

**EXHIBIT I: YIELD COMPARISON METHODOLOGY**

## YIELD COMPARISON METHODOLOGY

1. **Overview.** For each Eligible Field, the Claims Administrator must apply the Yield Comparison Methodology as set forth herein to determine the Preliminary Field Loss Amount for such Eligible Field, unless such Eligible Field is subject to the Enhanced Review Process. Capitalized terms used herein will have the same meaning as in the Settlement Agreement. In the event of a conflict between this Exhibit and the Settlement Agreement, this Exhibit will control.

2. **Definitions.** The following terms have the following meanings for purposes of this Exhibit:

*“Affected Field Damage Year Yield”* means the yield for an Affected Field in a given Damage Year as determined by Actual Yield Data.

*“Benchmark Field Damage Year Yield”* means the yield for a Benchmark Field in a given Damage Year as determined by Actual Yield Data.

*“Benchmark Field Historic Yield”* means the yield for a Benchmark Field in a given Non-Damage Year as determined by Actual Yield Data.

3. **Choice of Benchmark Field Methodology or County Average Methodology.** For each Eligible Field subject to the Yield Comparison Methodology, the Claims Administrator must determine whether Predicted Yield Per Acre, which is the estimated yield that would have been obtained on an Eligible Field in the absence of dicamba symptomology, will be calculated in accordance with the Benchmark Field Methodology or the County Average Methodology.

- a) The Claimant must select a Benchmark Field, if any qualifying Fields exist, for each Affected Field in a given Damage Year pursuant to the requirements of Section 9 of the Settlement Agreement. If for any Eligible Field subject to the Yield Comparison Methodology, Actual Yield Data exists for a Selected Benchmark Field meeting the Minimum Benchmark Criteria and Benchmark Similarity Requirement for the Damage Year and the three Non-Damage Years closest in time to the Damage Year in which both the Affected Field and the Selected Benchmark Field were planted to soybeans, then the Eligible Field is subject to the Benchmark Field Methodology.
- b) If for any Eligible Field subject to the Yield Comparison Methodology, the Claimant: (i) has no Fields meeting the Minimum Benchmark Criteria; (ii) has Fields meeting the Minimum Benchmark Criteria but the Claimant certifies that none meet the Benchmark Similarity Requirement for a qualifying reason supported by documents; or (iii) has no Benchmark Field for which Actual Yield Data exists for the Damage Year and the three Non-Damage Years closest in time to the Damage Year in which both the Affected Field and the Selected Benchmark Field were planted to soybeans, then the Eligible Field is subject to the County Average Methodology.
- c) For avoidance of doubt, the same Affected Field may be subject to the Yield Comparison Methodology for one or more Damage Years and the Enhanced Review Process for one or more Damage Years, and for the Damage Years subject to the Yield Comparison Methodology,

may be subject to the Benchmark Field Methodology for one or more Damage Years and to the County Average Methodology for one or more Damage Years.

**4. Benchmark Yield Data Requirements for Non-Damage Years.** For each Eligible Field subject to the Yield Comparison Methodology, the Claims Administrator must determine for each Benchmark Field whether Actual Yield Data are available for all Non-Damage Years for which Actual Yield Data are available for the corresponding Affected Field (the “Benchmark Field Methodology Yield Data Requirements”). Available Actual Yield Data includes Actual Yield Data obtained directly by the Claimant as part of its Claims Package or, as to A-Yields only, if they were provided by the RMA pursuant to the Claimant’s RMA and FSA Release or by Claimant as part of the documents accompanying its PFS.

**5. Benchmark Field Methodology.** For any Eligible Field subject to the Benchmark Field Methodology, the Claims Administrator must determine Predicted Yield Per Acre as set forth herein.

- a) First, the Claims Administrator must determine the Benchmark Field Historic Yield for each Non-Damage Year in which the Eligible Field has Actual Yield Data, up to a maximum of ten years, and the Benchmark Field Damage Year Yield using the Actual Yield Data for that Benchmark Field for that year.
- b) Second, the Claims Administrator must determine the Benchmark Relationship between the Eligible Field and the corresponding Benchmark Field using: (i) the Actual Yield Data of the Eligible Field for each Non-Damage Year in which the Eligible Field has Actual Yield Data and in which there is data to support a Benchmark Field Historic Yield; and (ii) the Benchmark Field Historic Yields, for up to ten Non-Damage Years.
  - i) The Benchmark Relationship uses the linear relationship between the Non-Damage Year yields for the Eligible Field and the Benchmark Field. The Claims Administrator will regress the Actual Yield Data of the Eligible Field on Benchmark Field Historic Yields, using Ordinary Least Squares regression and considering as many years of Non-Damage Year Actual Yield Data as are available (including from information obtained pursuant to an RMA and FSA Release) up to a maximum of the ten Non-Damage Years closest in time to the Damage Year in which both the Affected Field and the Benchmark field were planted to soybeans. The Ordinary Least Squares regression will produce the slope of the line of best fit (“ $\beta$ ”), and the y-intercept (“ $\alpha$ ”), which together represent the Benchmark Relationship.
- c) Third, the Claims Administrator must calculate a Predicted Yield Per Acre for each Eligible Field, notated as  $\hat{Yield} / acre$  using the Benchmark Relationship and the Benchmark Field Damage Year Yield for the Damage Year at issue, which may be notated, as an example, for  $Affected\ Field_1(2017)$  as  $\hat{Yield}_1(2017) / acre = \alpha + \beta * Benchmark\ Field\ Actual\ Yield_1(2017)$ , with  $\alpha$  and  $\beta$  drawn from  $Benchmark\ Relationship_1(2017)$ .

**6. County Average Methodology.** For any Eligible Field subject to the County Average Methodology, the Claims Administrator must determine Predicted Yield Per Acre as set forth herein.

- a) First, the Claims Administrator must determine the County Average Relationship between the Eligible Field and county average soybean yields using: (i) the Actual Yield Data for each Non-Damage Year in which the Eligible Field has Actual Yield Data for up to ten Non-Damage Years, with a minimum of four Non-Damage Years; and (ii) the county average soybean yield as reported by USDA/NASS for the county (or if no county data is reported, the applicable agricultural district) in which the Affected Field is located for the same Non-Damage Years identified under (i).
  - i) The County Average Relationship uses the linear relationship between the Non-Damage Year yields for the Eligible Field and historical county average soybean yields. The Claims Administrator will regress the Actual Yield Data of the Eligible Field on the county average soybean yield for Non-Damage Years using Ordinary Least Squares regression and considering as many years of Non-Damage Year Actual Yield Data as are available (including from information obtained pursuant to an RMA and FSA Release) up to a maximum of the ten Non-Damage Years closest in time to the Damage Year. The Ordinary Least Squares regression will produce the slope of the line of best fit (“ $\beta$ ”), and the y-intercept (“ $\alpha$ ”), which together represent the County Average Relationship.
- b) Second, the Claims Administrator must calculate a Predicted Yield Per Acre for each Eligible Field, notated as  $\hat{Yield} / acre$  using the County Average Relationship and the county average soybean yield for the Damage Year at issue, which may be notated, as an example, for Eligible Field  $Affected\ Field_1(2017)$  as  $\hat{Yield}_1(2017) / acre = \alpha + \beta * County\ Average\ Yield_1(2017)$ , with  $\alpha$  and  $\beta$  drawn from  $County\ Average\ Relationship_1(2017)$ .

**7. Field Yield Loss.** For each Eligible Field subject to the Yield Comparison Methodology, the Claims Administrator must calculate a Field Yield Loss by subtracting the Eligible Field’s Affected Field Damage Year Yield from the Predicted Yield Per Acre for the Damage Year at issue. The result is the Field Yield Loss for the Eligible Field, expressed in bushels per acre. For avoidance of doubt, the Field Yield Loss determined in accordance with the Yield Comparison Methodology may be a negative number. If for any Affected Field subject to the Benchmark Field Methodology or County Average Methodology predicts that the Affected Field’s Field Yield Loss is a negative number, then the Claims Administrator will set the Field Yield Loss to zero.