Exhibit 19-1
Removed November 4, 2002
SEE NOTE AT END OF RECORD 19
LIABILITY CALCULATION

\[
\text{AGR Liability} = \text{Approved AGR} \times \text{Coverage Level} \times \text{Payment Rate}
\]

\begin{align*}
\text{AGR} & : \$81,098 \\
\text{(Field 49)} & : \text{Approved AGR} \\
\text{(Field 47)} & : \text{Coverage Level} \\
\text{(Field 16)} & : \text{Payment Rate} \\
\text{Note} & : \text{Cannot exceed $6.5 million for AGR and $100,000 for AGR-L (Liability cap).}
\end{align*}

PREMIUM LIABILITY CALCULATION

\[
\text{Max MPCI} = \text{AGR Liability} \times 0.50
\]

\begin{align*}
\text{Max MPCI} & : \$81,098 \\
\text{(Field 49)} & : \text{AGR Liability} \\
\text{Internal} & : 0.50
\end{align*}

\[
\text{Premium Liability} = \text{AGR Liability} - \text{Lesser of:} \begin{cases} 
\text{MPCL Liability} & \text{or} \\
\text{Max MPCI} & \text{Field 48} \end{cases}
\]

\begin{align*}
\text{Premium Liability} & : \$81,098 \\
\text{(Internal)} & : \text{AGR Liability} \\
\text{(Field 49)} & : \text{Lesser of:} \\
\text{(Field 48)} & : \text{MPCL Liability or Max MPCI} \\
\text{Internal} & : \text{Max MPCI}
\end{align*}
AGR RATE CALCULATION

\[ \frac{.209}{(2.3)} = \frac{\$34,100}{\text{Commodity}} \div \frac{\$163,360}{\text{Total Income}} \]

\[ \frac{.015}{(2.3)} = \frac{.070}{\text{Commodity Rate}} \times \frac{.209}{\% \text{ of Revenue}} \]

\[ \frac{.147}{(2.3)} = \frac{.015 + .046 + .070 + .016}{\text{Sum of Weighted Commodity Rate}} \]

\[ \frac{.250}{(Field 50)} = \frac{1.00}{\text{Commodity Factor}} \div \frac{4}{\text{Number of Commodities}} \]

\[ \frac{.041}{(Field 50)} = \frac{.209}{\% \text{ of Revenue}} - \frac{.250}{\text{Commodity Factor}} \]

\[ \frac{.410}{(Field 50)} = \frac{.041 + .022 + .205 + .142}{\text{Sum all Commodity Deviation Factor}} \]

\[ \frac{.521}{(Note)} = \frac{.474 + (.0248208 \times (\text{Sum of Commodity Deviation})) + (.218472 \times ((\text{Sum of Commodity Deviation}) \times (\text{Sum of Commodity Deviation})))}{\text{Diversity Factor}} \]

Note: Round at end of calculation
### DIVERSIFICATION FACTOR FORMULAS:

<table>
<thead>
<tr>
<th>CASES</th>
<th>FORMULA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Commodity</td>
<td>DF=1.000</td>
</tr>
<tr>
<td>2 Commodity</td>
<td>DF=.668 + .0179999 (DEV) + .3142858 (DEV) (DEV)</td>
</tr>
<tr>
<td>3 Commodity</td>
<td>DF=.523 + .0607623 (DEV) + .3142858 (DEV) (DEV)</td>
</tr>
<tr>
<td>4 Commodity</td>
<td>DF=.474 + .0248208 (DEV) + .218472 (DEV) (DEV)</td>
</tr>
<tr>
<td>5 Commodity</td>
<td>DF=.437 + .0710358 (DEV) + .1760129 (DEV) (DEV)</td>
</tr>
<tr>
<td>6 Commodity</td>
<td>DF=.412 + .0325131 (DEV) + .1945816 (DEV) (DEV)</td>
</tr>
<tr>
<td>7 or More Commodities</td>
<td>DF=.410</td>
</tr>
</tbody>
</table>

\[
\text{AGR Rate} = \text{Diversity Factor} \times \text{Total Weighted Farm Rate}
\]

\[
\begin{align*}
\text{AGR Rate} & = \text{Diversity Factor} \\
\text{Field 52} & = \text{Field 51} \\
\text{Field 52} & = \text{Field 50}
\end{align*}
\]
**TOTAL PREMIUM CALCULATION**

\[
\text{Total Premium} = \frac{\text{S6245}}{\text{S81098}} \times \text{.077}
\]

- **S6245**: Total Premium (Field 53)
- **S81098**: Premium Liability (Field 52)
- **.077**: AGR Rate (Field 56)

**PRODUCER PREMIUM CALCULATION**

\[
\text{Subsidy} = \frac{\text{Total Premium}}{\text{Subsidy Factor}}
\]

- **Subsidy**: Total Premium (Field 53)
- **Total Premium**: (Field 56)
- **Subsidy Factor**: (Note 7)

**Preliminary Producer Premium**

\[
\text{Preliminary Producer Premium} = \frac{\text{Total Premium}}{\text{Subsidy}}
\]

- **Preliminary Producer Premium**: Total Premium (Field 53)
- **Total Premium**: (Field 56)
- **Subsidy**: (Field 57)

**Additional Subsidy**

\[
\text{Additional Subsidy} = \frac{\text{Preliminary Producer Premium}}{\text{Cost-Share Factor}}
\]

- **Preliminary Producer Premium**: Total Premium (Field 53)
- **Cost-Share Factor**: (ADM 9 field “Cost-Share”) (Note 8)

**Preliminary Producer Premium**

\[
\text{Preliminary Producer Premium} = \frac{\text{Preliminary Producer Premium}}{\text{Additional Subsidy}}
\]

- **Preliminary Producer Premium**: Total Premium (Field 53)
- **Additional Subsidy**: (Field 58)

**ANIMAL/ANIMAL PRODUCT PERCENT CALCULATION**

\[
\text{Animal/Animal Product Percent} = \frac{\text{Sum of commodity values (1 – 14)}}{\text{Total Expected Income}}
\]

- **Animal/Animal Product Percent**: Sum of commodity values (1 – 14) (Field 61)
- **Total Expected Income**: for animal/animal products (Note 7)

**Note:** Animal/animal products – commodity codes that have ‘Y’ in the livestock indicator field on ADM G or animal column in handbook.
<table>
<thead>
<tr>
<th>UNIT MEASURE</th>
<th>UNIT ABBREVIATION</th>
<th>UNIT NUMERIC CODE</th>
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<tbody>
<tr>
<td>ACRE</td>
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<td>BAG/SACK</td>
<td>BG/SK</td>
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<tr>
<td>TON</td>
<td>TON</td>
<td>04</td>
</tr>
</tbody>
</table>

** If the commodity code is 0073 or 0600 the unit code will be 98. If the unit code is 98 the Expected Value field will be zero.