A. Converting APH Production to Pounds of Raw Sugar

Adjust sugar beet production for APH purposes by multiplying the insured's net paid tons by 2,000 pounds multiplied by the insured's average percent of raw sugar (determined from processor test). Round pounds of raw sugar to a whole number (no decimal points).

(Net paid tons * 2,000) * average percent of raw sugar = pounds of raw sugar

Example: (20 net paid tons * 2,000 lbs.) * 0.180 insured's average percent of raw sugar) = 7,200 pounds of raw sugar

Note: If the insured's production evidence from the processor is already in net pounds, then conversion of net paid tons to net pounds can be skipped. Multiply the insured's net pounds by the insured's percent of raw sugar (determined from processor test).

Note: For the 2018 crop year, the calculation for the prior year's approved APH yield is 2018 approved APH yield in standardized tons multiplied by 2,000 multiplied by 2018 percent sugar factor in the actuarial documents (AD). This calculation will only be applicable for the 2019 crop year for sugar beets with the exception of Imperial county, California which it will be applicable for the 2020 crop year.

B. Converting APH History from Standardized Tons to Pounds of Raw Sugar

(1) Actual yields in an APH database

Previous crop years' actual production contained in each APH database (including the master yield (MY) summary APH database, if applicable) must be converted from standardized tons to pounds of raw sugar. The conversion is actual production in standardized tons multiplied by 2,000 pounds multiplied by the percent sugar factor from the 2018 AD for each crop year in the APH database. Round pounds of raw sugar to a whole number (no decimal points). Divide pounds of raw sugar by the number of acres to determine the actual yield (also rounded to a whole number). See Exh. 19B for an APH database conversion example.

(Actual production in standardized tons * 2,000) * 2018 sugar factor from the AD = pounds of raw sugar

B. Converting APH History from Standardized Tons to Pounds of Raw Sugar (Continued)

Example: (20 standardized tons * 2,000 pounds) * 0.170 percent sugar factor from AD = 6,800 lbs. of raw sugar.

(2) Assigned yields and non-actual yields

Insured's previous crop years' non-actual yields contained in each APH database (including the master yield (MY) summary APH database, if applicable) must be converted from standardized tons to pounds of raw sugar. The conversion is assigned yield or non-actual yield in standardized tons multiplied by 2,000 pounds multiplied by the percent sugar factor from the 2018 AD for each crop year in the APH database. Round pounds of raw sugar to a whole number (no decimal points). See Exh. 19B for an APH database conversion example.

(Assigned yield or non-actual yield in standardized tons * 2,000 pounds) * 2018 sugar factor from the AD = pounds of raw sugar

C. Determining APH Production on Non-loss Units when Unharvested Due to Processor's Lack of Capacity

When acreage in non-loss units will not be harvested due to the processor's lack of capacity to process the sugar beets, harvested production from acreage within the same unit may be used as the appraisal for APH purposes for the unharvested acres, if:

- more than 50 percent of the sugar beet acreage within a field is harvested; or
- more than 50 percent of a person's unit is harvested when more than one person is operating in the same field.
- (1) The insured must notify the AIP if any portion of the insured crop will be abandoned.
- (2) The AIP must verify that the applicable acreage requirement (more than 50 percent) is met and, with the insured's consent, the AIP may use the harvested acreage's actual yield per acre calculated in pounds of raw sugar, including the sugar content of the harvested acreage, as the appraisal for the unharvested acreage.

C. Determining APH Production on Non-loss Units when Unharvested Due to Processor's Lack of Capacity (Continued)

- (a) The insured must provide the AIP with a legible map or photo identifying the unharvested and abandoned sugar beet acreage; and
- (b) The AIP will use the map or photo and the insured's notification of abandonment as documentation of the unharvested acreage.
- (3) An appraisal to determine the potential production is required if:
 - (a) 50 percent or less of the sugar beet acreage for the field is harvested; or
 - (b) 50 percent or less of the unit is harvested when the field consists of more than one insurable entity.
- (4) Coverage ends with the abandonment of the crop on the unit. Therefore, once the acreage has been left unharvested because the production will not be accepted by the processor due to storage or processing capacity, insurance on the abandoned acreage ends.
- (5) AIPs must notify the insured of these requirements and ensure harvested production from one insured is not used to establish a yield for the unharvested acreage of any other insured.

D. Determining APH Production Lost Due to Harvest Prior to Full Maturity

If the percentage of insured acreage in the unit harvested prior to full maturity (early harvest) exceeds the threshold specified in the ADs for the same crop year as the acreage is planted, production from early harvested acreage will be determined by increasing the amount of harvested production by one percent per day for each day the sugar beets were harvested prior to the date the sugar beets would have reached full maturity.

- (1) This adjustment will only be made when early harvest has been requested by the processor.
- (2) The date the sugar beets would have reached full maturity will be considered to be 45 days prior to the calendar date for the end of the insurance period, unless otherwise specified in the SP.
- (3) This adjustment will not be made if the sugar beets are damaged by an insurable cause of loss and leaving the crop in the field would reduce production.

D. Determining APH Production Lost Due to Harvest Prior to Full Maturity (Continued)

(4) The adjusted production from the early harvest acreage cannot exceed the APH database's approved APH yield;

Example:

The end of insurance is November 15 and the sugar beets will reach full maturity on October 1 (45 days prior to the end of insurance date). The threshold in the SP is 10 percent and the insured harvested 50 acres of their 250 acres in the unit prior to October 1. The threshold has been met with the insured harvesting 20 percent of their insured acres (250 acres * 0.20 = 50 acres). The insured harvested 1,000 tons, harvesting 250 tons per day for 4 days prior to October 1 on this unit. The approved APH yield is 7,550 pounds of raw sugar an acre for the unit and the insured's average percent of raw sugar (determined from processor test) is 16.1 percent.

```
September 30: 250 \text{ tons} + 1\% = 252.5 \text{ tons } \times 2,000 = 505,000 \text{ lbs.}

September 29: 250 \text{ tons} + 2\% = 255 \text{ tons } \times 2,000 = 510,000 \text{ lbs.}

September 28: 250 \text{ tons} + 3\% = 257.5 \text{ tons } \times 2,000 = 515,00 \text{ lbs.}

September 27: 250 \text{ tons} + 4\% = 260 \text{ tons } \times 2,000 = 520,000 \text{ lbs.}
```

$$(505,000 + 510,000 + 515,000 + 520,000) = 2,050,000$$
 lbs

[(2,050,000 lbs. * 0.161 avg raw sugar) / 50 early-harvested acres] = 6,601 pounds of raw sugar

Since 6,601 is less than 7,550 Approved APH yield the production will not be capped.

(5) The AIP must verify the processor required early harvest and the number of acres required to be harvested early for the early harvest factor to apply.

E. Acceptable Supporting Documentation

To consider sugar company delivery records or settlement sheets as acceptable records, they must show net paid tons or net pounds of beets delivered and percent of sugar.

B. Category B Crops-Multi-Purpose Production and Yield Worksheet

(6) Sugar Beets, used to express sugar beet production in terms of pounds of raw sugar:

Col. 1 – actual production of sugar beets in net tons

Col. 2 - 2,000 pounds

Col. 3 – % raw sugar (records) expressed in three decimal points 0.000

Col. 4 – pounds of raw sugar [(col. 1 x col. 2) x col. 3]

A. Example Determining APH Production in Raw Pounds of Sugar

In 2018, the insured harvested 7,840 net tons of sugar from 224 acres. The net tons of sugar must be converted into raw pounds of sugar. The insured's percent of raw sugar is 18.1 percent determined from processor's tests.

[(7,840 net paid tons * 2,000 pounds) * 0.181 insured's average percent of raw sugar] = 2,838,080 total pounds of raw sugar

2,838,080 pounds of raw sugar / 224 acres = actual yield of 12,670 pounds of raw sugar per acre

B. Converting Previous APH History from Standardized Tons to Pounds of Raw Sugar

(standardized tons * 2,000 pounds) * percent sugar factor from AD = pounds of raw sugar

Example APH Database: APH Database Before Pounds of Raw Sugar

The counties 2018 percent sugar factor is 17.3 from the AD.

In years 2008, 2009, and 2011-2017 the APH database has actual yields with actual production. In 2010, the MY APH database has an assigned yield that has no production associated with it. Since crop year 2010 doesn't have any production, the conversion is standardized tons multiplied by 2,000 multiplied by the counties 2018 percent sugar factor from the AD.

Crop Year 2018		Yield Indicator: M	
Sugar Beets (0039)		NI (003)	
Unit # 0000-0000		NTS (997)	
Year	Production	Acres	Yield
<mark>2008</mark>	<mark>6,920</mark>	400.0	17.3
2009	3,529	222.0	15.9
2010	0	63.0	13.9
2011	1,830	<mark>64.0</mark>	<mark>28.6</mark>
2012	<mark>4,203</mark>	148.0	<mark>28.4</mark>
<mark>2013</mark>	<mark>3,497</mark>	141.0	<mark>24.8</mark>
<mark>2014</mark>	<mark>4,924</mark>	152.0	<mark>32.4</mark>
<mark>2015</mark>	3,232	143.0	<mark>22.6</mark>
<mark>2016</mark>	<mark>3,886</mark>	145.0	<mark>26.8</mark>
2017	<mark>5,510</mark>	168.0	32.8
Approved APH			<mark>24.4</mark>
Yield			

Conversion Calculation [(6,920 * 2,000) * 0.173] / 400.0 = 5,986 [(3,529 * 2,000) * 0.173] / 222.0 = 5,500 [(13.9 * 2,000) * 0.173] = 4,809 [(1,830 * 2,000) * 0.173] / 64.0 = 9,893 [(4,203 * 2,000) * 0.173] / 148.0 = 9,826 [(3,497 * 2,000) * 0.173] / 141.0 = 8,581 [(4,924 * 2,000) * 0.173] / 152.0 = 11,209 [(3,232 * 2,000) * 0.173] / 143.0 = 7,820 [(3,886 * 2,000) * 0.173] / 145.0 = 9,273 [(5,510 * 2,000) * 0.173] / 168.0 = 11,348

B. Converting ... Standardized Tons to Pounds of Raw Sugar(continued)

Resulting APH Database <u>After Conversion from Standardized Tons to Pounds of Raw Sugar</u>

Crop Year: 2019		Yield Indicator: M	
Sugar Beets (0039)		NI (003)	
Unit # 0000-0000		NTS (997)	
Year	Production	Acres	Yield
2009	1,221,034	222.0	<mark>5,500</mark>
2010	0	<mark>63.3</mark>	<mark>4,809</mark>
2011	633,180	<mark>64.0</mark>	<mark>9,893</mark>
2012	1,454,238	148.0	<mark>9,826</mark>
2013	1,209,962	141.0	<mark>8,581</mark>
<mark>2014</mark>	1,703,704	152.0	11,209
2015	1,118,272	143.0	<mark>7,820</mark>
<mark>2016</mark>	1,344,556	145.0	<mark>9,273</mark>
<mark>2017</mark>	1,906,460	168.0	11,348
<mark>2018</mark>	2,838,080	224.0	12,670
Approved APH			9,093
Yield Yield			