FIP-SI coverage range and the coverage percentage.

$$\$476,760 \times 0.45 \times 0.90 = \$193,088 \text{ (SPA)}$$

(b) Determine the SPA times the Payment Factor.

Step 1: Determine the Payment Factor:

Formula: Divide the Smoke Loss Factor (located in the SP) by the smoke coverage range.

$$0.0621 \div 0.45 = 0.138 \text{ (Payment Factor)}$$

Step 2: Calculate the SPA times the Payment Factor:

$$\$193,088 \times 0.138 = \$26,646$$

The indemnity payment is \$26,646, the lesser of (a) or (b).

**A. Examples for Underlying Policy with CAT Coverage (Continued)**

(2) The following calculations are based on the underlying policy's liability of \$131,109 and a total of 48 Smoke Events during the insurance period:

(a) Determine the SPA.

Step 1: Determine the smoke coverage range:

Formula: 95 percent minus the maximum coverage from the underlying policy.

$$0.95 - 0.50 = 0.45 \text{ (smoke coverage range)}$$

Step 2: Determine the expected crop value of the underlying policy:

Formula: Divide the liability of the underlying policy by the coverage level of the underlying policy and then by the percentage of price election of the underlying policy.

$$\$131,109 \div 0.50 \div 0.55 = \$476,760 \text{ (expected crop value)}$$

Step 3: Calculate the SPA:

Formula: Multiply the expected crop value by the FIP-SI coverage range and the coverage percentage.

$$\$476,760 \times 0.45 \times 0.90 = \$193,088 \text{ (SPA)}$$

(b) Determine the SPA times the Payment Factor.

Step 1: Determine the Payment Factor:

Formula: Divide the Smoke Loss Factor (located in the SP) by the smoke coverage range.

$$0.45 \div 0.45 = 1.00 \text{ (Payment Factor)}$$

Step 2: Calculate the SPA times the Payment Factor:

$$\$193,088 \times 1.000 = \$193,088$$

The indemnity payment is \$193,088, the SPA.

**B. Examples for an Underlying Policy with Buy-Up Coverage**

(1) Producer A elects 70 percent coverage and 100 percent of price on the underlying. The liability for the underlying policy is \$333,732 policy and there was a total of 21 Smoke Events during the insurance period.

(a) Determine the SPA.

Step 1: Determine the smoke coverage range:

Formula: 95 percent minus the maximum coverage from the underlying policy.

$$0.95 - 0.70 = 0.25 \text{ (smoke coverage range)}$$

Step 2: Determine the expected crop value of the underlying policy:

Formula: Divide the liability of the underlying policy by the coverage level of the underlying policy and then by the percentage of price election of the underlying policy.

$$\$333,732 \div 0.70 \div 1.00 = \$476,760 \text{ (expected crop value)}$$

Step 3: Calculate the SPA:

Formula: Multiply the expected crop value by the FIP-SI coverage range and the coverage percentage.

$$\$476,760 \times 0.25 \times 0.90 = \$107,271 \text{ (SPA)}$$

(b) Determine the SPA times the Payment Factor.

Step 1: Determine the Payment Factor:

Formula: Divide the Smoke Loss Factor (located in the SP) by the smoke coverage range.

$$0.0621 \div 0.25 = 0.248 \text{ (Payment Factor)}$$

Step 2: Calculate the SPA times the Payment Factor:

$$\$107,271 \times 0.248 = \$26,603$$

The indemnity payment is \$26,603, the lesser of (a) or (b).

(2) Producer A elects 70 percent coverage and 100 percent of price on the underlying policy. The liability for the underlying policy is \$333,732 and there was a total of 41 Smoke Events during the insurance period.

(a) Determine the SPA.

**B. Examples for an Underlying Policy with Buy-Up Coverage**

Step 1: Determine the smoke coverage range:

Formula: 95 percent minus the maximum coverage from the underlying policy.

$$0.95 - 0.70 = 0.25 \text{ (smoke coverage range)}$$

Step 2: Determine the expected crop value of the underlying policy:

Formula: Divide the liability of the underlying policy by the coverage level of the underlying policy and then by the percentage of price election of the underlying policy.

$$\$333,732 \div 0.70 \div 1.00 = \$476,760 \text{ (expected crop value)}$$

Step 3: Calculate the SPA:

Formula: Multiply the expected crop value by the FIP-SI coverage range and the coverage percentage.

$$\$476,760 \times 0.25 \times 0.90 = \$107,271 \text{ (SPA)}$$

(b) Determine the SPA times the Payment Factor.

Step 1: Determine the Payment Factor:

Formula: Divide the Smoke Loss Factor (located in the SP) by the smoke coverage range.

$$0.3724 \div 0.25 = 1.487 \text{ (capped at 1.000) (Payment Factor)}$$

Step 2: Calculate the SPA times the Payment Factor:

$$\$107,271 \times 1.000 = \$107,271$$

The indemnity payment is \$107,271, the SPA.

**C. Examples for an Underlying Policy with Buy-Up Coverage and SCO**

(1) Producer A elects 70 percent coverage, 100 percent of price on the underlying policy, and SCO election of 86 percent. The liability for the underlying policy is \$333,732 and there was a total of 23 Smoke Events during the insurance period.

(a) Determine the SPA.

Step 1: Determine the smoke coverage range:

**C. Examples for an Underlying Policy with Buy-Up Coverage and SCO (Continued)**

Formula: 95 percent minus the maximum coverage from the underlying policy.

$$0.95 - 0.86 = 0.09 \text{ (smoke coverage range)}$$

Step 2: Determine the expected crop value of the underlying policy:

Formula: Divide the liability of the underlying policy by the coverage level of the underlying policy and then by the percentage of price election of the underlying policy.

$$\$333,732 \div 0.70 \div 1.00 = \$476,760 \text{ (expected crop value)}$$

Step 3: Calculate the SPA:

Formula: Multiply the expected crop value by the FIP-SI coverage range and the coverage percentage.

$$\$476,760 \times 0.09 \times 0.90 = \$38,618 \text{ (SPA)}$$

(b) Determine the SPA times the Payment Factor.

Step 1: Determine the Payment Factor:

Formula: Divide the Smoke Loss Factor (located in the SP) by the smoke coverage range.

$$0.0823 \div 0.09 = 0.914 \text{ (Payment Factor)}$$

Step 2: Calculate the SPA times the Payment Factor:

$$\$38,618 \times 0.914 = \$35,297$$

The indemnity payment is \$35,297, the lesser of (a) or (b).

(2) Producer A elects 70 percent coverage, 100 percent of price on the underlying policy, and SCO election of 86 percent. The liability for the underlying policy is \$333,732 and there was a total of 30 Smoke Events during the insurance period.

(a) Determine the SPA.

Step 1: Determine the smoke coverage range:

Formula: 95 percent minus the maximum coverage from the underlying policy.

$$0.95 - 0.86 = 0.09 \text{ (smoke coverage range)}$$

**C. Examples for an Underlying Policy with Buy-Up Coverage and SCO (Continued)**

Step 2: Determine the expected crop value of the underlying policy:

Formula: Divide the liability of the underlying policy by the coverage level of the underlying policy and then by the percentage of price election of the underlying policy.

$$\$333,732 \div 0.70 \div 1.00 = \$476,760 \text{ (expected crop value)}$$

Step 3: Calculate the SPA:

Formula: Multiply the expected crop value by the FIP-SI coverage range and the coverage percentage.

$$\$476,760 \times 0.09 \times 0.90 = \$38,618 \text{ (SPA)}$$

(b) Determine the SPA times the Payment Factor.

Step 1: Determine the Payment Factor:

Formula: Divide the Smoke Loss Factor (located in the SP) by the smoke coverage range.

$$0.1721 \div 0.09 = 1.912 \text{ (capped at 1.000) (Payment Factor)}$$

Step 2: Calculate the SPA times the Payment Factor:

$$\$38,618 \times 1.00 = \$38,618$$

The indemnity payment is \$38,618, the SPA.