

**MULTIPLE PERIL CROP INSURANCE
APPLE CROP INSURANCE
PILOT QUALITY OPTION**

2001-NCIS 721QO

1. In return for payment of the additional premium designated in the actuarial documents, this option, which provides additional quality-based coverage, is attached to and made part of your Apple Crop Insurance Provisions subject to the terms and conditions described herein. In the event of a conflict between the Apple Crop Insurance Provisions and this option, this option will control.
2. You must elect this option on or before the sales closing date for the initial crop year for which you wish to insure your apples under this option. This option will continue in effect until canceled by either you or us for any succeeding crop year by written notice to the other party on or before the cancellation date.
3. To be eligible for this option, you must have elected to insure your apples at the additional coverage level. If you elect Catastrophic Risk Protection (CAT) after this option is effective, it will be considered as notice of cancellation of this option by you.
4. To be eligible for coverage under this option, you must provide us acceptable records, for each unit, of your annual packout percentages or other disposition of your apples by varietal group as designated in the Special Provisions so that we may determine an historical packout factor, and the number of acres contained in the unit for at least the four consecutive crop years preceding the crop year immediately prior to the current crop year, for at least one varietal group. You must provide these records to us no later than the production reporting date specified in the Common Crop Insurance Policy. Failure to provide acceptable records or reports as required will make you ineligible for coverage under this option and your coverage will revert to that provided by the Apple Crop Insurance Provisions.
5. If you select this option, these provisions will apply to all your fresh market apple acreage that meets the insurability production requirements specified in the Apple Crop Insurance Provisions, except any acreage specifically excluded by the actuarial documents. If you also have processing apple acreage, such acreage will be insured under the Apple Crop Insurance Provisions (you may choose Option A if available) at the same coverage level and price election percentage relationship to the maximum price as selected under this option.
6. The coverage level and price elections you choose for each varietal group must have the same percentage relationship to the maximum price offered by us for each varietal group. For example, if you choose 100 percent of the maximum price election for one varietal group, you must also choose 100 percent of the maximum price election for all other varietal groups.
7. We will only pay an indemnity if a grade inspection is performed by us prior to the apples being placed in storage. Production to count for apples destroyed, stored, or marketed without a grade inspection will be 100 percent of the amount of insurance for such apples.
8. For the purposes of this option, the following terms are hereby defined:
 - (a) **Amount of insurance (unit)** - In lieu of the term "production guarantee" (per acre) in the Apple Crop Insurance Provisions, this term "amount of insurance" is applicable and is defined as the dollar amount obtained by:
 - (1) Multiplying the number of insured acres by the APH approved yield per acre;
 - (2) Multiplying the result of 8(a)(1) by your coverage level;
 - (3) Multiplying the result of 8(a)(2) by the historical packout factor for Fancy apples, by varietal group as applicable, and by the applicable price shown on the Special Provisions;
 - (4) Multiplying the result of 8(a)(2) by the historical packout factor for All-Other apples, by varietal group as applicable, and by the applicable price shown on the Special Provisions;
 - (5) Totaling the results of 8(a)(3) and 8(a)(4); and
 - (6) Multiplying the result of 8(a)(5) by your share.
 - (b) **Container** - A bin, box, or bushel as defined in the Apple Crop Insurance Provisions.
 - (c) **Culls** - Apples that fail to meet the grade requirements of U.S. Cider Grade, as defined in the U.S. Standards for Grades of Apples for Processing.
 - (d) **Grade** - The grades shown below or any other grade classification shown in the Special Provisions.
 - (1) **Fancy** - Apples meeting or exceeding the U.S. Fancy Grade as defined in the U.S. Standards for Grades of Apples plus apples failing to grade Fancy due to uninsured causes.
 - (2) **All-Other apples** - Apples that fail to meet the grade requirements for U. S. Fancy but at least meet the grade requirements of U.S. Cider Grade as defined in the U.S. Standards for Grades of Apples for Processing, plus culls that are sold.
 - (e) **Marketable production** - In lieu of the definition of "marketable" in section 1 of the Apple Crop Insurance Provisions, all apples, including damaged apples that are at least U.S. Cider Grade quality and are marketed or could be marketed plus culls that are sold, are considered in determining the value of production.
 - (f) **Minimum value** - A dollar amount per container shown in the Special Provisions that is used to value damaged marketable production, harvested or unharvested, that is not sold.
 - (g) **Net value received** - The dollar amount received by you for culls sold.
 - (h) **Packout factors** - Values used to establish the amount of insurance and determine quality factor(s) by unit.
 - (1) **Annual packout factor** - A value calculated for each crop year, by varietal group and unit as applicable, that grade Fancy or All-Other apples. We will calculate your annual packout factors in the following manner:
 - (i) Sum the total production of Fancy apples and All-Other apples, for each varietal group and unit;
 - (ii) For Fancy apples divide the total production of Fancy apples, for each varietal group and unit, by the total production for each varietal group and unit as determined in item (i) above and round this result to the nearest whole percent.
 - (iii) For All-Other apples, 1.00 minus the result of item (ii) above.
 - (iv) For example:

Packout Production (Containers)	Packout Factor = Production/Total*
6,000 - Fancy & Above	6,000/10,000 = 60%
4,000 - All-Others	100% - 60% = 40%
*10,000 - Total Production	

- (2) You must have 4 years of records for at least one varietal group to be eligible for this option. If you have produced varieties of apples in both varietal groups, but have fewer than 4 years of records for one of those varietal groups, annual packout factors will be assigned for the varietal group with missing years.
 - (3) The annual packout factor, as calculated in steps 1(i) through 1(iii) above, will be used for current year's loss adjustment determinations. However, the percent of apples that failed to grade fancy due to uninsured causes, as determined by our loss adjuster for claims settlement purposes, will be subtracted from the annual packout factor for fancy apples when determining the historical packout factor.
 - (4) **Historical packout factor** - The value calculated based on the simple average of the annual packout factors, adjusted for apples that failed to grade fancy due to uninsured causes, as noted in 8(h)(3), if applicable. The records we will use are the four consecutive years preceding the crop year immediately prior to the current crop year. For example, for the 2001 crop year we will use the annual packout factors for the 1996-1999 crop years. We will calculate your historical packout factor in the following manner:
 - (i) Calculate the simple average of the annual packout factors for each varietal group and unit that graded Fancy, rounded to the nearest whole percent.
 - (ii) Subtract the historical packout factor for Fancy apples determined in item 8(h)(4)(i) from 1.00 to establish the historical packout factor for All-Other apples.
 - (iii) The historical packout factor will be recalculated yearly. The maximum reduction that will be permitted in any one year from the correctly-calculated factor for the preceding year is 10 percent, rounded to the nearest whole percent.
 - (i) **Quality factor** - A factor used to reduce your production to count of Fancy apples when determining your claim for indemnity, as determined in section 18 of this option.
9. **Unit Division.**
A basic unit, as defined in section 1 of the Basic Provisions, will be divided into additional basic units by varietal group. Optional unit division will be allowed only for those units for which the producer has both APH and packout records.
10. In addition to the reduction in yield referenced in section 3(b) of the Apple Crop Insurance Provisions, we will reduce your amount of insurance based on the effect of the conditions listed in that section.
 11. Fancy and All-Other apples will be valued at the price shown in the Special Provisions. Cull apples are valued at the net value received. The value of damaged, harvested or unharvested marketable apples that are not sold will be not less than the Minimum Value shown in the Special Provisions.
 12. In lieu of sections 9(a)(8) and 9(b)(1) and (4) of the Apple Crop Insurance Provisions, all other natural causes of loss

that cannot be prevented, including but not limited to failure to color, hail, and sunburn, are insured causes of loss.

13. Apples that fail to grade Fancy due to uninsured causes or poor farming practices will be considered Fancy for purposes of establishing the annual packout factor and determining any indemnity.
14. In addition to the reporting requirements contained in section 6 of the Common Crop Insurance Policy, you must provide the information required by this option and the Special Provisions.
15. The options contained in sections 13 and 14 of the Apple Crop Insurance Provisions are not applicable to any fresh apple acreage under this option.
16. Apples harvested or appraised prior to full maturity, regardless of grade, will be considered to be Fancy unless we agree that the apples were damaged by an insurable cause of loss and that leaving the crop in the field would further reduce the amount of apple production or quality.
17. Culls are not considered in the value of production to count unless they are sold. If sold, the net value received is included in the value of production to count and the production is added to the APH production of All-Other apples for the crop year.
18. If your current year's annual packout factor of Fancy apples falls more than 10 percentage points below your historical packout factor for Fancy apples, we will determine a quality factor for production of Fancy apples for the current crop year as follows:

- (a) For packout factors of Fancy apples not more than 10 whole percentage points lower than the historical packout factor, the quality factor will be 1.00;
- (b) For packout factors of Fancy apples more than 10 whole percentage points but not more than 30 whole percentage points lower than your historical packout factor, the quality factor will be as follows:

Percentage Points Less Than Historical Packout Factor	Quality Factor
0-10	1.00
11	.98
12	.96
13	.94
14	.92
15	.90
16	.88
17	.86
18	.84
19	.82
20	.80
21	.78
22	.76
23	.74
24	.72
25	.70
26	.68
27	.66
28	.64
29	.62
30	.60

- (c) For packout factors of Fancy apples more than 30 whole percentage points but not more than 50 whole percentage points lower than your historical packout factor, the quality factor will be as follows:

Percentage Points Less Than Historical Packout Factor	Quality Factor
31	.57
32	.54
33	.51
34	.48
35	.45
36	.42
37	.39
38	.36
39	.33
40	.30
41	.27
42	.24
43	.21
44	.18
45	.15
46	.12
47	.09
48	.06
49	.03
50	.00

- (d) For packout factors of Fancy apples 50 or more whole percentage points lower than your historical packout factor for Fancy apples, the quality factor will be .00, resulting in all of your apples being valued at the price for All-Other apples.
19. In the event of damage or loss covered by this policy, we will settle your claim on a unit basis as follows:
- (a) Calculate your amount of insurance by:
- (1) Multiplying the number of insured acres by your approved APH yield per acre;
 - (2) Multiplying the result of 19(a)(1) by your coverage level;
 - (3) Multiplying the result of 19(a)(2) by the historical packout factor for each grade and varietal group as applicable;
 - (4) Multiplying the results in section 19(a)(3) by the applicable price for each grade and varietal group; and
 - (5) Totaling the results of 19(a)(4).
- (b) Calculate the value of marketable production, both harvested and appraised unharvested apples:
- (1) For Fancy apple production by:
 - (i) Multiplying the quantity of Fancy apples produced by the applicable quality factor; and
 - (ii) Multiplying the result of 19(b)(1) by the price shown in the Special Provisions for Fancy apples;
 - (2) For All-Other apple production by:
 - (i) Multiplying the quantity of Fancy apples produced by the result of 1.00 minus the applicable quality factor;
 - (ii) Adding to the result of 19(b)(2)(i) the quantity produced of All-Other apples, excluding culls sold;
 - (iii) Multiplying the result of 19(b)(2)(ii) by the price shown in the Special Provisions;
 - (iv) Adding the net value received for culls sold, if applicable, to the result of b(2)(iii); and
 - (3) Summing the results of 19(b)(1)(ii) and 19(b)(2)(iv);
- (c) Calculate the indemnity payable by:
- (1) Subtracting the result of section 19(b)(3) from 19(a)(5); and
 - (2) Multiplying the result of section 19(c)(1) by your share.

20. For example
- (a) Assume that:
- (1) You insure one unit of apples under the Apple Crop Insurance Provisions containing 20 acres;
 - (2) You elect this Apple Crop Insurance Pilot Quality Option;
 - (3) You have a 100% share;
 - (4) Your apple production, including cull apples sold, has averaged 1,333 boxes per acre for the last 5 years based on your APH data base;
 - (5) You selected the 75 percent coverage level, and 100 percent of the price election;
 - (6) Your historical packout factor is:
 - (i) 80 percent Fancy; and
 - (ii) 20 percent All-Other apples.
 - (7) The prices that apply to your policy are as follows:
 - (i) \$10.00 for Fancy;
 - (ii) \$3.00 for All-Other apples; and
 - (iii) \$1.00 per box Minimum Value.
- (b) Your total amount of insurance under the Pilot Apple Quality Option (\$171,957) is determined as follows:
- (1) 1,333 boxes times 20 acres = 26,660 boxes;
 - (2) 26,660 boxes times .75 coverage level = 19,995 boxes;
 - (3) Fancy: 19,995 boxes times 0.80 = 15,996 boxes
All-Other: 19,995 boxes times 0.20 = 3,999 boxes;
 - (4) Fancy: 15,996 boxes times \$10.00 per box = \$159,960
All-Other: 3,999 boxes times \$3.00 per box = \$11,997;
 - (5) \$159,960 plus \$11,997 = \$171,957.
- (c) The total value of your marketable production for the unit is as follows:
- (1) For the current year you produced 24,000 boxes with 12,000 boxes grading U.S. Fancy, and 12,000 boxes grading All-Other apples (this includes 1,000 boxes of marketed culls);
 - (2) A quality factor applies, due to a Fancy packout percentage that is more than 10 percentage points below your Fancy historical packout factor. A total of 24,000 boxes were produced, with 12,000 boxes grading U.S. Fancy, resulting in a 50 percent Fancy packout;
 - (3) With the historical packout factor of 80 percent minus the determined 50 percent packout results in a difference of 30 percentage points. The corresponding quality factor from 18(b) is .60;
 - (4) .60 times 12,000 Fancy boxes equals 7,200 boxes at \$10.00 per box = \$72,000;
 - (5) 12,000 boxes times .40 (1 minus .60 quality factor) equals 4,800 boxes, plus the 11,000 boxes grading All-Other apples for a total of 15,800 boxes at \$3.00 per box = \$47,400; and
 - (6) 1,000 boxes of cull apples at \$1.50 per box = \$1,500.
 - (7) The total value of the apple production is \$120,900 (72,000 + 47,400 + 1,500).
- (d) The indemnity payable is \$51,057 (\$171,957 amount of insurance minus total value of apple production from the unit of \$120,900).